



Preview - Information

Thank you for your interest in this Mega Bundle. This product contains multiple Workbooks and Google Lesson Slides. Within this preview, you will see:

- ✓ **A selection of Ready-To-Use Google Lesson Slides for each unit.**
- ✓ **A selection of worksheets included in each workbook.**

When you make a purchase, you will receive a folder that contains each of the .pdf workbook files and links to where you can make copies of the Google Lessons units to your Google Drive.

Thank you for shopping with us. Please let us know if you have any questions at:

rob@supersimplesheets.com



Google Slides Lessons Preview





Ontario Math

Number Unit - Grade 2

3-Part Lesson Format

Part 1 – Minds On!

- Learning Goals
- Discussion Questions
- Why Math is Important
- And More!

Expanded Form

Number	Standard Form
147	$100 + 40 + 7$
126	$100 + 20 + 6$
158	$100 + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
136	$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
200	$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

Part 2 - Action!

- Questions
- Matching
- Drag and Drop
- Videos
- And More!

Part 3 – Consolidation!

- Exit Cards
- Word Problems
- Quizzes
- Student Created Quizzes



Ontario Math Number Unit – Grade 2

Written Form

Match the written forms with their correct standard forms.

One hundred ninety-seven	32
Eighty-eight	154
One hundred forty-four	197
Thirty-two	176
One hundred twenty-six	88

Placeholder

Checkmark in the "B" column if Bella's answer is right and in the "T" column if Terry's answer is right.

Number	Bella's Answer	Terry's Answer	B	T
103	One hundred thirty	One hundred three		
24	Twenty-four	Forty-four		
160	One hundred six	One hundred sixty		
173	One hundred thirty-seven	One hundred seventy-three		
95	Ninety	Ninety-five		
200	Two hundred	Twenty		

Comparing Numbers

Drag the correct sign between the numbers.

#	Number 1	Sign	Number 2
1	23	<	28
2	47	<	42
3	85	<	93
4	104	=	104
5	136	<	148
6	152	<	129

#	Number 1	Sign	Number 2
7	31	<	89
8	164	<	160
9	141	<	163
10	186	<	186
11	200	<	199
12	169	<	178



Ontario Math Number Unit - Grade 2

Comparing Base Ten Blocks

Drag the correct sign between the number of base ten blocks.

Counting

Drag the circles in the correct order to count and build the caterpillar's body.

Equal Sharing

You were sharing the objects below, how would you split them up equally?

Objects	Questions
	How many objects are there? How many groups did you make? How many are in each group? Write the division sentence
	How many objects are there? How many groups did you make? How many are in each group? Write the division sentence



Workbook Preview



Grade 2
Stand: B1 – Number Sense

	Curriculum Expectations	Pages That Cover the Expectations
B1.1	Read, represent, compose, and decompose whole numbers up to and including 200, using a variety of tools and strategies, and describe various ways they are used in everyday life	5 – 25, 29
B1.2	<p style="color: red; font-size: 1.5em; font-weight: bold;">Preview of 130 pages from this product that contains 381 pages total.</p>	
B1.3	Use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 10 items among 2, 3, 4, and 6 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts	69 – 77
B1.7	Recognize that one third and two sixths of the same whole are equal, in fair-sharing contexts	78 – 87

Place Value Chart**167**

Hundreds	Tens	Ones
1	6	7

Part 1

Fill in the place value charts below

2) 141

Hundreds	Tens	Ones

Hundreds	Tens	Ones

3) 17

4) 123

Hundreds	Tens	Ones

Hundreds	Tens	Ones

5) 59

Hundreds	Tens	Ones

Hundreds	Tens	Ones

Part 2

Which place value is the underlined number?

1) 752) 1843) 118

Tens

4) 325) 896) 687) 928) 1549) 200

Place Value – How Many...

Number	# of Hundreds	# of Tens	# of Ones
175	1	7	5

Part 1

Fill in the table below

Number	# of Hundreds	# of Tens	# of Ones
1.			
3.			
4.			
5.	89		
6.	148		
7.	52		
8.	177		
9.	97		
10.	200		

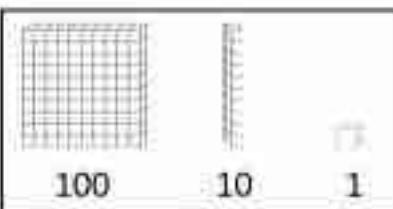
PREVIEW



Part 2

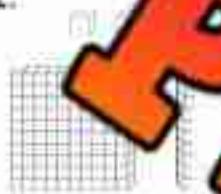
Answer the riddles below

- 1) My number has 1 hundreds, 4 tens, 3 less ones than tens. What is my number?
- 2) My number has 8 ones and half as many tens. What is my number?
- 3) My number has 1 hundreds, 2 tens and 6 more ones than tens. What is my number?

Base Ten Blocks**Part 1**

How many blocks do you count?

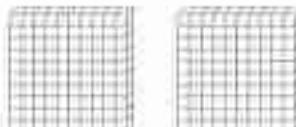
1.



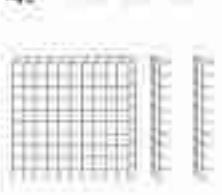
2.



3.

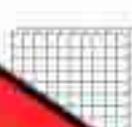


4.



5.

6.

**Part 2**

Draw the base ten blocks to represent the number.

1) 75

2) 18

3) 118

4) 52

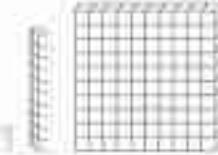
5) 163

6) 64

Base Ten Blocks - Challenge

Challenge

Tip: draw pictures to help you solve



Sam and Dan are arguing over who has more blocks. Sam has 1 hundreds block, 5 tens blocks, and 2 ones blocks. Dan has 1 hundreds block, 3 ten blocks, and 15 ones blocks.

Dan thinks _____ because he has more blocks, his total blocks are more than Sam's.

Who has more blocks? Show your work below.

PREDICTION

Sam's Blocks: _____

Dan's Blocks: _____

Who has more blocks? _____

Bonus:

How many more blocks will Sam/Dan need to have the same number of blocks? Draw the blocks below.

Answer: _____

Exit Cards**Cut Out**

Cut out the exit cards below and have students complete them at the end of class

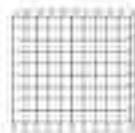
Name: _____

What is the value represented by the base ten blocks?



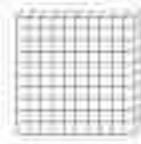
Name: _____

What is the value represented by the base ten blocks?



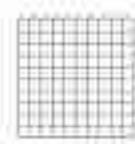
Name: _____

What is the value represented by the base ten blocks?



Name: _____

What is the value represented by the base ten blocks?



Expanded Form**Part 1**

What is the standard form of the numbers below?

1) $100 + 70 + 2$

2) $70 + 9$

3) $100 + 50 + 2$

4) $30 + 5$

5) $100 + 20 + 4$

6) $10 + 8$

7) $80 + 2$

9) $70 + 2$

Part 2

What is the expanded form of the numbers below?

1) 145

2) 53

3) 104

4) 139

5) 96

6) 146

Part 3

Fill in the blanks with the missing number

1) $153 = 100 + \underline{\hspace{2cm}} + 3$

2) $79 = \underline{\hspace{2cm}} + 9$

3) $139 = 100 + 30 + \underline{\hspace{2cm}}$

4) $105 = 100 + \underline{\hspace{2cm}}$

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

a) Write the standard form: _____

PREVIEW

Name: _____

a) Write the standard form: _____

$100 + 20 + 4$

b) Write the expanded form: _____

b) Write the expanded form: 137

Name: _____

a) Write the standard form: _____

$100 + 20 + 4$

b) Write the expanded form: 137

Name: _____

a) Write the stand

$100 + 20 + 4$

b) Write the expanded form: 137

Written Form

1 - One	5 - Five	9 - Nine	13 - Thirteen	17 - Seventeen	30 - Thirty	70 - Seventy
2 - Two	6 - Six	10 - Ten	14 - Fourteen	18 - Eighteen	40 - Forty	80 - Eighty
3 - Three	7 - Seven	11 - Eleven	15 - Fifteen	19 - Nineteen	50 - Fifty	90 - Ninety
4 - Four	8 - Eight	12 - Twelve	16 - Sixteen	20 - Twenty	60 - Sixty	100 - Hundred

Part 1

Write the standard form of the written words below

1) One hundred six

2) Sixty-three

3) Fifteen

4) One hundred twenty-eight

5) Forty-nine

6) One hundred two

Part 2

Write the written form of the numbers below

1) 134

2) 62

3) 31

4) 123

5) 86

PREVIEW

Standard Form

Words

PREVIEW

Place Value Chart

Hundreds

Tens

Pictures

Help Roger Decompose Numbers

Roger tried to decompose the first number. He isn't sure what number goes with the number he used. Help him out.



Part 1

Fill in the missing number

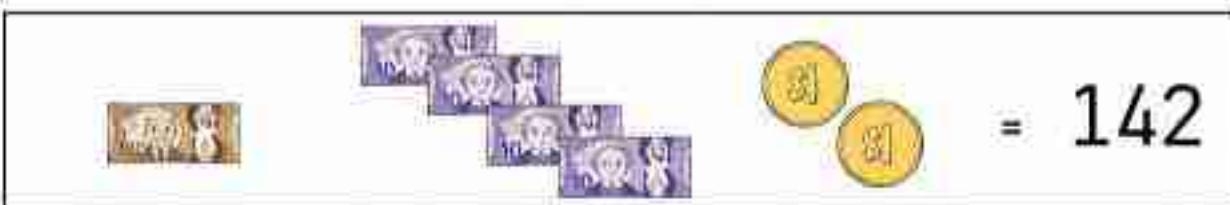
First Number	Roger's Number	Missing Number
237	14	
108	7	
253	8	
186		
290	250	
272	12	
350	330	

Part 2

Can you decompose the number a different way than Roger?

Number	Roger's Answer	Your Turn
435	$410 + 25$	
650	$350 + 300$	
263	$198 + 65$	

Counting Money



Questions

Count the money below.

1)

PREDICTION

2)



3)



4)



5)



Place Value Riddles

Questions

Solve the riddles below



Questions

Answers

1) Which number has: 1 hundreds, 3 more tens than hundreds, and 4 more ones than tens?

PREPARE
 hundreds tens ones

2) Which number has 1 ones, 4 tens, and twice as many tens as hundreds?

3) Which number has 4 tens, half as many hundreds, and 1 more ones than hundreds.

4) Which number has 5 tens, 4 less hundreds than tens and 2 more ones than hundreds.

Place Value Quiz

Part 1

Fill in the place value charts below.

92

Tens	Ones

63

Tens	Ones

192

Hundreds	Tens	Ones

Part 2: What place value is the underlined number?

1) 1353) 1154) 316) 14**Part 3**

How many blocks do you count?

1)



2)

**Part 4**

What is the standard form of the numbers below?

1) $100 + 20 + 2$ 2) $100 + 30 + 6$ 3) $100 + 2$

Part 5: What is the expanded form of the numbers below?

Question	Answer
1) 75	
2) 53	
3) 141	
4) 160	

Part 6: Write the standard form of the written words below

Question	Answer
1) Thirty	
2) One hundred four	

Part 7: Write the written form of the numbers

Question	Answer
1) 24	
2) 167	

Part 8: Solve the riddles

Question	Answer
1) Which number has 1 hundreds, 3 more tens than hundreds, and 2 less ones than tens?	
2) Which number has 6 ones, and 1 hundreds and three times as many tens as hundreds?	

Comparing Numbers

Part 1

Write a number between 1 and 100 that fits the description

Question	Answer
1) Number greater than 42	
2) Number less than 67	
3) Number less than 99	
4) Number less than 100	
5) Number greater than 90	
6) Number less than 100	
7) Number equal to 97	
8) Number greater than 95	

Part 2

Write a number between 1 and 200 that fits the description

1) $25 > \underline{\hspace{2cm}}$	2) $64 > \underline{\hspace{2cm}}$	3) $\underline{\hspace{2cm}} < 41$
4) $165 = \underline{\hspace{2cm}}$	5) $\underline{\hspace{2cm}} < 127$	6) $20 > \underline{\hspace{2cm}}$
7) $\underline{\hspace{2cm}} > 195$	8) $137 < \underline{\hspace{2cm}}$	9) $\underline{\hspace{2cm}} = 102$
10) $115 = \underline{\hspace{2cm}}$	11) $\underline{\hspace{2cm}} < 157$	12) $120 > \underline{\hspace{2cm}}$

Comparing Numbers

53  112176  11876  76**Part 1**Compare the following numbers using **<**, **=**, or **>**1) 132 **<** 2) 36 **>** 36 3) 135 **>** 934) 113 **<** 199 5) 162 **<** 193 6) 165 **>** 237) 134 **<** 146 8) 101 **<** 105 9) 165 **>** 73**Part 2**

Greater than, Equal to, Less than

QUESTION1) 75 is 422) 156 is 1223) 125 is 1254) 84 is 1125) 72 is 1366) 171 is 1427) 125 is 1428) 54 is 459) 45 is 45

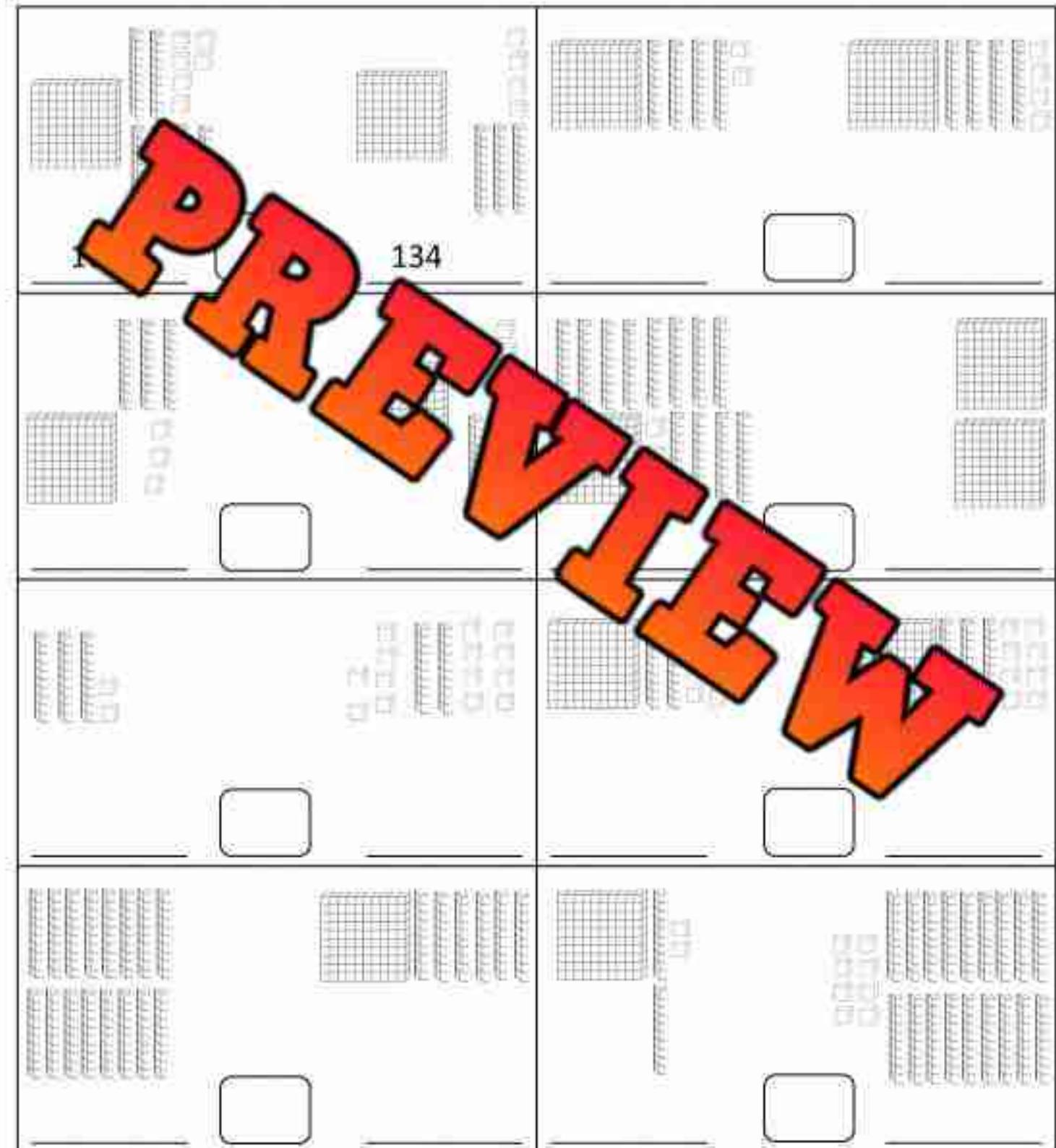
Comparing Base Ten Blocks

Questions

Compare the number of base ten blocks below using

PRACTICE

134



Comparing Numbers

25, 53, 42, 65, 22

Least to Greatest

22, 25, 42, 53, 65

25, 53, 42, 65, 22

Greatest to Least

65, 53, 42, 25, 22

Part 1

Order the numbers below from least to greatest

Unordered Numbers	Ordered (least to greatest)
43, 46, 41, 48	
6, 15, 18, 53, 75	
121, 126, 120, 123	
18, 9, 25, 53, 22	
158, 131, 143, 148, 131	
23, 75, 33, 56, 57	

Part 2

Order the numbers below from greatest to least

Unordered Numbers	Ordered (greatest to least)
11, 6, 3, 17, 15	
85, 99, 93, 85, 91	
167, 123, 128, 131, 154	
40, 43, 29, 33, 46	
123, 120, 123, 174, 177	
65, 53, 78, 58, 35	

Ordering Numbers From Least to Greatest**5**

5, 24, 9, 16
Least to Greatest
5, 9, 16, 24



Questions

Order the numbers below from least to greatest

1. 3, 11, 6

2. 9, 5, 18, 22

3. 41, 22, 1

18, 43, 26, 31

5. 185, 176, 175, 177

152, 142, 141

7. 123, 121, 120, 112

173, 168, 177, 189

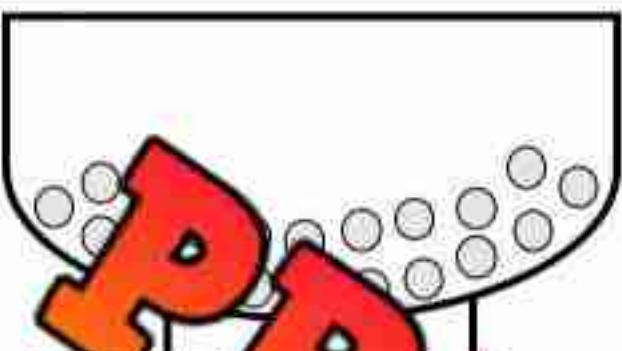
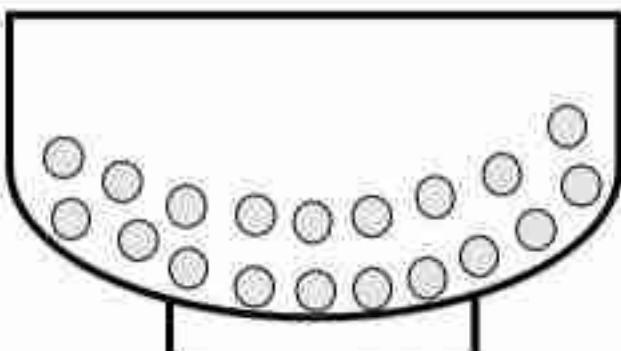
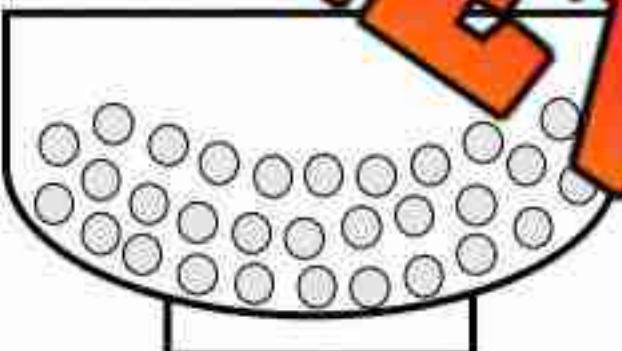
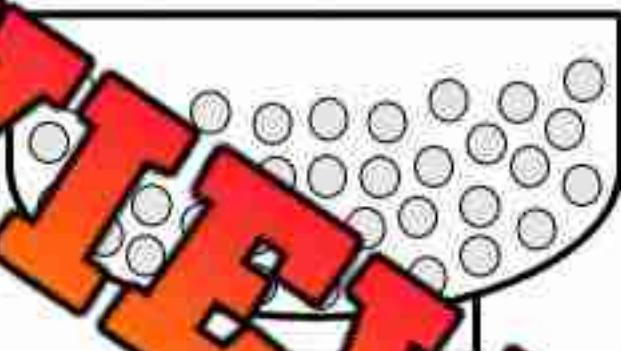
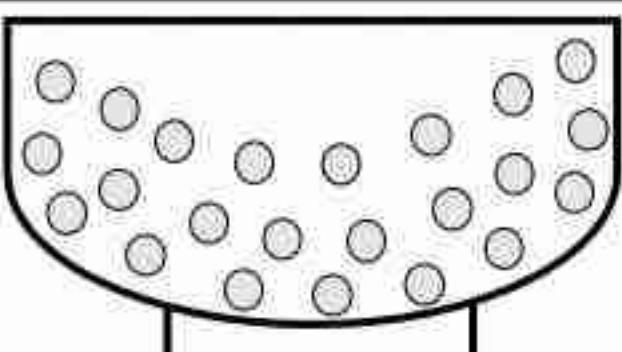
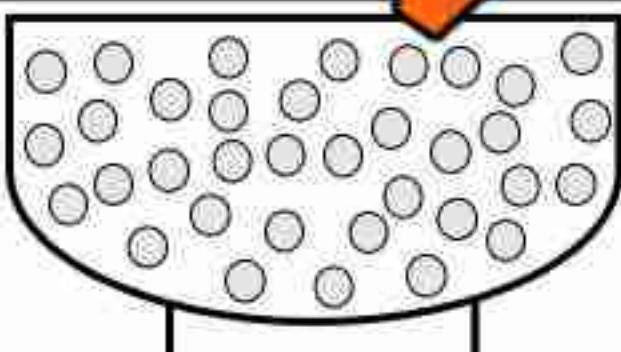
9. 193, 194, 191, 199

182, 183, 185, 195

Estimating How Many...

Instructions

Estimate how many cereal pieces are in each bowl without counting. Then count them to check your estimate.

**Estimate:** _____**Actual:** There are _____ pieces**Estimate:** About _____ pieces**Actual:** There are _____ pieces**Estimate:** About _____ pieces**Actual:** There are _____ pieces**Estimate:** About _____ pieces**Actual:** There are _____ pieces**Estimate:** About _____ pieces**Actual:** There are _____ pieces**Estimate:** About _____ pieces**Actual:** There are _____ pieces

Estimating How Many...



Use this referent of 10 to help you with your estimates

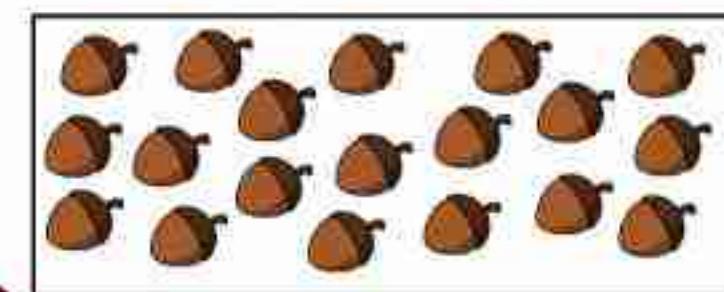
Questions

Estimate how many acorns are in the box. Then count them to check.



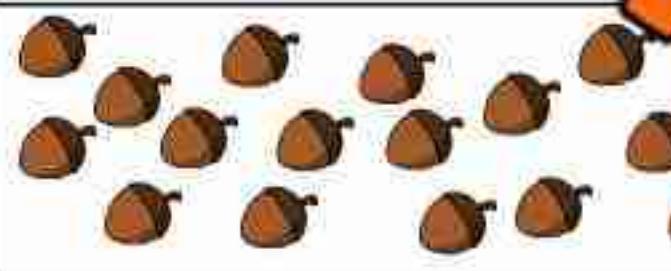
Estimate: About _____

Actual: There are _____ acorns



Estimate: About _____ acorns

Actual: There are _____ acorns



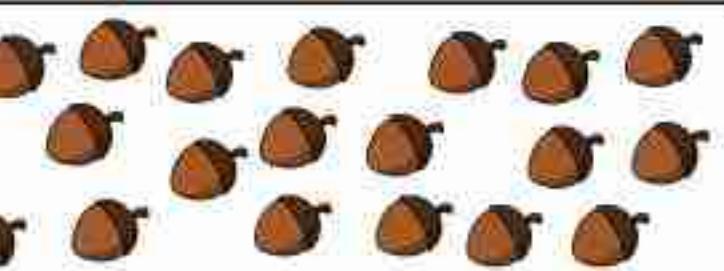
Estimate: About _____ acorns

Actual: There are _____ acorns

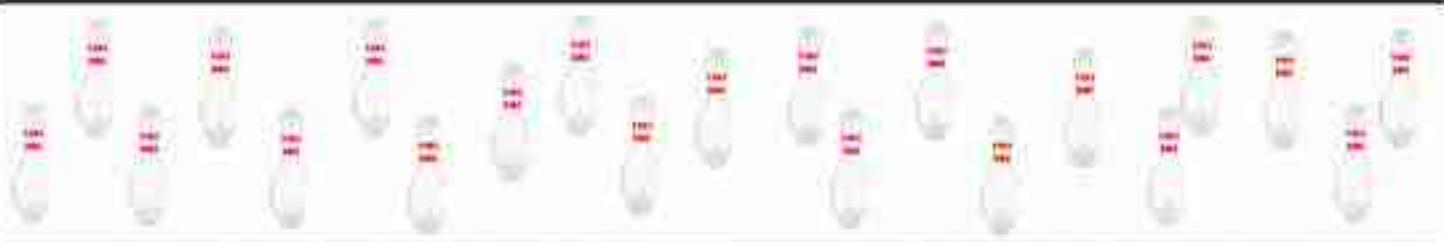


Estimate: About _____ acorns

Actual: There are _____ acorns

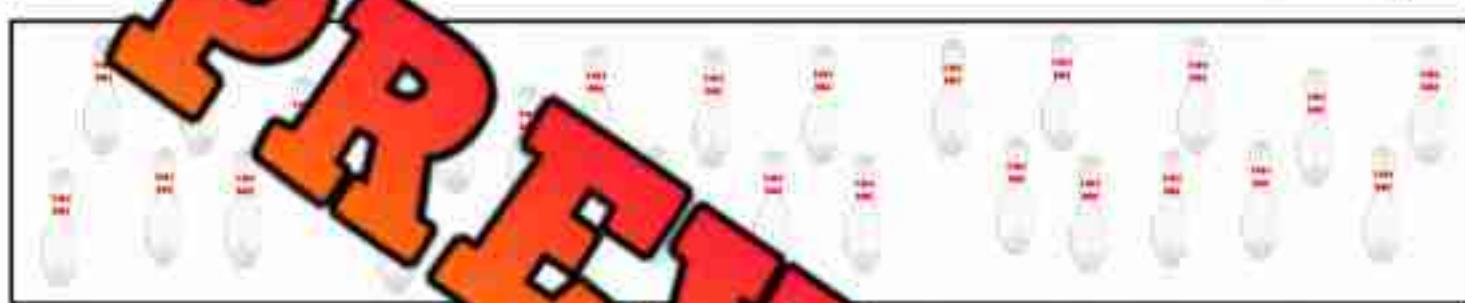


Estimating How Many...



Count how many bowling pins there are in the box above _____

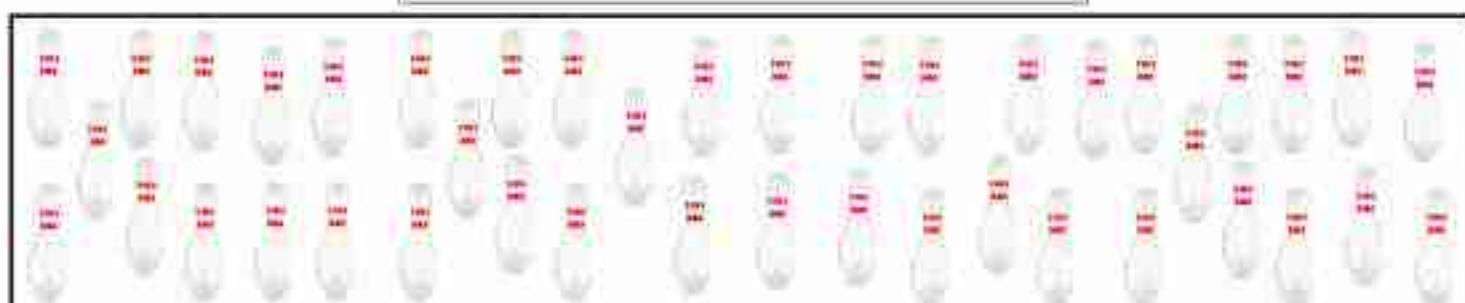
Questions _____ Estimate how many caps are in the box using the referent above



Estimate: _____ pins
Actual: There are _____ pins



Estimate: About _____ pins
Actual: There are _____ pins



Estimate: About _____ pins
Actual: There are _____ pins

Estimating Larger Amounts

Questions

How many balloons do you think are in the box?



Estimate: About _____ balloons

Actual: There are _____ balloons

Four Corners Activity: Estimation

Objective

What are we learning about?

To help students practice and improve their estimation skills by visually assessing quantities and making informed guesses.

Materials

What you will need for the activity.

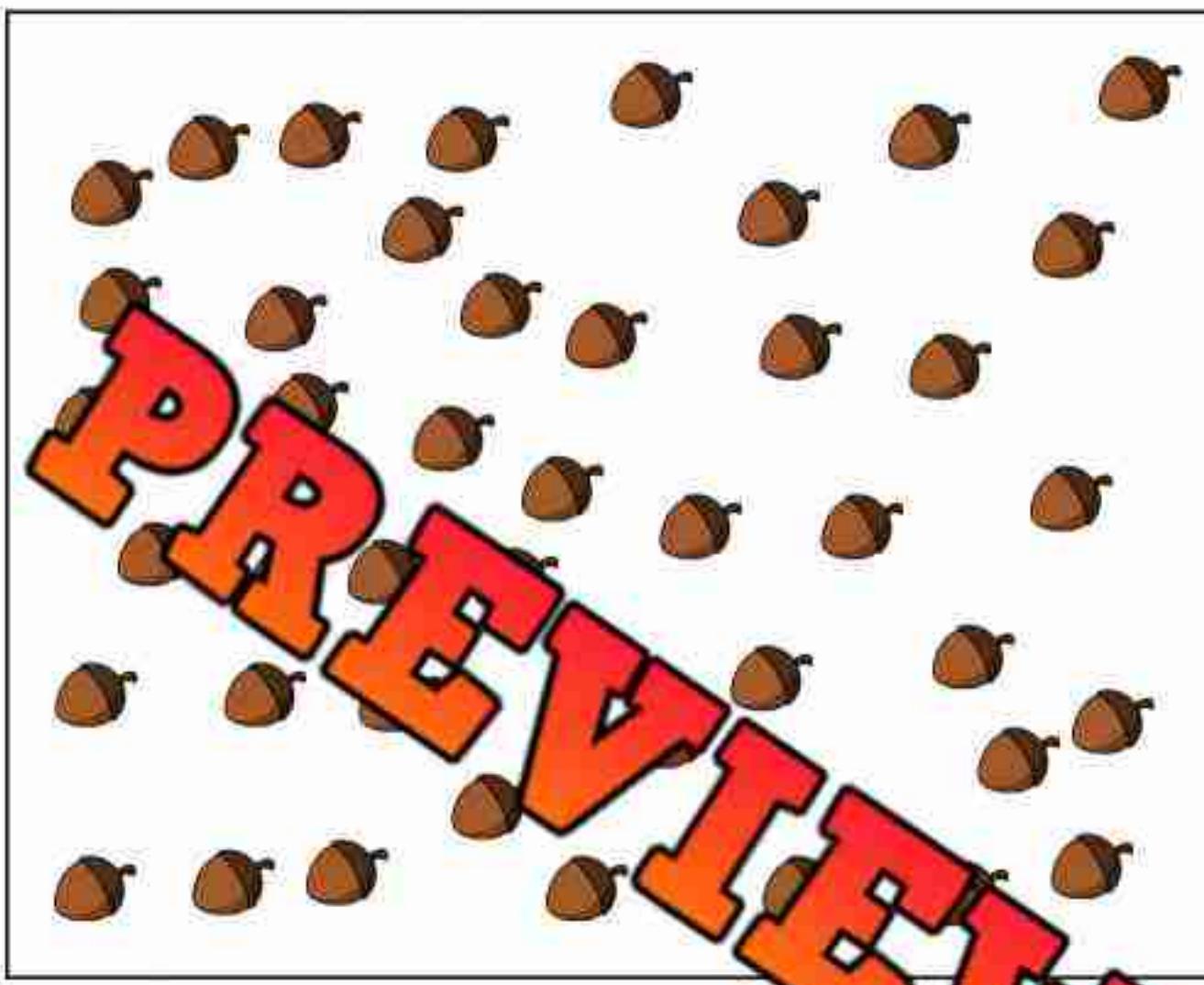
- A list of questions you will ask the students.
- Large letters A, B, C, and D placed around the room (A, B, C, D)

Instructions

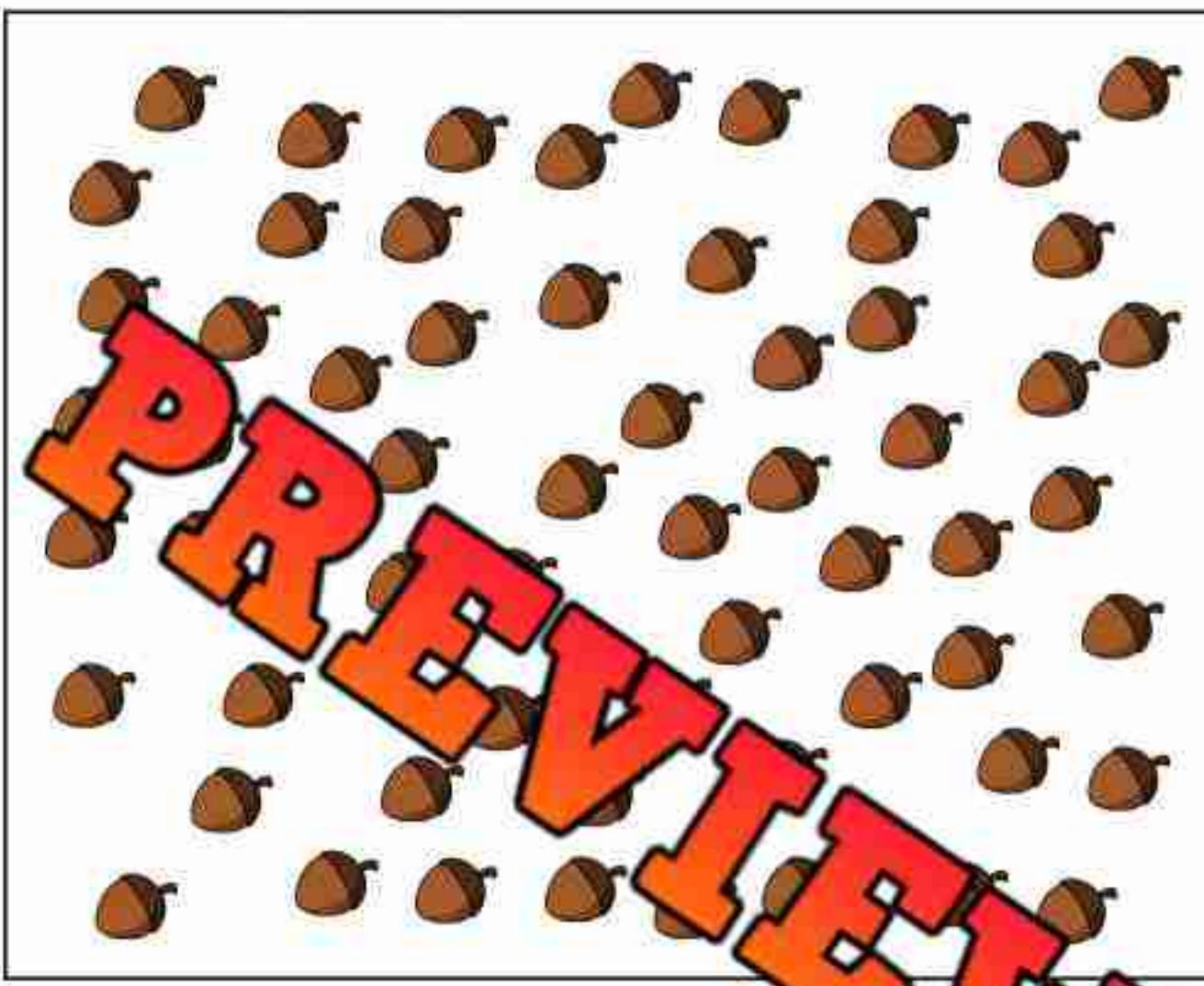
What you will do to complete the activity



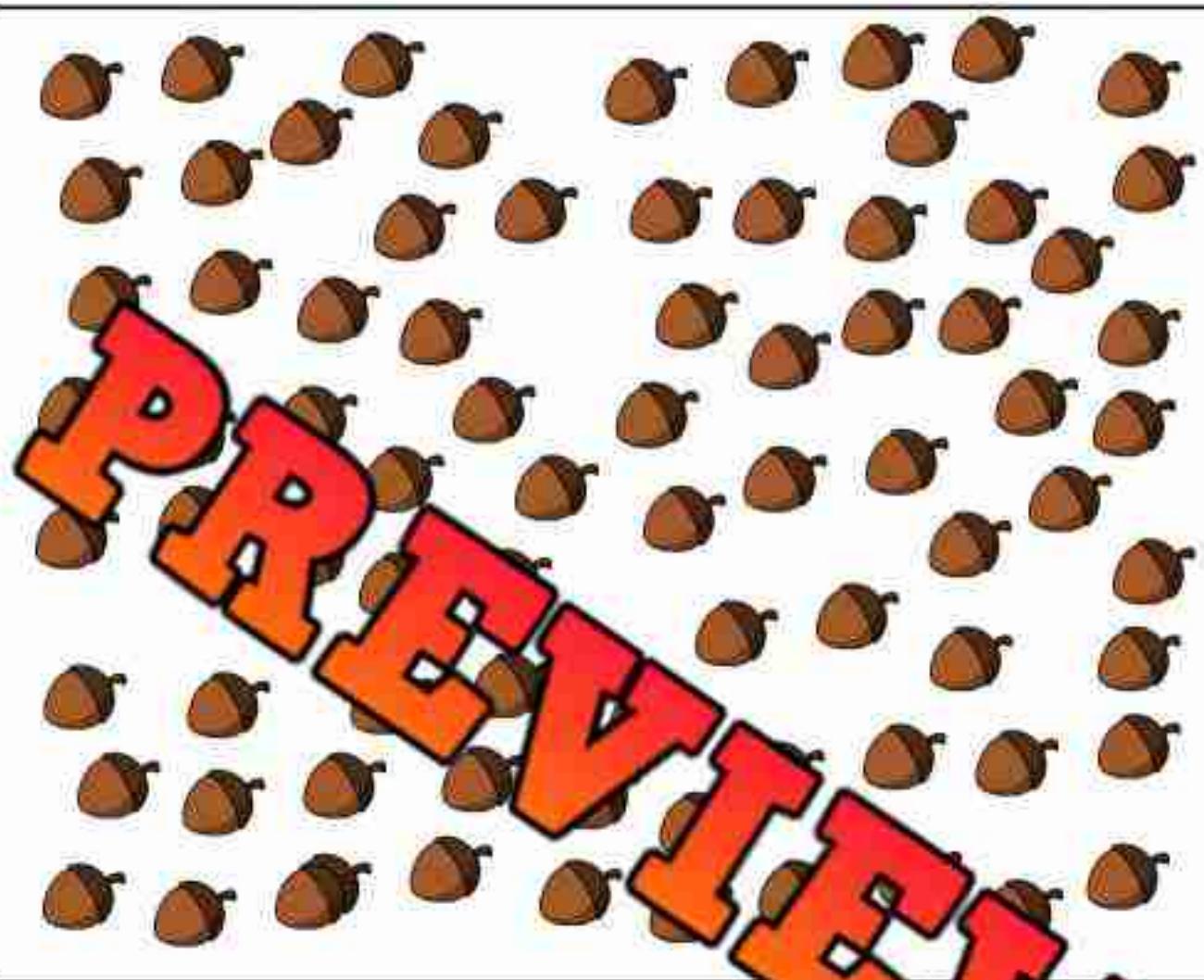
1. Prepare the classroom by placing large letters A, B, C, and D around the room.
2. Explain to the students that they will be asked questions on the smart board or projector with a container filled with a certain number of objects.
3. Read out a question about the quantity of objects in the container and provide four multiple-choice options (A, B, C, and D).
4. When you read the question, students will move to one of the corners that corresponds to the answer they think is correct.
5. Once all students have chosen their corners, reveal the correct answer and discuss why it is correct.
6. For some questions, ask students to discuss their estimation strategies and reasoning with others who chose the same option. Then discuss as a class.
7. Repeat with different graphics and questions to reinforce their estimation skills and understanding.
8. Encourage students to explain their thought process and share tips on making better estimates.
9. This activity helps students practice their estimation skills, encourages critical thinking, and fosters group discussion and reasoning.

**Multiple Choice**

- a) 9
- b) 17
- c) 44
- d) 96

**Multiple Choice**

- a) 26
- b) 61
- c) 35
- d) 122

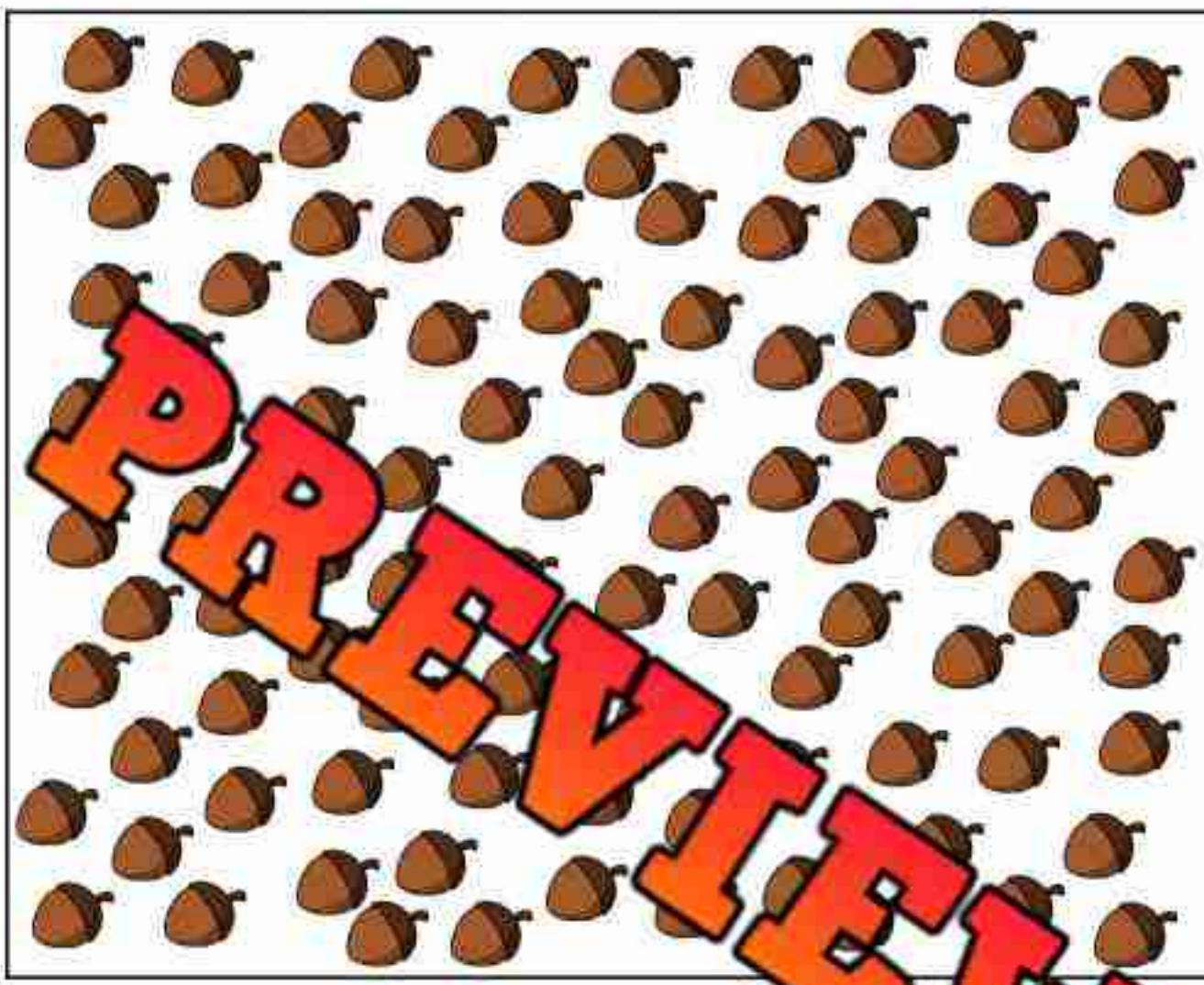
**Multiple Choice**

a) 80

b) 37

c) 126

d) 64

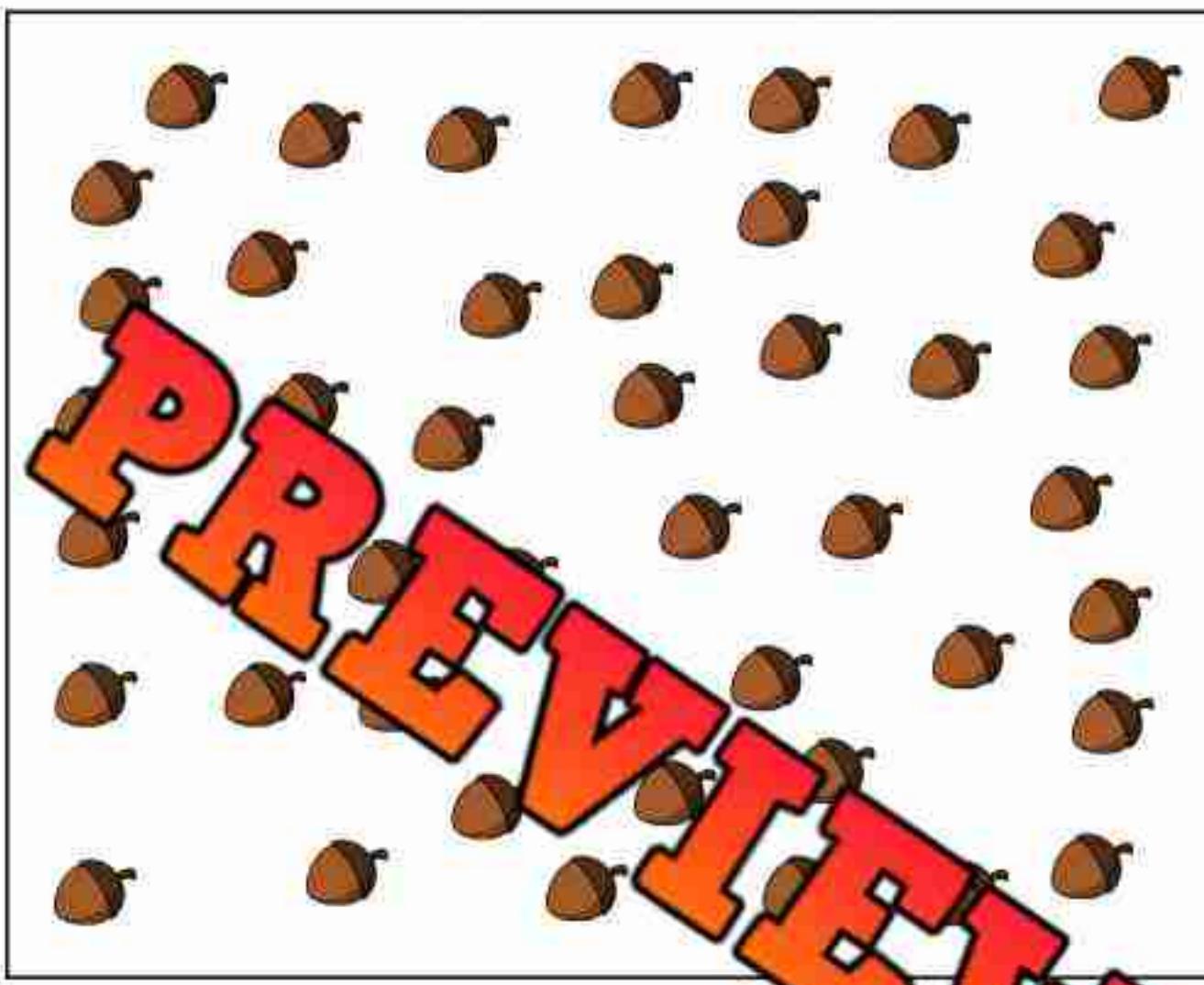
**Multiple Choice**

a) 102

b) 52

c) 77

d) 127

**Multiple Choice**

a) 15

b) 44

c) 62

d) 88

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Estimate how many bowling pins are in the box. Then count them to check.

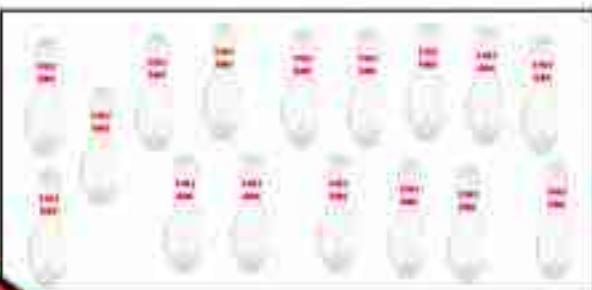


Estimate: About _____ pins

Actual: There are _____ pins

Name: _____

Estimate how many bowling pins are in the box. Then count them to check.

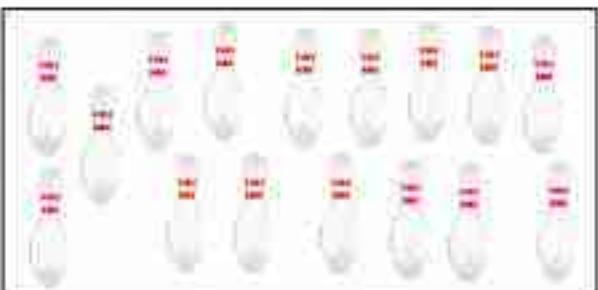


Estimate: About _____ pins

Actual: There are _____ pins

Name: _____

Estimate how many bowling pins are in the box. Then count them to check.



Estimate: About _____ pins

Actual: There are _____ pins

Name: _____

Estimate how many bowling pins are in the box. Then count them to check.



Estimate: About _____ pins

Actual: There are _____ pins

Counting by 20s**Part 1**

Count by 20's to 200

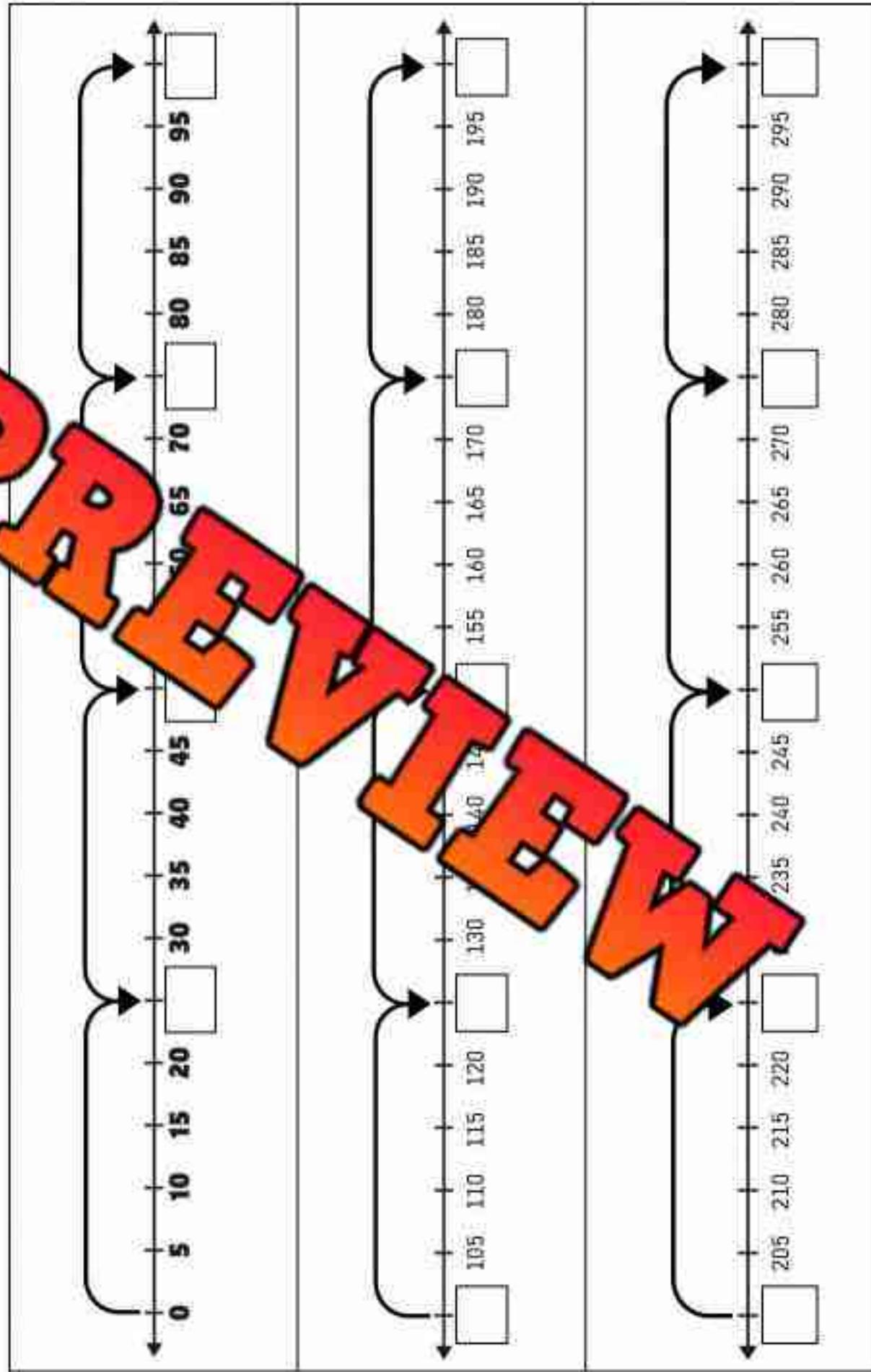
**Part 2**

Fill in the blanks counting by 20

1)	20	40	60					
2)	20			80				
3)		40			120			
4)								

PREVIEW

Counting By 25s



Counting By 50s

Part 1

Count by 50's to 200



50		150	
----	--	-----	--

**Part 2**

Count by 50's to 200 using the number line

50

**Part 3**

Fill in the blank using counting by 50's

1)	50	100		
2)	50			200
3)		100		
4)				

Part 4

How many fifty-dollar bills do you need to make \$200?
Draw them in the box

Counting By 20, 25, & 50s**Part 1**

Count by 20 starting at different numbers

1)	10	30	50	70					170	
2)	5		45	65					165	
3)	35			75					175	

Part 2

Count by 25 starting at different numbers

1)	0	25	50						175	
2)	5	30	55						180	
3)	20	45	70							

Part 3

Count by 50 starting at different numbers

1)	5	55			205	
2)	10	60			210	
3)	7	57			207	



Even and Odd Numbers

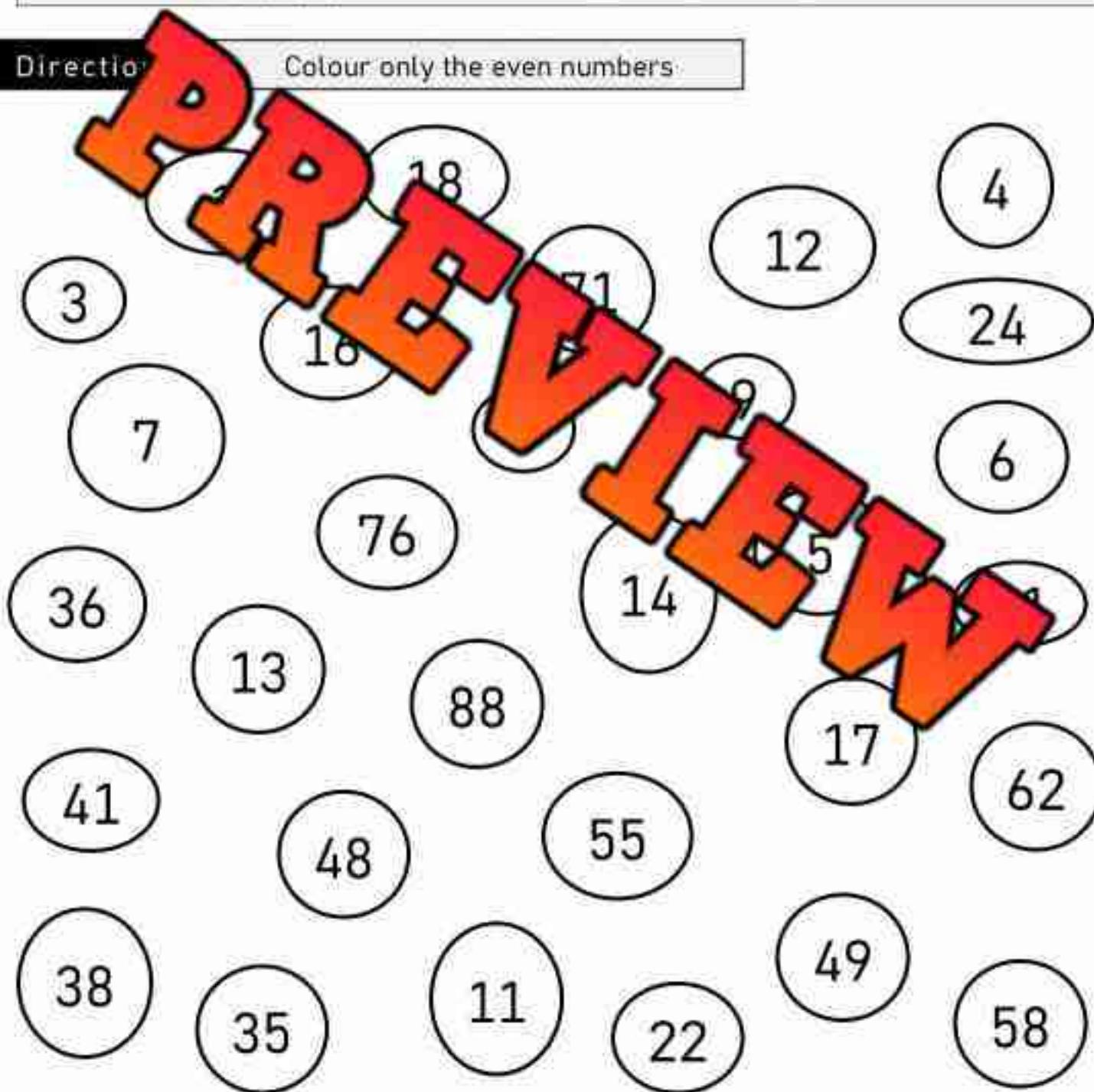
An **even** number is a number that can be shared into two equal-sized groups. An **odd** number cannot be shared into two equal-sized groups. Even numbers can be split in half while odd numbers can't be.

Even Numbers: 2, 4, 6, 8, 10...

Odd Numbers: 1, 3, 5, 7, 9...

Directions:

Colour only the even numbers



Even and Odd**Questions**Write **even** or **odd** beside the numbers**20**

1)	7	Odd
2)		
3)		
4)	8	
5)	22	
6)	16	
7)	15	
8)	19	
9)	23	
10)	28	

11)	44	Even
12)	32	
13)	38	
14)	33	
15)		
16)	53	
17)	67	
18)	60	
19)	70	
20)	84	

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Circle even or odd beside the numbers

		Odd	Even
1)	24	Odd	Even
2)	6	Odd	Even
3)	9	Odd	Even
4)	54	Odd	Even
5)	99	Odd	Even
6)	82	Odd	Even
7)			

Name: _____

Circle even or odd beside the numbers

		Odd	Even
1)	17	Odd	Even
2)	24	Odd	Even
3)	6	Odd	Even
4)	9	Odd	Even
5)	54	Odd	Even
6)	99	Odd	Even
7)	82	Odd	Even

Name: _____

Circle even or odd beside the numbers

		Odd	Even
1)	17	Odd	Even
2)	24	Odd	Even
3)	6	Odd	Even
4)	9	Odd	Even
5)	54	Odd	Even
6)	99	Odd	Even
7)	82	Odd	Even

Name: _____

Circle even or odd beside the numbers

		Odd	Even
1)	17	Odd	Even
2)	24	Odd	Even
3)	6	Odd	Even
4)	9	Odd	Even
5)	54	Odd	Even
6)	99	Odd	Even
7)	82	Odd	Even

Even and Odd

Part 1

Write even numbers in the stars below

**Part 2**

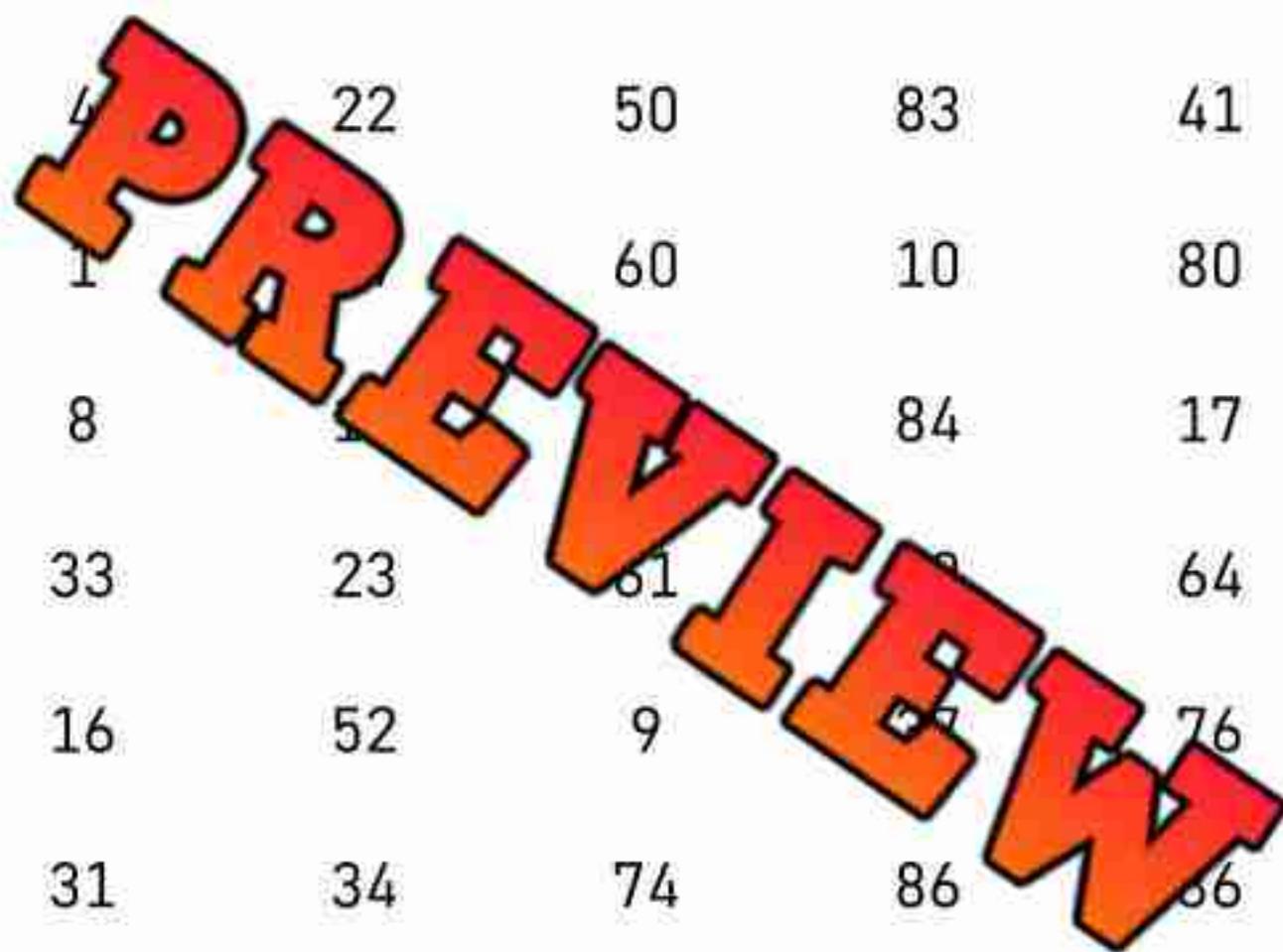
Write odd numbers in the stars



Even and Odd**Questions**

Circle the odd numbers in blue and the even numbers in green

71 28 12 20 68

The word "PREVIEW" is written in large, bold, red, 3D-style letters. The letters are arranged diagonally, sloping upwards from left to right. The letters are partially overlapping, creating a sense of depth. The letters are positioned in the center of the page, with the "P" on the top left and the "W" on the bottom right.
4 22 50 83 41
1 60 10 80
8 84 17
33 23 61 64
16 52 9 7
31 34 74 86 66
19 53 6 51 5
71 44 62 91 98
45 91 93 47 63

Activity Title: Odd and Even Number Hunt

Objective

What are we learning about?

To help students differentiate between odd and even numbers through an engaging and interactive activity.

Materials

What you will need for the activity.

- Colored paper
- Index cards
- Marker
- Tape or chalk
- Large open space (indoor or outdoor)

Even

96

Odd

88

Instructions

How you will complete the activity.

1. Cut out the index cards provided.
2. Use tape or chalk to create two large circles on the floor or wall, labeling one "Odd" and the other "Even."
3. Spread the numbered cards randomly around the room or outdoor space.
4. Divide the students into small groups.
5. On your signal, students search for numbered cards and decide if the number is odd or even.
6. Students then run to the appropriate circle and place their card in it.
7. After all cards are placed, gather the students and review each number, asking if it's odd or even and why.
8. Discuss patterns in odd and even numbers (e.g., even numbers end in 0, 2, 4, 6, 8; odd numbers end in 1, 3, 5, 7, 9).

Labels

Cut out the labels below and place them in a circle, like a hula-hoop

PREVIEW

Index Cards

Cut out the index cards below

57 11 83

PREVIEW

92 23 NEW

64 5 88

Index Cards

Cut out the index cards below

38 90 6

PREVIEW

95 8

21 85 41

Index Cards

Cut out the index cards below

36 16 74

PREVIEW

56 89

63 93

47 18 82

Index Cards

Cut out the index cards below

29 99 7

PREP
60 354
TEEN
25 86 42

91 32 61

Fair Sharing - Cookies

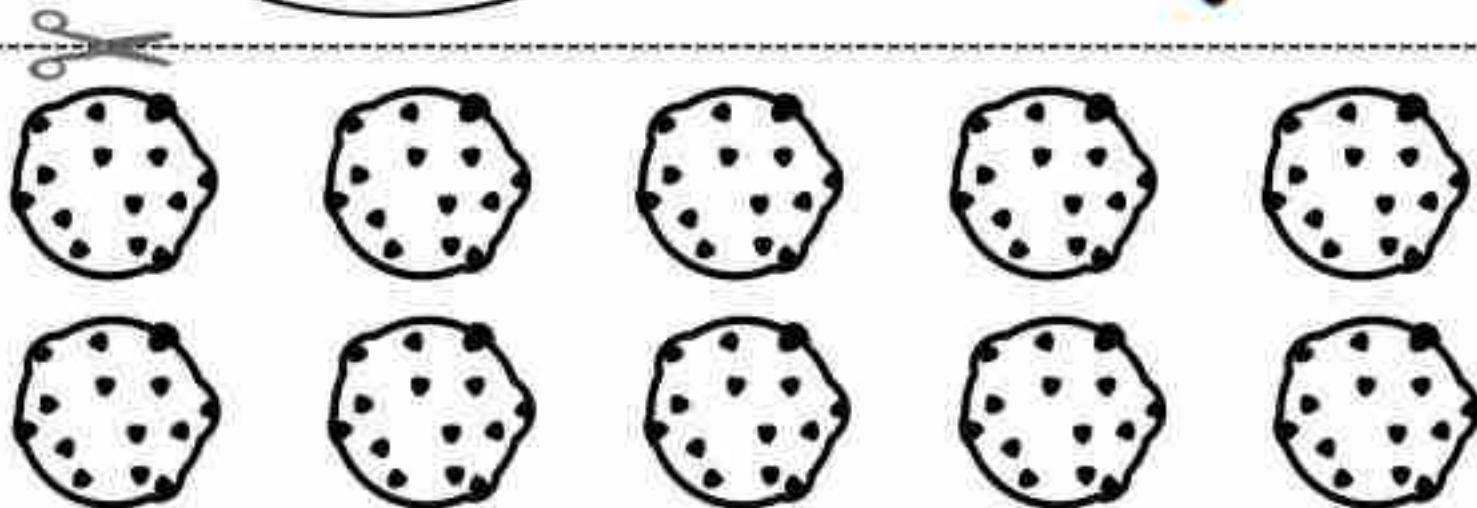
Two friends are sharing the cookies below. Cut and paste the cookies on the plates. Make sure they get the same number of cookies!

PREVIEW

10

Sam's Plate

Mark's Plate



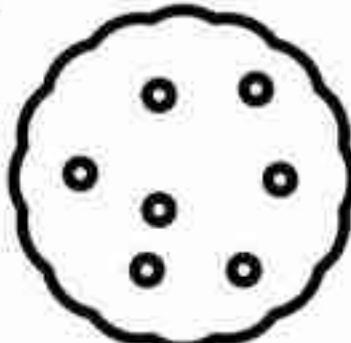
Fair Sharing - By Two

Sharing**How much does each friend get?**

1) Share the candies equally with 2 friends by circling what each gets.



4) Share the cookie equally with 2 friends.



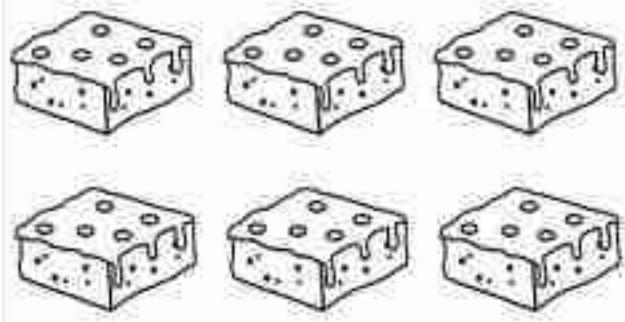
2) Share the oranges equally with 2 friends by circling what each gets.



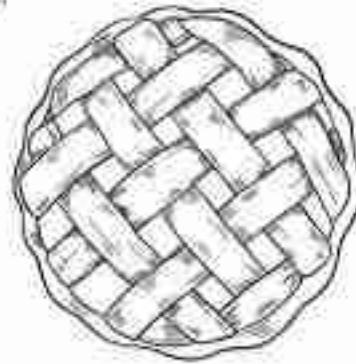
5) Share the pizza equally with 2 friends.



3) Share the brownies equally with 2 friends by circling what each gets.



6) Share the pie equally with two friends.



Fair Sharing - By Threes

Sharing

How much does each friend get?

1) Share the candies equally with 3 friends by circling what each gets.



4) Share the cake equally with 3 friends.



2) Share the bananas equally with 3 friends by circling what each gets.



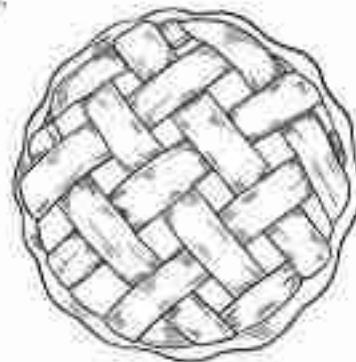
5) Share the books equally with 3 friends.



3) Share the muffins equally with 3 friends by circling what each gets.



6) Share the pie equally with 3 friends.



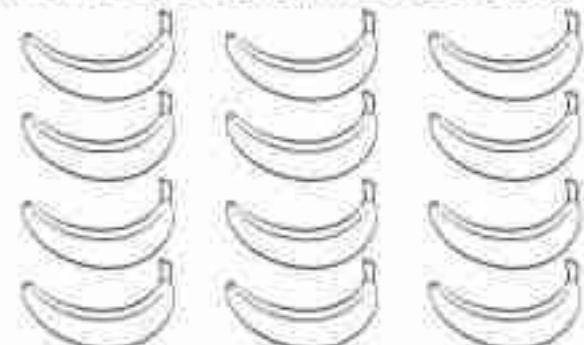
Fair Sharing - By Sixes

Sharing**How much does each friend get?**

1) Share the ice cream equally with 6 friends by circling what each gets.



4) Share the bananas equally with 6 friends by circling what each gets.



2) Share the orange equally with 6 friends by circling what each gets.



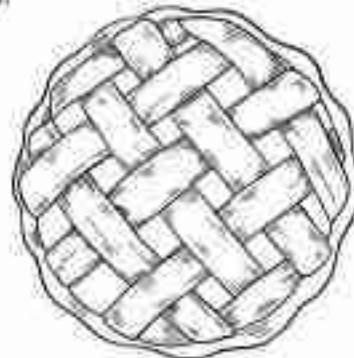
5) Share the pizza equally with 6 friends.



3) Share the muffins equally with 6 friends by circling what each gets.



6) Share the pie equally with 6 friends.



Fair Sharing – Chocolate Bars

Sharing

Share the chocolate bars below



Chocolate Bar

Chocolate Bar

1) a) Zach has one chocolate bar that he wants to share with 10 people. How many pieces will each person get?

b) Ryan is one of the people that is getting some chocolate. What fraction of the chocolate bar is Ryan getting?

2) a) Zach has two more chocolate bars that he wants to share with 10 people. How many pieces will each person get?

b) Chris is one of the people that is getting some chocolate. What fraction of the chocolate bar is Chris getting?

3) a) Zach found two more chocolate bars that he will now share with 5 people in total. How many pieces of chocolate will each person get?

b) Sam is one of the people that is getting some chocolate. What fraction of the chocolate bar is Sam getting?

Fair Sharing - Pizza

Alex and Julia are really hungry tonight. They ordered 3 pizzas to share. Each pizza is cut up into 4 slices. How much pizza will Alex and Julia get?

Alex's Plate

Julia's Plate

PREVIEW

of total pizzas

4

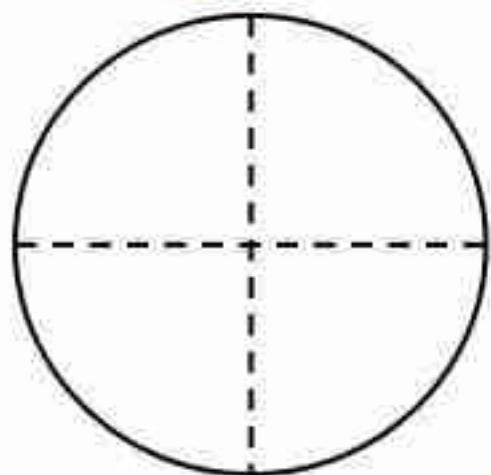
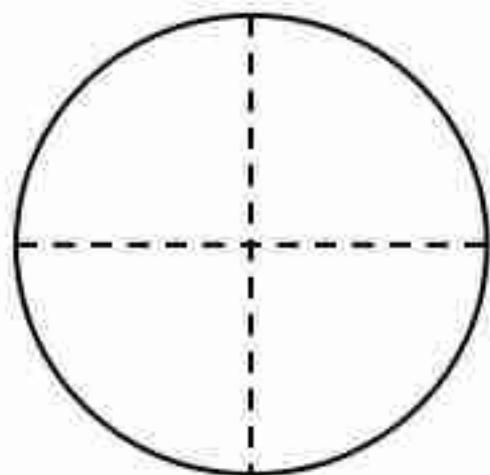
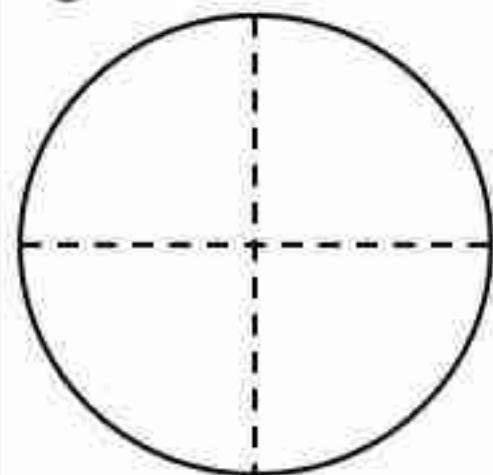
Alex's Slices

Slices in one
pizza
(whole)

of total pizzas

4

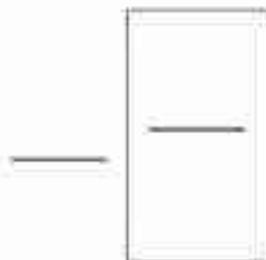
Julia's Slices

Slices in one
pizza
(whole)

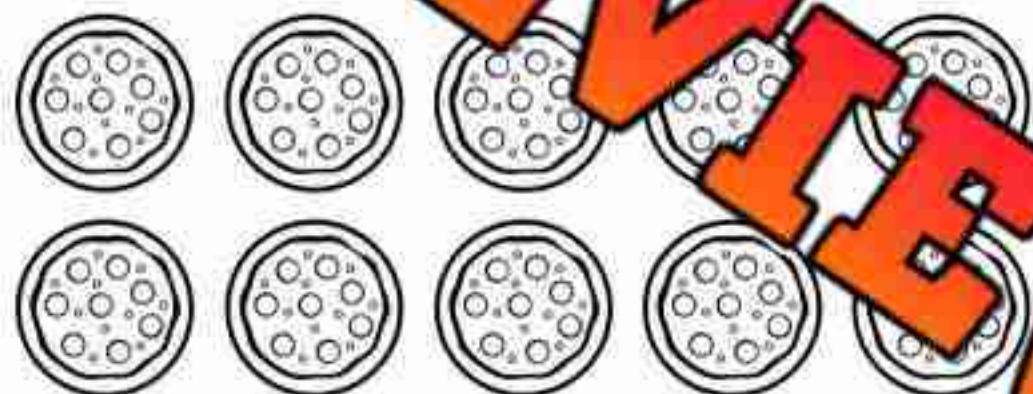
Fair Sharing – Mixed Numbers

Sharing**How much does each friend get?**

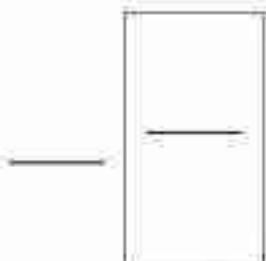
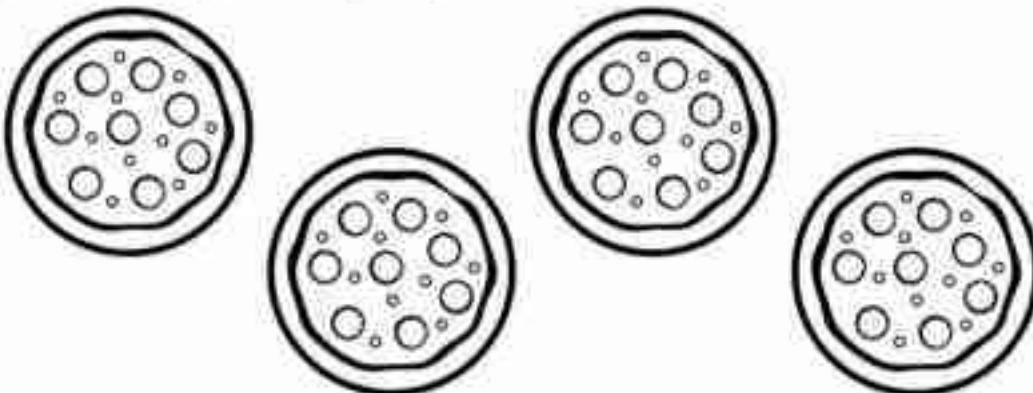
1) Share the pizzas equally with 2 friends.



2) Share the pizzas equally with 3 friends.



3) Share the pizzas equally with 3 friends.



Fractions

A **fraction** is a way of representing a part of a whole. It tells us how many equal parts something is divided into, and how many of those parts we have.

The top number, called the **numerator**, represents the part of the whole that we have. The bottom number, called the **denominator**, represents the total number of equal parts that make up the whole.

Examples

Read the examples below and fill in the table

1) A pizza is cut into 8 slices. If you eat 3 slices, how much of the pizza will you eat?	$\frac{3}{8}$
2) A split class of 30 students has 14 grade 3s. How many grade 3s make up the class?	$\frac{14}{30}$
3) A soccer game is 90 minutes long. You have run for 20 minutes of the game. How much of the game have you run?	$\frac{20}{90}$
4) Shelly has 10 blocks. 6 of the blocks are green. What fraction of the total blocks are green?	
5) On a plate is 12 cookies. You eat 4 of them. What fraction of the plate of cookies did you eat?	

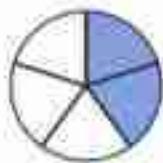
Think

Write your own example of a fraction below

Words	Fraction

Naming Fractions

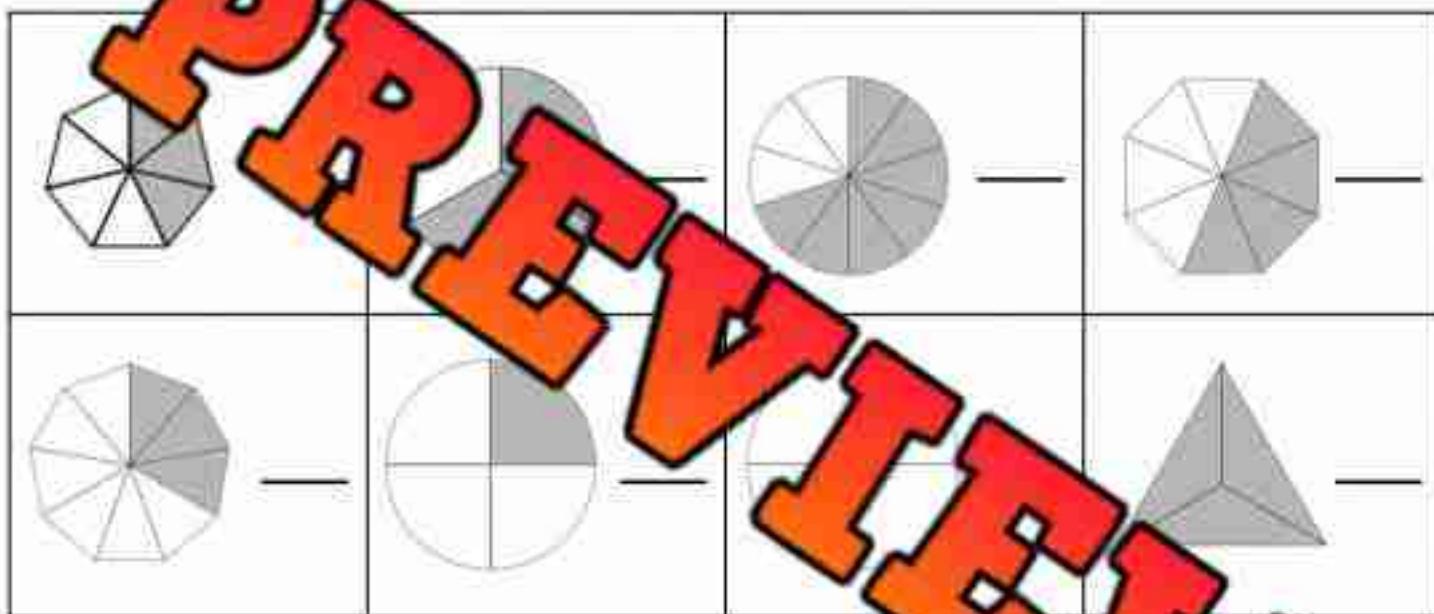
Fractions are numbers that represent an amount or quantity. Fractions are usually not whole numbers, but only fractions or parts of a whole number.



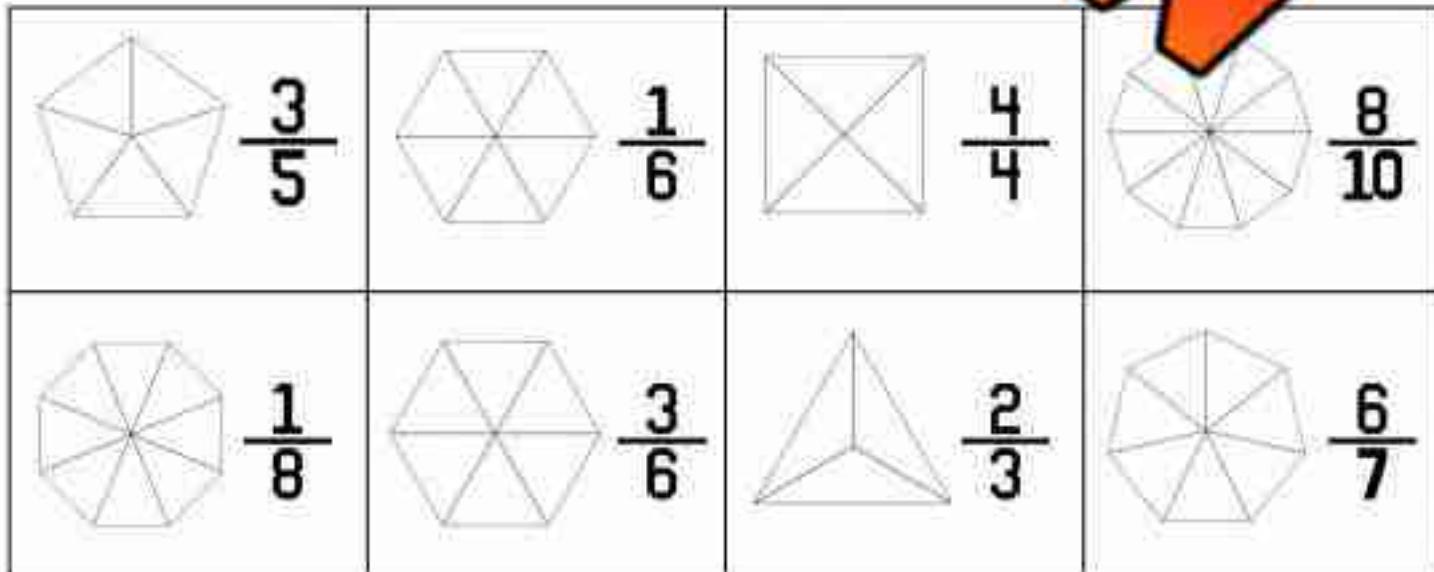
Example:

This pizza has been cut into 5 pieces. You are given the shaded slices of pizza, therefore, you received $\frac{2}{5}$ of the pizza. You do not get the whole pizza, so you are only getting part or a fraction of the 1 pizza.

Part 1: What fraction is shaded in on the images below



Part 2: Read the fraction and draw the shaded in value on the shape below



Fractions – Equal Parts

Part 1

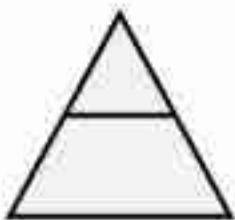
Are the shapes below split into equal parts?

1)



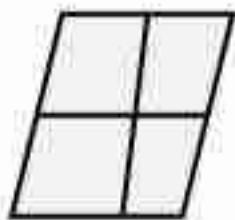
Yes

2)



Yes

3)



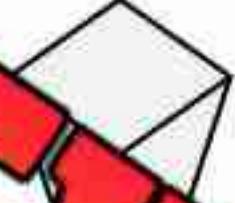
Yes

4)



Yes

5)



Yes

6)



Yes

Part 2

Are the statements true or false?

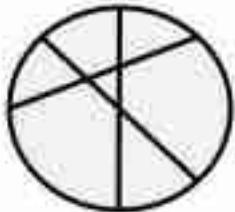
1) The square is cut into fourths.



True

False

2) The circle is cut into sixths.



True

False

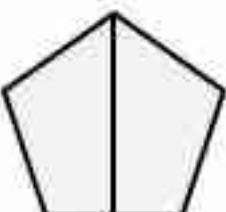
3) The triangle is cut into fourths.



True

False

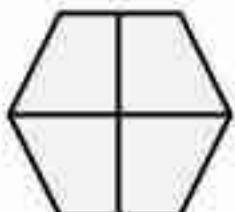
4) The pentagon is cut into halves.



True

False

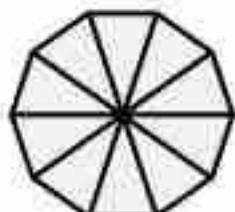
5) The hexagon is cut into fourths.



True

False

6) The octagon is cut into eighths.



True

False

Exit Cards

Cut Out

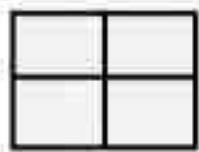
Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Are the shapes below split into equal parts?



Yes No



Yes No

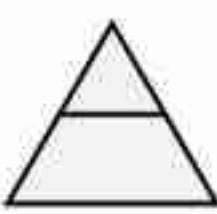
PREPTEEN

Name: _____

Are the shapes below split into equal parts?



Yes No



Yes No



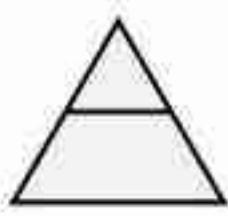
Yes No

Name: _____

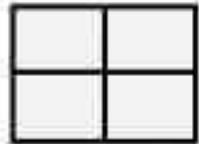
Are the shapes below split into equal parts?



Yes No



Yes No



Yes No



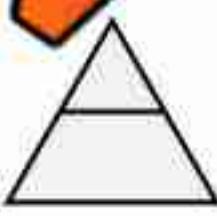
Yes No

Name: _____

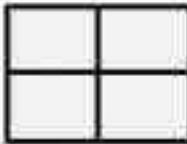
Are the shapes below split into equal parts?



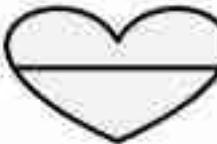
Yes No



Yes No



Yes No

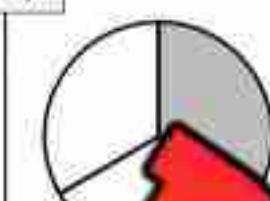


Yes No

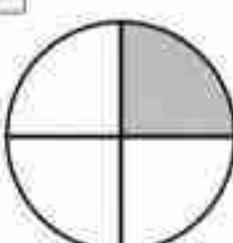
Fair Sharing – Equal Fractions

Instructions: Write the fraction and circle which is bigger ($<$ $>$ $=$) or if they are equal

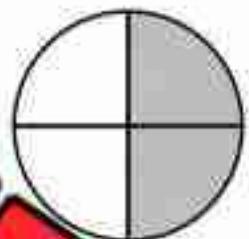
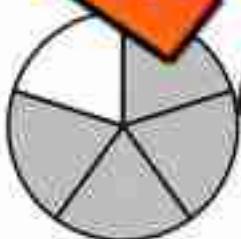
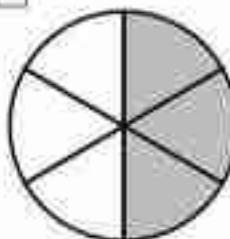
1)



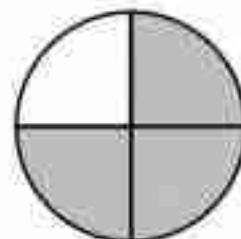
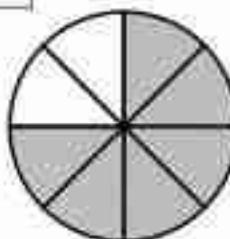
2)



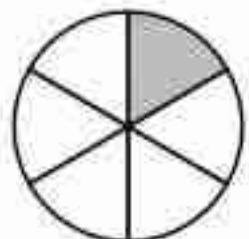
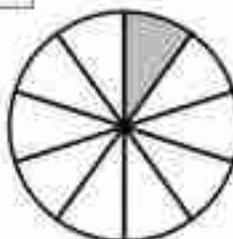
3)



5)



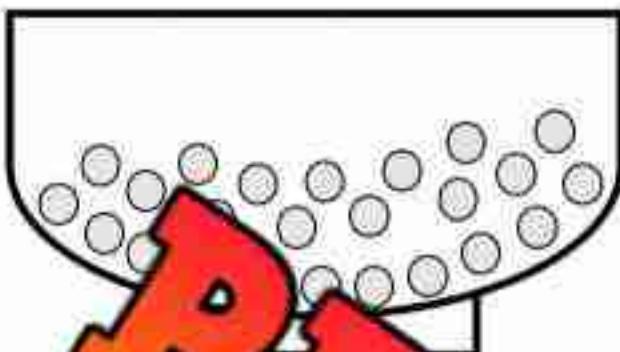
6)



Numbers Sense Quiz

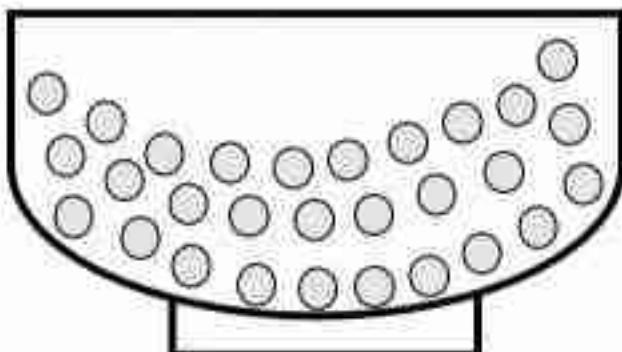
Part 1

Estimate how many cereal pieces are in the bowl. Then count them.



Estimate: About _____ pieces

Actual: There are _____ pieces



Estimate: About _____ pieces

Actual: There are _____ pieces

Part 2

Compare the following numbers < > =

1)

75 93

2)

42 11

3)

73 73

Part 3

Order the numbers below from greatest to least

43, 65, 31, 41, 46

18, 9, 25, 50

Part 4

Order the numbers below from greatest to least

11, 6, 3, 17, 15

40, 43, 29, 33, 46

Part 5

Fill in the Blanks by counting by 20, 25s, and 50s

1)

20, 40, 60, _____, _____, _____, _____, _____, _____

2)

25, 50, 75, _____, _____, _____, _____

3)

50, _____, _____

Part 6

Fill in the blanks by counting by 20, 25s, and 50s. Draw lines from the cookies to each person's plate.

Two friends are sharing 8 cookies. Draw lines from the cookies to each person's plate.

Jessica

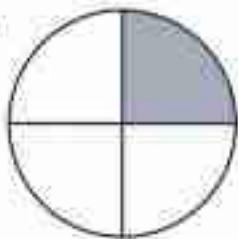


How many cookies does each friend get? _____

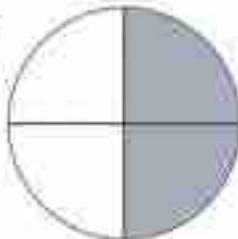
Part 7

Write the fraction and then label it - half, quarter, third, or fourth.

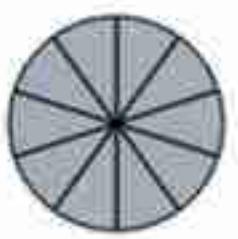
1.



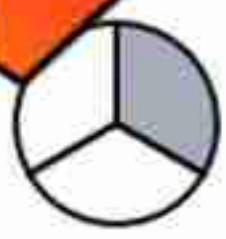
2.



3.



4.



Grade 2

Stand: B2 – Operations

	Curriculum Expectations	Pages
B2.1	Use the properties of addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations	178, 180 – 181, 183 – 186
B2.2	Recall and demonstrate addition facts for numbers up to 20, and related subtraction facts	99 – 106, 133 – 140,
B2.3	Use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used	89 – 98, 130 – 132
B2.4	Use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100	107 – 129, 141 – 177
B2.5	Represent multiplication as repeated equal groups, including groups of one half and one fourth, and solve related problems, using various tools and drawings	178 – 183, 185 – 189, 200 – 204
B2.6	Represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings	185 – 186, 190 – 204

Mental Math Strategy – Counting On

1. Circle the higher number on the hundreds chart/number line.
2. Count up by the other number and write down the answer.

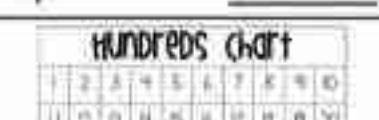
Part 1

Use the chart to answer the question

1) $4 + 5 =$ _____



2) $8 + 6 =$ _____



3) $8 + 3 =$ _____



4) $7 + 4 =$ _____



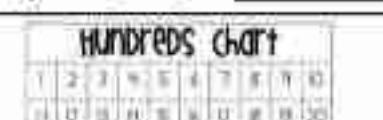
5) $3 + 6 =$ _____



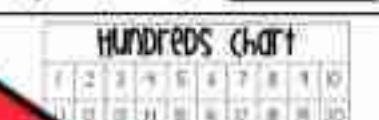
6) $2 + 5 =$ _____



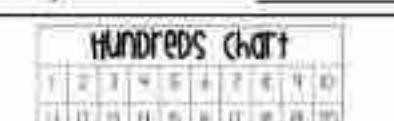
7) $8 + 8 =$ _____



9) $9 + 4 =$ _____



10) $9 + 9 =$ _____



11) $5 + 6 =$ _____

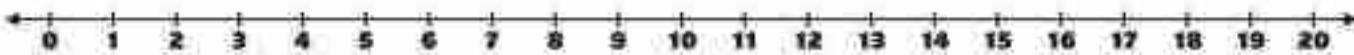


8) $8 +$ _____

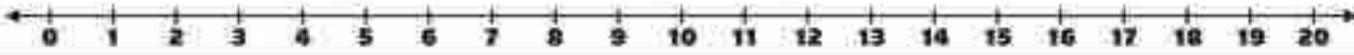
**Part 2**

Use the number line to find the answer

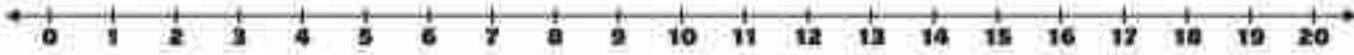
1) $3 + 9 =$ _____



2) $6 + 4 =$ _____



3) $5 + 9 =$ _____



Mental Math Strategy – Making Tens

Directions:

1. Create a ten by taking some from the other number.
2. Add the remaining amount.



1) $14 + 7$



2) $19 + 6$



3) $8 + 18$

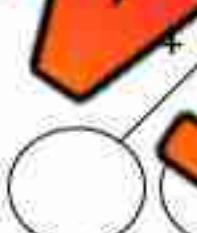


$20 + 3 = 23$

4) $8 + 14$



6) $18 + 13$



$\underline{\quad} + \underline{\quad} = \underline{\quad}$

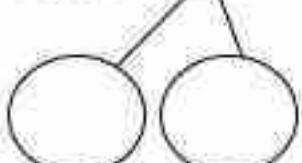
$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

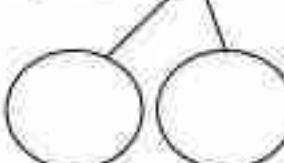
7) $28 + 13$



8) $39 + 17$



9) $48 + 24$



$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

Mental Math Strategy – Making Doubles

Directions:

1. Decide which number you will double and add those numbers together.
2. Subtract or add the remaining amount

*** If you added to the original number, subtract at the end. If you subtracted from the original number, then add at the end.



PREDICTION

$20 + 21$

$15 + 16$

$29 + 30$

$31 + 30$

$3 + 4$

$11 + 10$

$50 + 51$

$$\begin{array}{r} 5 + 6 \\ 5 + 5 \\ \hline 10 + 1 = 11 \end{array}$$

$4 + 5$

Mental Math – Break Into Place Value

Directions:

1. Solve each digit by writing out its place value and adding it to the other number's same place value (hundreds + hundreds, tens + tens, ones + ones)
2. Add together your totals



PREVIEW

13 + 12

$14 + 17$

$22 + 23$

$24 + 13$

36

$45 + 41$

$52 + 44$

Counting – Bridging over 100

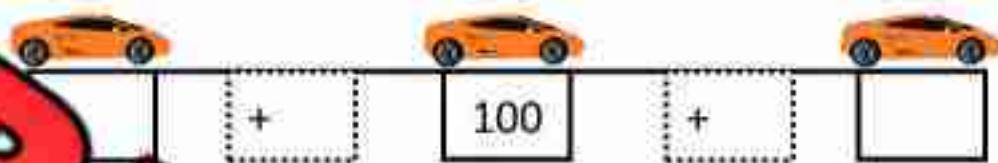
$94 + 8$



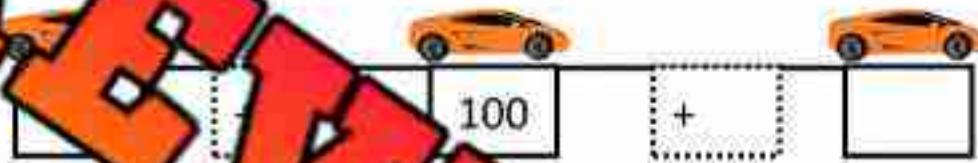
Questions:

Fill in the blanks by bridging over 100

1) 9



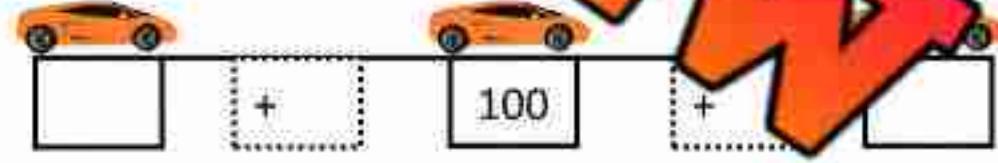
2) 93 + 9



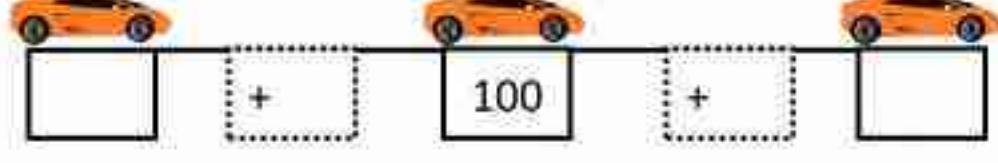
3) 95 + 8



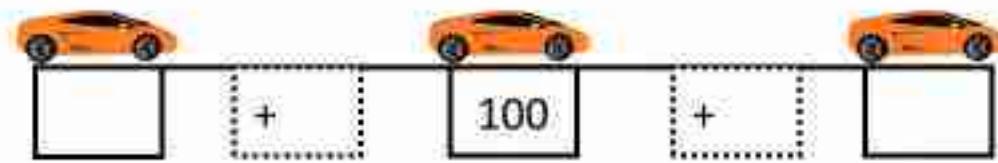
4) 99 + 6



5) 94 + 9



6) 96 + 7



Math Facts – Adding 0 and 5**Questions**

Solve as many problems as you can before the time runs out!

$$\begin{array}{r} 6 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ 4 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

PREPARE NOW

Math Facts – Adding 10

Questions

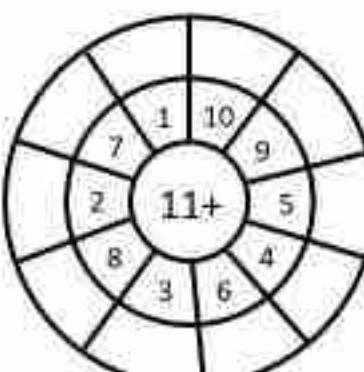
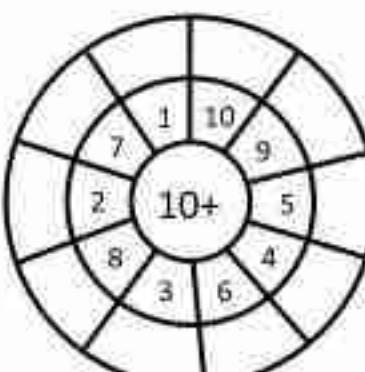
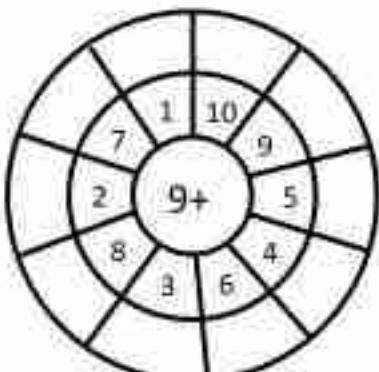
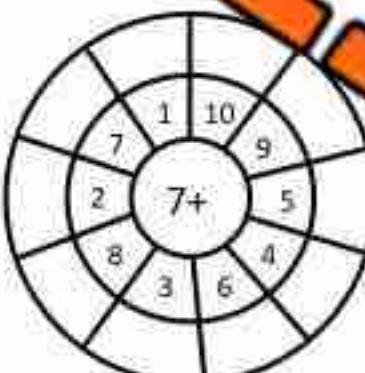
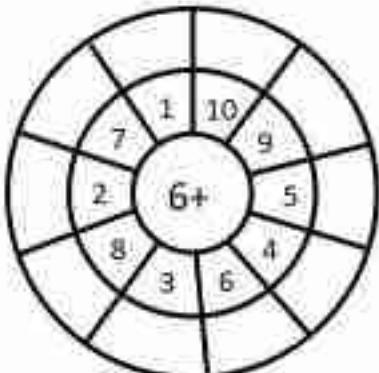
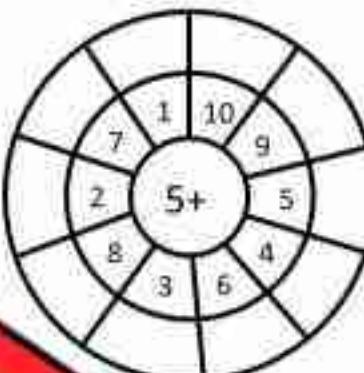
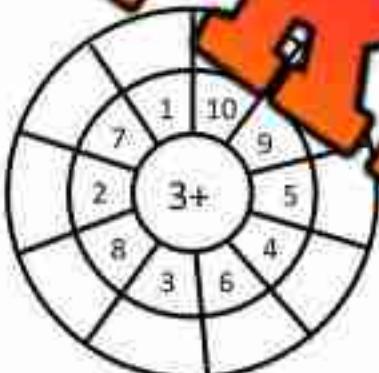
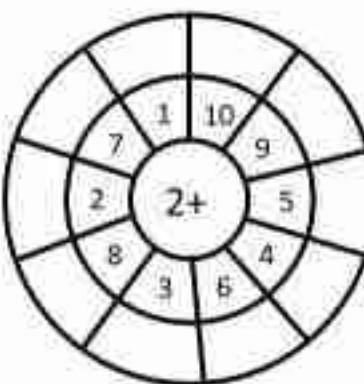
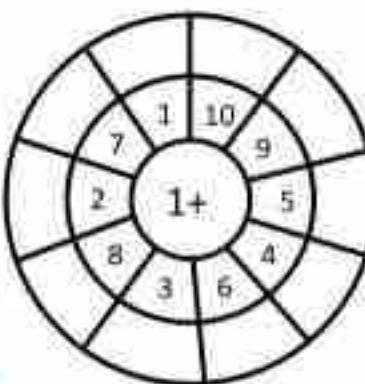
Solve as many problems as you can before the time runs out!

4 + 10 ____	10 + 1 ____	10 + 7 ____	10 + 7 ____	1 + 10 ____	2 + 10 ____
$+$ 9 ____	10 + 10 ____	10 + 10 ____	8 + 10 ____	10 + 7 ____	
10 + 0 ____	4 + 10 ____	4 + 0 ____	4 + 10 ____	4 + 10 ____	4 + 10 ____
10 + 9 ____	10 + 6 ____	10 + 1 ____	10 + 10 ____	1 + 10 ____	1 + 0 ____
10 + 4 ____	2 + 10 ____	10 + 9 ____	9 + 10 ____	10 + 4 ____	10 + 7 ____
4 + 10 ____	10 + 5 ____	10 + 4 ____	10 + 5 ____	10 + 10 ____	3 + 10 ____

Bullseye Math Facts

Questions

Fill in the outer layer of the bullseye



Adding Multiples of 10

Part 1

Answer the questions below

1)

30

+

20

=

2)

50

+

30

=

3)

10

40

=

4)

30

+

60

=

5)

70

6)

80

+

10

=

7)

40

+

40

5)

50

+

20

=

9)

60

+

40

=

8)

50

+

30

=

Part 2

Answer the questions below

1) Molly has \$60 in her bank account. She is given \$20. How much does she have now?



2) Zane drove 40 km to work and 40 km back home. How many total km did he drive?



Adding Multiples of 10

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Questions

Answer the questions.

1)	52	+	20	=		21	30	=		
3)	38	+	40	=		4)	39	+		
5)	41	+	50	=		6)	83	+	10	=
7)	68	+	30	=		8)	54	+	40	=
9)	17	+	40	=		10)	77	+	20	=

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Solve the problems below

a) 1)	2) 60
	$+ 20$

b) Sophia has 20 stickers in her collection. She wins 30 more in a contest. How many stickers does she have now?

Name: _____

Solve the problems below

a) 1) 18	2) 60
	$+ 20$

b) Sophia has 25 stickers in her collection. She wins 30 more in a contest. How many stickers does she have now?

Name: _____

Solve the problems below

a) 1) 18	2) 60
	$+ 20$

b) Sophia has 25 stickers in her collection. She wins 30 more in a contest. How many stickers does she have now?

Name: _____

Solve the problem

a) 1) 18	2) 60
	$+ 20$

b) Sophia has 25 stickers in her collection. She wins 30 more in a contest. How many stickers does she have now?

Part Part Whole – Numbers To 18

Questions:

How do the parts below equal the whole at the top?

1)

11

2)

14

3)

12

5)

7

7)

10

5

9)

14

8

10)

9

8

10	5

12	

8	

9	8

	8

4)

6

5

6)

17

8)

18

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

8	

9	8

	8

6	5

7	

6	5

10	5

12	

Part Part Part Whole – Numbers To 18

Questions

How do the parts below equal the whole at the top

1)

12

	5	

2)

11

	2	6

3)

5

5		

4)

5

5	5	5

5)

15

7

4

7		4

6)

6

		6

7)

9

4

1

9	4	1

8)

15

9

4

9		4

9)

17

6

6

6	6	

10)

18

11

6

11		6

Part Part Part Whole – Numbers To 100

Questions How do the parts below equal the whole at the top

1)

32		

2)

48		
	20	20

3)

50		
20		20

4)

50		
	15	8

5)

63		
40		13

6)

63		
22	22	14

7)

90		
35	45	

8)

97		
50		40

Number Line Addition

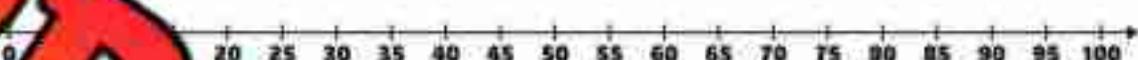
Questions

Use the number line to add the numbers below.

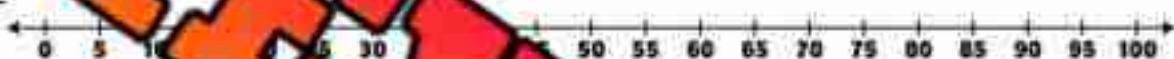
$10 + 15 = 25$

+ 15

$20 + 10 =$



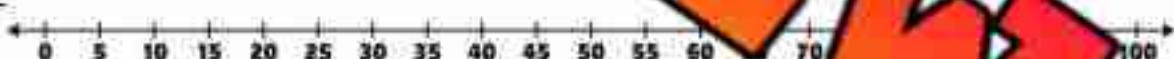
$25 + 10 =$ **_____**



$40 + 15 =$ **_____**



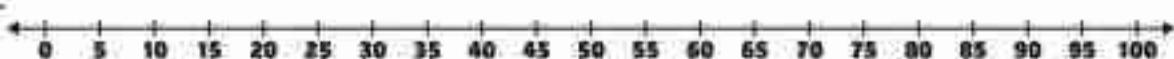
$50 + 20 =$ **_____**



$70 + 30 =$ **_____**



$40 + 50 =$ **_____**



$80 + 10 =$ **_____**



Associative Property of Addition

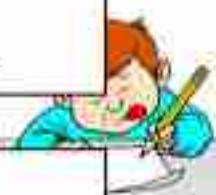
Questions

Investigate the results of adding when changing the order of the numbers

1)

$5 + 5 + 8 = \underline{\hspace{2cm}}$

$8 + 5 + 5 = \underline{\hspace{2cm}}$



2)

$9 + 1 + 7 = \underline{\hspace{2cm}}$

$5 + 1 + 9 = \underline{\hspace{2cm}}$

3)

$3 + 7 + 6 = \underline{\hspace{2cm}}$

$6 + 7 + 3 = \underline{\hspace{2cm}}$

4)

$4 + 6 + 5 = \underline{\hspace{2cm}}$

$5 + 6 + 4 = \underline{\hspace{2cm}}$

5)

$2 + 9 + 1 = \underline{\hspace{2cm}}$

$1 + 9 + 2 = \underline{\hspace{2cm}}$



6)

$7 + 2 + 8 = \underline{\hspace{2cm}}$

$8 + 2 + 7 = \underline{\hspace{2cm}}$



7)

$4 + 7 + 6 = \underline{\hspace{2cm}}$

$6 + 7 + 4 = \underline{\hspace{2cm}}$

Adding – Borrowing**Questions**

Use the standard algorithm to solve the addition problems below

1)	Tens	Ones
$+$	3	7

2)	Tens	Ones
	6	7
$+$	1	4

3)	Tens	Ones
	4	6
$+$	3	5

4)	Tens	Ones
	4	9
$+$	3	4

5)	Tens	Ones
	6	2
$+$	2	4

6)	Tens	Ones
	7	5
$+$	1	5

7)	Tens	Ones
	4	7
$+$	1	7

8)	Tens	Ones
	6	8
$+$	2	7

9)	Tens	Ones
	7	9
$+$	1	4

Adding - Word Problems (Up To 18)

Questions Solve the following addition questions. Tip: draw pictures to help!

1) Rebecca has \$10 in her wallet. She finds \$5 on the ground. How much money does she have now?



2) Kennedy has 5 points in a game she is playing. She gets 6 more points. How many total points does she have?



3) Scott scores 14 goals in a hockey tournament. He scores 5 more goals in the last game. How many total goals did he score?



4) Luke ran 9 kilometres on Monday and 7 kilometres on Tuesday. How many total kilometres did he run?



Adding - Word Problems (Up To 100)

Questions Solve the following addition questions. Tip: draw pictures to help!

1) Stacy read 63 pages last week in her book. She read another 35 pages this week. How many total pages has she read?



2) Beth has 5 crayons. She bought another 25 more crayons. How many crayons does Beth have now?



3) Alexa drove 63 kilometres yesterday and 36 kilometres today. How many total kilometres did she drive?



4) Lindsay has a math test tomorrow. She studied for 35 minutes last night and 56 minutes tonight. How many total minutes has she studied?



Activity: Adding Adventures: Treasure Hunt

Objective

What are we learning about?

To help students understand and practice addition through engaging word problems involving whole numbers up to 100.

Materials

What you will need for the activity.

- Sets of index cards with addition word problems
- Markers or pens for writing on the cards
- Small bags or containers to hold the card sets
- Optional: small prizes (or a treat for treasure)
- Tape



Instructions

How you will complete the activity

- 1) Prepare sets of index cards with different addition problems (up to 18 and up to 100).
- 2) Hide these cards around the classroom or in a designated outdoor area, taping them under chairs, desks, or tucked into non-obvious spots.
- 3) Divide the class into small teams and give each team a bag to collect their cards.
- 4) Explain the game: each team will hunt for a card, solve the problem as quickly as they can, and return to you for verification.
- 5) Say "Go!" Each team rushes to find their first card.
- 6) When a team thinks they have the correct answer, they come back to you. If correct, they receive a small prize (or a checkmark) and move on to find the next card.
- 7) The game continues until all cards are found or you call time. The team with the most correct answers wins.
- 8) Discuss the game, focusing on the addition problems and solutions each team encountered.

Instructions

Cut out the cards below

John has 7 apples and buys 5 more. How many apples does he have now?

Sarah has 6 candies and receives 8 more from a friend. How many candies does she have now?

Mary has 9 balloons and buys 30 more. How many balloons does she have now?

Tom finds 4 marbles and then finds 9 more. How many marbles does he have in total?

Lisa has 3 books and buys 12 more. How many books does she have now?

Mike has 10 stickers and gets 7 more from his sister. How many stickers does he have now?

If you have 40 pencils and buy 20 more, how many pencils do you have in total?

There were 50 students in the class, and 20 new students joined. How many students are there now?

Instructions

Cut out the cards below

Tom had 30 candies and received 15 more from his friend. How many candies does he have now?

Lisa bought 40 cookies and made 20 more. How many cookies does Lisa have now?

A farmer has 9 cows and buys 8 more. How many cows does the farmer have now?

Sam has 15 toy cars and gets 10 more as a gift. How many toy cars does Sam have now?

Emma has 13 flowers and picks 5 more. How many flowers does Emma have now?

Ben has 12 rocks and finds 7 more. How many rocks does Ben have now?

Lucy has 14 crayons and buys 3 more. How many crayons does Lucy have now?

Jake has 20 marbles and wins 10 more in a game. How many marbles does he have now?

Instructions

Cut out the cards below

$18 + 9 + 6 =$

46

$\underline{+ 15}$

PREVIEW

$+ 24$

 $33 + 11 + 8 =$
 $5 \quad 14$

$12 + 12 + 12 =$

55

$20 + 21 + 22 =$

20

$\underline{+ 11}$

Instructions

Cut out the cards below

Nina has 8 dolls and gets 6 more for her birthday. She then finds 2 more in her closet. How many dolls does she have now?

Anna has 10 stickers at home. Her mom gives her 12 more. She gets 8 stickers for her book at school. How many stickers does Anna have now?

James has 28 toy cars, 13 toy motorcycles, and 18 toy trucks. How many toy vehicles does James have?

Sophie has 19 bracelets and buys 18 more. She makes 15 more bracelets. How many bracelets does Sophie have now?

Carlos buys 35 pencils and finds 8 more in his drawer. At school, his teacher gives him 10 more pencils. How many pencils does he have now?

A baker bakes 25 chocolate chip cookies, 15 sugar cookies, and 30 oatmeal raisin cookies. How many cookies does the baker have now?

David has 12 comic books and buys 10 more from a friend. David adds 30 more comic books. How many comic books does David have now?

Lucas has 13 action figures and gets 6 more as a gift. Then he buys 22 more. How many action figures does Lucas have now?

Subtracting Mental Math – Counting Back

1. Circle the higher number on the hundreds chart/number line.
2. Count back by the other number and write down the answer



Part 1

Use the charts to answer the questions

1) $18 - 5 =$ _____

Hundreds Chart									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

2) $22 - 4 =$ _____

Hundreds Chart									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

3) $27 - 7 =$ _____

Hundreds Chart									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

4) $43 - 9 =$ _____

Hundreds Chart									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

73

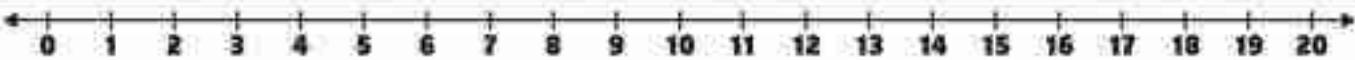
6) $93 - 6 =$ _____

Hundreds Chart									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

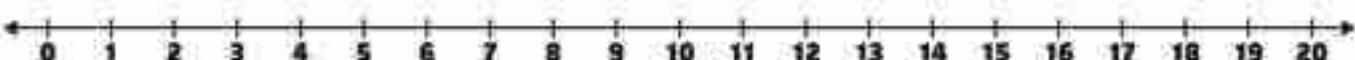
Part 2

Use the number line to find the answer

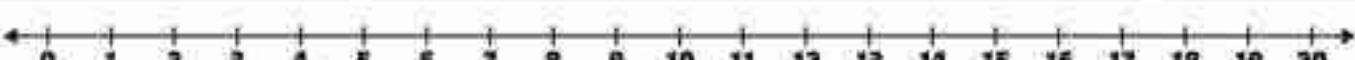
1) $17 - 6 =$ _____



2) $15 - 4 =$ _____



3) $20 - 8 =$ _____



Subtraction Mental Math – Counting Up

Directions:

1. Start with the smaller number
2. Count up from the smaller number to the bigger number to find the difference
3. The difference is the answer

PREVIEW

$24 - 10$

10

Answer

$33 - 21$

$27 - 15$

$38 - 26$

$49 - 31$

$68 - 55$

$87 - 73$

Math Facts – Subtract By 8 and 9

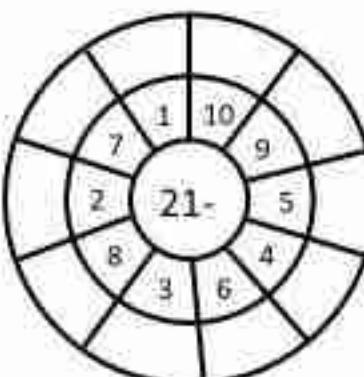
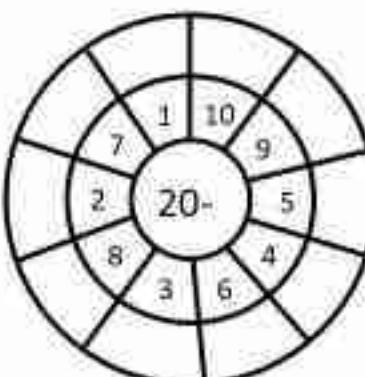
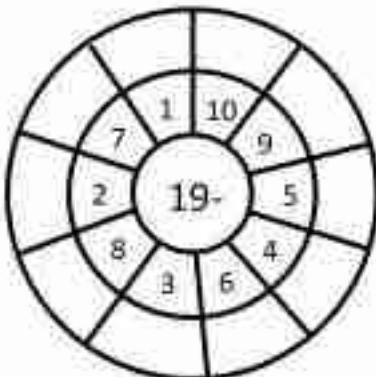
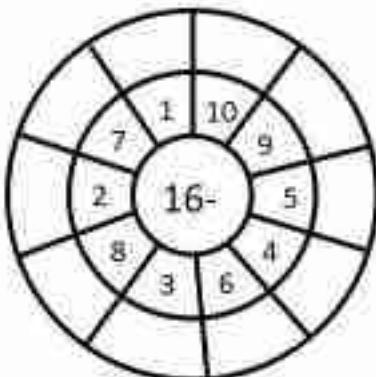
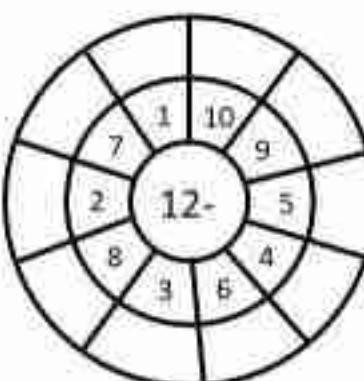
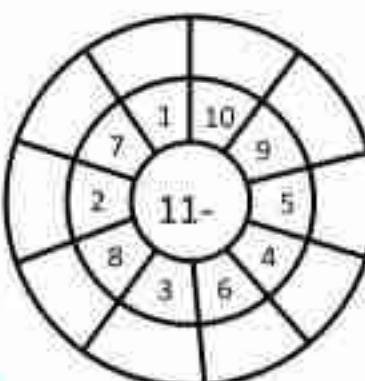
Questions: Solve as many problems as you can before the time runs out!

12 - 8 ____	9 - 9 ____	8 - 8 ____	14 - 9 ____	13 - 9 ____	10 - 8 ____
14 - 9 ____	10 - 8 ____	10 - 8 ____	13 - 9 ____		
11 - 8 ____	13 - 9 ____	11 - 9 ____	14 - 9 ____	8 - 8 ____	12 - 7 ____
14 - 9 ____	13 - 8 ____	9 - 8 ____	10 - 9 ____	8 - 7 ____	
12 - 8 ____	13 - 8 ____	15 - 9 ____	14 - 9 ____	12 - 8 ____	11 - 8 ____
12 - 9 ____	10 - 9 ____	11 - 8 ____	13 - 8 ____	13 - 9 ____	11 - 9 ____

Bullseye Subtraction Facts

Questions

Fill in the outer layer of the bullseye



Subtracting Multiples of 10

Part 1

Answer the questions below

$$1) \quad 70 \quad - \quad 20 \quad = \quad \boxed{}$$

$$2) \quad 50 \quad - \quad 30 \quad = \quad \boxed{}$$

$$3) \quad 80 \quad - \quad 40 \quad = \quad \boxed{}$$

$$4) \quad 30 \quad - \quad 10 \quad = \quad \boxed{}$$

$$5) \quad 40 \quad - \quad \quad \quad = \quad \boxed{}$$

$$6) \quad 90 \quad - \quad 50 \quad = \quad \boxed{}$$

$$7) \quad 50 \quad - \quad 40 \quad = \quad \boxed{}$$

$$8) \quad 100 \quad - \quad 90 \quad = \quad \boxed{}$$

$$9) \quad 60 \quad - \quad 40 \quad = \quad \boxed{}$$

$$10) \quad 70 \quad - \quad 60 \quad = \quad \boxed{}$$

Part 2

Answer the questions below

1) Ava has \$80 in her purse. She spent \$50 on a new sweater. How much money does she have left?



2) Hayden needed to drive 90 km to get to his friend's house. He has driven 30 km already. How much further does he need to drive?



Subtracting Multiples of 10

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41		43	44	45	46	47	48	49	50
51		53	54	55	56	57	58	59	60
61		63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Questions**Answer the questions**

1) $62 - 20 =$

31) $31 - 20 =$

3) $58 - 40 =$

4) $99 -$

5) $71 - 50 =$

6) $83 - 10 =$

7) $88 - 30 =$

8) $94 - 40 =$

9) $57 - 40 =$

10) $77 - 20 =$

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

Solve the problems below

a) 1)	2)
90	-40

b) Ella had 90 balloons for her party. She gave 40 balloons to her friends. How many balloons does she have left?

Name: _____

Solve the problems below

a) 1)	2)
73	90
-60	-40

b) Ella had 75 balloons for her party. She gave 30 balloons to her friends. How many balloons does she have left?

Name: _____

Solve the problems below

a) 1)	2)
73	90
-60	-40

b) Ella had 75 balloons for her party. She gave 30 balloons to her friends. How many balloons does she have left?

Name: _____

Solve the problem

a) 1)	2)
73	90
-60	-40

b) Ella had 75 balloons for her party. She gave 30 balloons to her friends. How many balloons does she have left?

Subtracting Using Base Ten Blocks

Questions

Subtract using the base ten blocks

PRACTICE

$$\underline{2} - 2 =$$

$$\underline{53} - \underline{12} =$$

$$\underline{35} - \underline{15} =$$

$$\underline{46} - \underline{12} =$$

$$\underline{63} - \underline{11} =$$

$$\underline{82} - \underline{2} =$$

$$\underline{78} - \underline{10} =$$

$$\underline{34} - \underline{20} =$$



$$\underline{53} - \underline{13} =$$

$$\underline{85} - \underline{45} =$$

Subtracting – Changing The Order Of The Numbers**Part 1** Answer the questions. Can you subtract the numbers when we change the order?

1)

$4 - 8 = \underline{\hspace{2cm}}$

$8 - 4 = \underline{4}$

Yes or No

4)

$2 - 9 = \underline{\hspace{2cm}}$

$9 - 2 = \underline{\hspace{2cm}}$

Yes or No

2)

$5 - 9 = \underline{\hspace{2cm}}$

$9 - 5 = \underline{\hspace{2cm}}$

Yes or No

5)

$7 - 9 = \underline{\hspace{2cm}}$

$9 - 7 = \underline{\hspace{2cm}}$

Yes or No

3)

$6 - 4 = \underline{\hspace{2cm}}$

$6 - 4 = \underline{\hspace{2cm}}$

Yes or No

6)

$3 - 5 = \underline{\hspace{2cm}}$

$5 - 3 = \underline{\hspace{2cm}}$

Yes or No

Part 2 Answer the questions. Can you subtract the numbers when we change the order?

1)

$8 - 4 - 3 = \underline{\hspace{2cm}}$

$4 - 3 = \underline{\hspace{2cm}}$

No

2)

$9 - 5 - 2 = \underline{\hspace{2cm}}$

$9 - 5 = \underline{\hspace{2cm}}$

Yes

3)

$8 - 3 - 5 = \underline{\hspace{2cm}}$

$5 - 3 = \underline{\hspace{2cm}}$

Yes or No

4)

$15 - 5 - 4 = \underline{\hspace{2cm}}$

$15 - 4 = \underline{\hspace{2cm}}$

Yes or No

5)

$20 - 10 - 7 = \underline{\hspace{2cm}}$

$10 - 7 = \underline{\hspace{2cm}}$

Yes or No

Subtracting 0 From Numbers

Questions

What happens when we subtract 0 from numbers?



1)

$4 - 0 = \underline{\hspace{2cm}}$

11)

$27 - 0 = \underline{\hspace{2cm}}$

2)

$6 - 0 = \underline{\hspace{2cm}}$

12)

$49 - 0 = \underline{\hspace{2cm}}$

3)

$3 - 0 = \underline{\hspace{2cm}}$

13)

$34 - 0 = \underline{\hspace{2cm}}$

4)

$9 - 0 = \underline{\hspace{2cm}}$

14)

$8 - 0 = \underline{\hspace{2cm}}$

5)

$3 - 0 = \underline{\hspace{2cm}}$

15)

$6 - 0 = \underline{\hspace{2cm}}$

6)

$9 - 0 = \underline{\hspace{2cm}}$

16)

$44 - 0 = \underline{\hspace{2cm}}$

7)

$12 - 0 = \underline{\hspace{2cm}}$

17)

$62 - 0 = \underline{\hspace{2cm}}$

8)

$8 - 0 = \underline{\hspace{2cm}}$

18)

$75 - 0 = \underline{\hspace{2cm}}$

9)

$10 - 0 = \underline{\hspace{2cm}}$

19)

$93 - 0 = \underline{\hspace{2cm}}$

10)

$23 - 0 = \underline{\hspace{2cm}}$

20)

$87 - 0 = \underline{\hspace{2cm}}$

Subtracting - Borrowing

Questions

Use the standard algorithm to solve the subtraction problems below

1)	Tens	Ones

2)	Tens	Ones

3)	Tens	Ones

4)	Tens	Ones

5)	Tens	Ones

6)	Tens	Ones

7)	Tens	Ones

8)	Tens	Ones

9)	Tens	Ones

Adding/Subtracting – Inverse Operations

Questions

Create 2 addition and 2 subtraction equations using the numbers provided. The first one is done for you.

1)	2	6	4	2)	3	5	8
----	---	---	---	----	---	---	---

Equation 1 (+): $2 + 4 = 6$

Equation 1 (+): _____

Equation 2 (+): $4 + 2 = 6$

Equation 2 (+): _____

Equation 3 (-): $6 - 2 = 4$

Equation 3 (-): _____

Equation 4 (-): $2 - 4 = 6$

Equation 4 (-): _____

3)	6	10	4	13	7	6	11
----	---	----	---	----	---	---	----

Equation 1 (+): _____

Equation 1 (+): _____

Equation 2 (+): _____

Equation 2 (+): _____

Equation 3 (-): _____

Equation 3 (-): _____

Equation 4 (-): _____

Equation 4 (-): _____

5)	15	20	5	6)	11	20	9
----	----	----	---	----	----	----	---

Equation 1 (+): _____

Equation 1 (+): _____

Equation 2 (+): _____

Equation 2 (+): _____

Equation 3 (-): _____

Equation 3 (-): _____

Equation 4 (-): _____

Equation 4 (-): _____

Adding/Subtracting – Inverse Operations

Questions

Fill in the blanks using the information given to you

1) If $2 + 4 = 6$

Then $6 - 2 = 4$

2) If $5 + 3 = 8$

Then $8 - 3 =$ _____

3) If $7 + 7 = 14$

Then $14 - 7 =$ _____

4) If $10 + 4 = 14$

Then $14 - 10 =$ _____

5) If $12 + 6 = 18$

Then $18 - 12 =$ _____

If $13 + 6 = 19$

$19 - 13 =$ _____

7) If $17 + 6 = 23$

Then $23 - 6 =$ _____

If $17 + 5 = 22$

$22 - 17 =$ _____

9) If $11 + 13 = 24$

Then $24 - 11 =$ _____

10) If $15 + 12 = 27$

Then $27 - 15 =$ _____

11) If $17 + 9 = 26$

Then $26 - 17 =$ _____

12) If $12 + 18 = 30$

Then $30 - 12 =$ _____

13) If $24 + 11 = 35$

Then $35 - 24 =$ _____

14) If $40 + 15 = 55$

Then $55 - 40 =$ _____

Inverse Operations – Checking Answers

Questions

Check your answer by using the inverse operation

$$\begin{array}{r} 36 \\ + 12 \\ \hline 48 \end{array}$$



$$\begin{array}{r} 48 \\ - 12 \\ \hline 36 \end{array}$$



$$\begin{array}{r} 56 \\ + 35 \\ \hline \end{array}$$



$$\begin{array}{r} 67 \\ + 22 \\ \hline \end{array}$$



$$\begin{array}{r} 48 \\ + 45 \\ \hline \end{array}$$



1



Matching Game: Inverse Operations Match

Objective**What are we learning about?**

To enhance students' understanding of inverse operations by matching addition and subtraction equations. Students will identify and match pairs of equations that demonstrate inverse relationships, fostering critical thinking and problem-solving skills in a collaborative group setting.

Materials: _____ will need for the activity.

- Pre-prepared inverse operation matching cards.
- Small bags or envelopes to hold the card sets for each group.

**Instructions****How you will complete the**

1. Before the class, the teacher will cut out the pre-prepared matching game cards, ensuring there are 10 subtraction equations and their corresponding 10 inverse addition equations.
2. Divide the students into small groups and give each group a bag or envelope containing a set of the matching cards.
3. In their groups, students will spread out the cards face down on their table.
4. Each person takes a turn to try to match two cards.
5. If they find a correct match, they keep the cards out and continue with their next turn. If the cards don't match, they turn them back over in the same place, and the next player takes a turn.
6. The activity continues until all pairs are correctly matched within each group.

Cards

Matching Game Cards

$8 - 3 = 5$

$5 + 3 = 8$

PREVIEW

$7 - 2 = 5$

$5 + 4 = 9$

$12 - 6 = 6$

$5 + 2 = 7$

$14 - 7 = 7$

$7 + 7 = 14$

Cards

Matching Game Cards

$16 - 8 = 8$

$8 + 8 = 16$

PREP WEEK

$18 - 9 = 9$

$10 + 10 = 20$

$24 - 12 = 12$

$12 + 12 = 24$

$22 - 11 = 11$

$11 + 11 = 22$

Cards

Matching Game Cards

$45 - 30 = 15$

$15 + 30 = 45$

PREDICTION

$55 - 30 = 25$

$25 + 25 = 50$

$60 - 35 = 25$

$25 + 35 = 60$

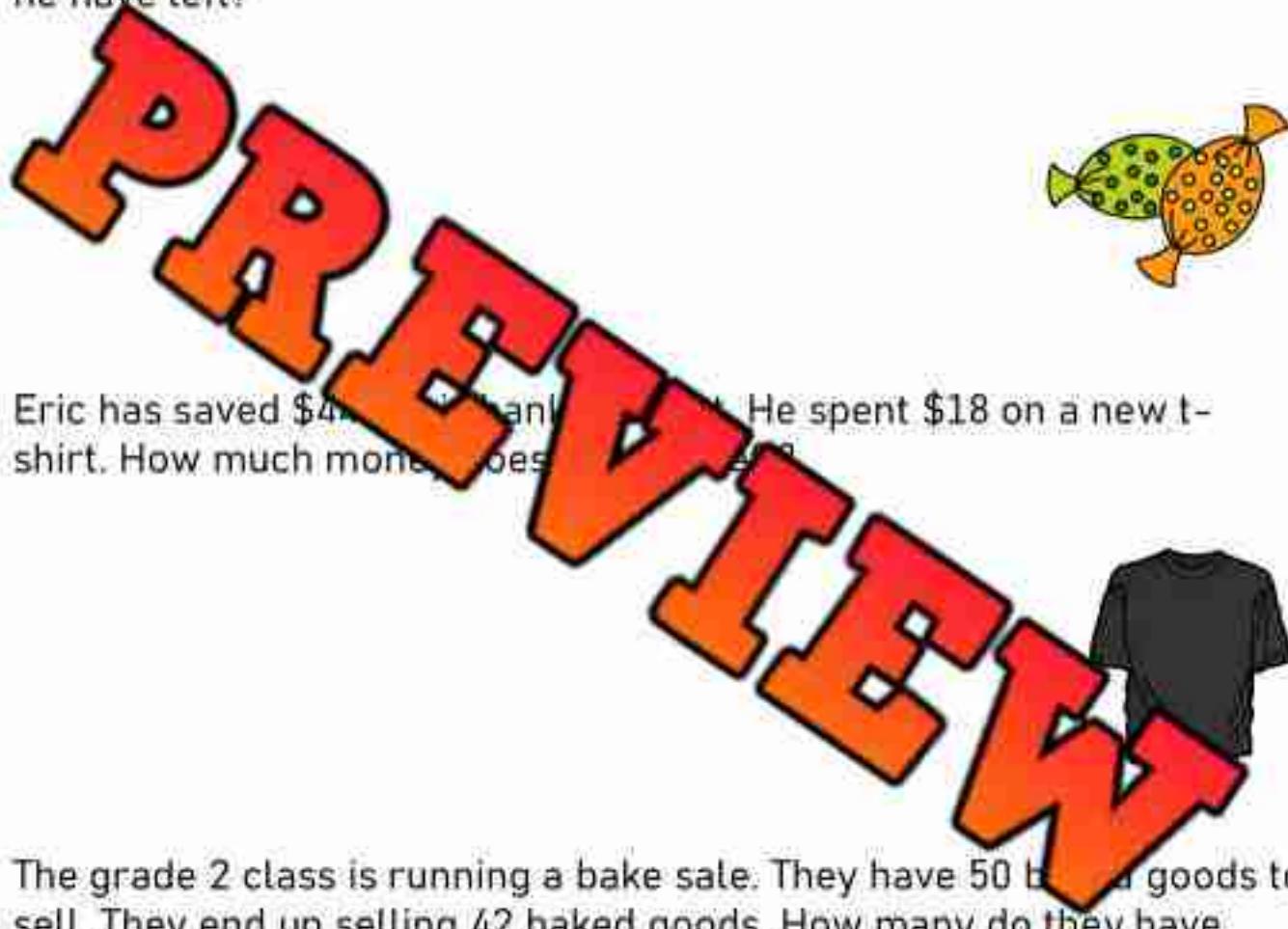
$65 - 40 = 25$

$25 + 40 = 65$

Subtraction Word Problem (Less than 50)

Questions: Answer the word problems below. Try drawing pictures to help you solve.

1) Markus got 38 candies when he went Trick-or-Treating for Halloween. He gave his younger brother 12 candies. How many does he have left?



2) Eric has saved \$45 in his bank account. He spent \$18 on a new t-shirt. How much money does Eric have left?



3) The grade 2 class is running a bake sale. They have 50 baked goods to sell. They end up selling 42 baked goods. How many do they have left?



Adding and Subtracting Numbers To 20

Questions**Addition and subtraction questions**

1) $5 + 2 - 2 =$

11) $7 - 5 + 10 =$

2) $12 - 3 =$

12) $15 - 8 + 5 =$

3) $6 + 5 =$

13) $11 + 6 - 8 =$

4) $12 + 6 - 4 =$

14) $13 + 5 - 9 =$

5) $15 - 5 + 6 =$

15) $12 - 4 =$

6) $14 - 3 + 2 =$

16) $1 + 6 =$

7) $14 + 1 - 2 =$

17) $1 + 8 - 5 =$

8) $15 + 3 - 5 =$

18) $8 + 9 - 6 =$

9) $11 - 7 + 6 =$

19) $16 - 9 + 6 =$

10) $10 + 8 - 6 =$

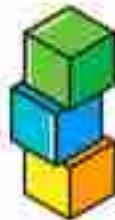
20) $3 + 8 - 4 =$

Adding and Subtracting – Word Problems (To 20)

Questions

Solve the following questions. Tip: draw pictures to help!

1) Anna has 9 blocks and then grabs 6 more. She gives 4 blocks to her friend. How many blocks does she have now?



2) Stephanie has \$10 and her mother gives her \$5 more. She spends \$8 on chocolate bars. How much money does she have now?



3) Ryerson bakes 8 cookies in his first batch and 10 in his second batch. He eats 4 cookies. How many cookies does he have left?



4) Derek collects 12 rocks the first day and 6 rocks the second day. He throws 9 of the rocks back outside. How many rocks did he keep?



Addition and Subtraction - Word Problems (Up To 100)

Questions

Solve the following questions. Tip: draw pictures to help!

1) Neil has a twenty dollar bill and a fifty dollar bill. Then he goes to the store and spends \$36. How much money does he have left?



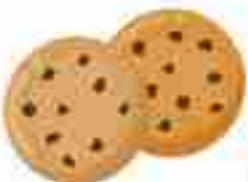
2) Charles buys 45 cards on Saturday and 27 cards the next day. He gives his friend 21 of the cards. How many cards does he have left?



3) Amy has 22 litres of gas in her car. She puts 15 litres of gas on at the gas station. She drives to a store and burns 18 litres of gas. How much gas does her car have now?



4) Gemma bakes 32 cookies in her first batch and 46 cookies in her second batch. She gives out 58 cookies to her friends. How many cookies does she have left?



Adding Measurements

Questions**Add the measurements below**

1) Jayden jumped 42 cm in his first jump and 31 cm in his second jump. How many total cm did he jump?

PREP WEEK



2) Luca drove 12 km to the gas station and got gas. Then he drove 25 more km to work. How many km did he drive?



3) Finn hit his golf ball 64 metres onto the golf course. He then putted it 13 metres into the hole. How far in total did Finn hit the golf ball?



4) Nova bought 2 brownies. One brownie was 42 grams. The other brownie was 53 grams. How many total grams did the brownies weigh?



Subtracting Measurements

Questions

Subtract the measurements below

1) Mia is 88 cm tall. Kayden is 71 cm tall. How much taller is Mia?

PEEPEE



2) Rowan bought a sandwich that was 52 cm long. He ate 25 cm of the sandwich. What size is the sandwich now?



3) Nova bought 96 grams of candy. She ate 47 grams of candy. How many grams of candy does she have left?



4) Skylar had a cup of 60 ml of syrup for his pancakes. He poured 22 ml. How many ml is left in the cup?



Task Cards: Addition and Subtraction

Objective**What are we learning about?**

To help students understand and practice addition and subtraction of numbers up to 100. Students will engage in activities that demonstrate these concepts concretely, pictorially, and symbolically.

Materials**What you will need for the activity.**

- 24 task cards
- Separate sheet for answers
- Pencils

**Instructions****How to complete the activity**

1. Cut out the 24 task cards.
2. Distribute a set of all 24 task cards to each pair of students. Ensure each pair has their cards shuffled to start.
3. Provide each pair with a recording sheet. The recording sheet should have numbers 1 to 24 where students can write their answers.
4. Explain to students that they will work with their partner to solve each card. They can discuss and agree on answers before writing them down.
5. Allow the pairs to begin working through the task cards. They can solve them in any order they prefer.
6. If using a timer, set it for 30 minutes to encourage focus and manage classroom time effectively.
7. Once the time is up or all pairs have completed their task cards, review the answers together as a class. Discuss any discrepancies and provide correct solutions.
8. Collect the recording sheets to assess understanding and give individual feedback.

Task Cards

Cut out the task cards below

Task Card 1:

Calculate:

$$5 + 2 - 2 = \underline{\quad}$$

PREPARE

Task Card 3:

$$\text{Calculate: } 35 - 3 + 6 = \underline{\quad}$$

Task Card 4:

Tom had 15 balloons, 3 of them popped, and he bought 4 more. How many balloons does he have now? $\underline{\quad}$

Task Card 5:

John had 12 apples, gave 5 to his friend, and then got 3 more. How many apples does John have now?

Task Card 6:

$$\text{Calculate: } 15 - 8 + 5 = \underline{\quad}$$

Sarah had 10 cans of soda. She drank 7 of them. How many cans of soda are left?

Task Card 8:

$$\text{Calculate: } 59 - 9 = \underline{\quad}$$

Task Cards

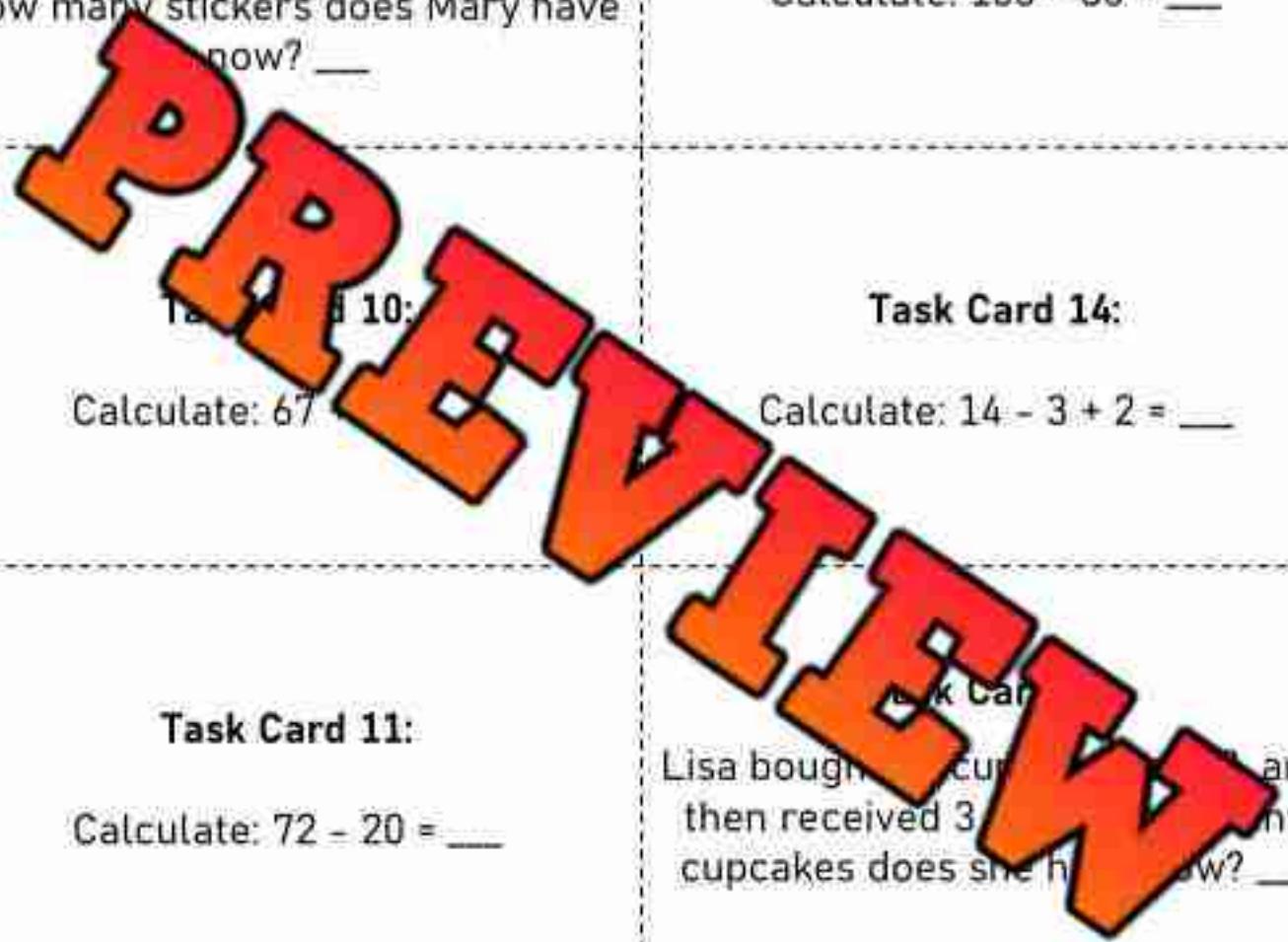
Cut out the task cards below

Task Card 9:

Mary had 25 stickers, gave 10 to her friend, and then bought 5 more. How many stickers does Mary have now? _____

Task Card 13:

Calculate: $100 - 60 =$ _____

**Task Card 11:**

Calculate: $72 - 20 =$ _____

Lisa bought 12 cupcakes and then received 3 more. How many cupcakes does she have now? _____

Task Card 12:

If you have 20 pencils, lose 5, and then buy 10 more, how many pencils do you have now? _____

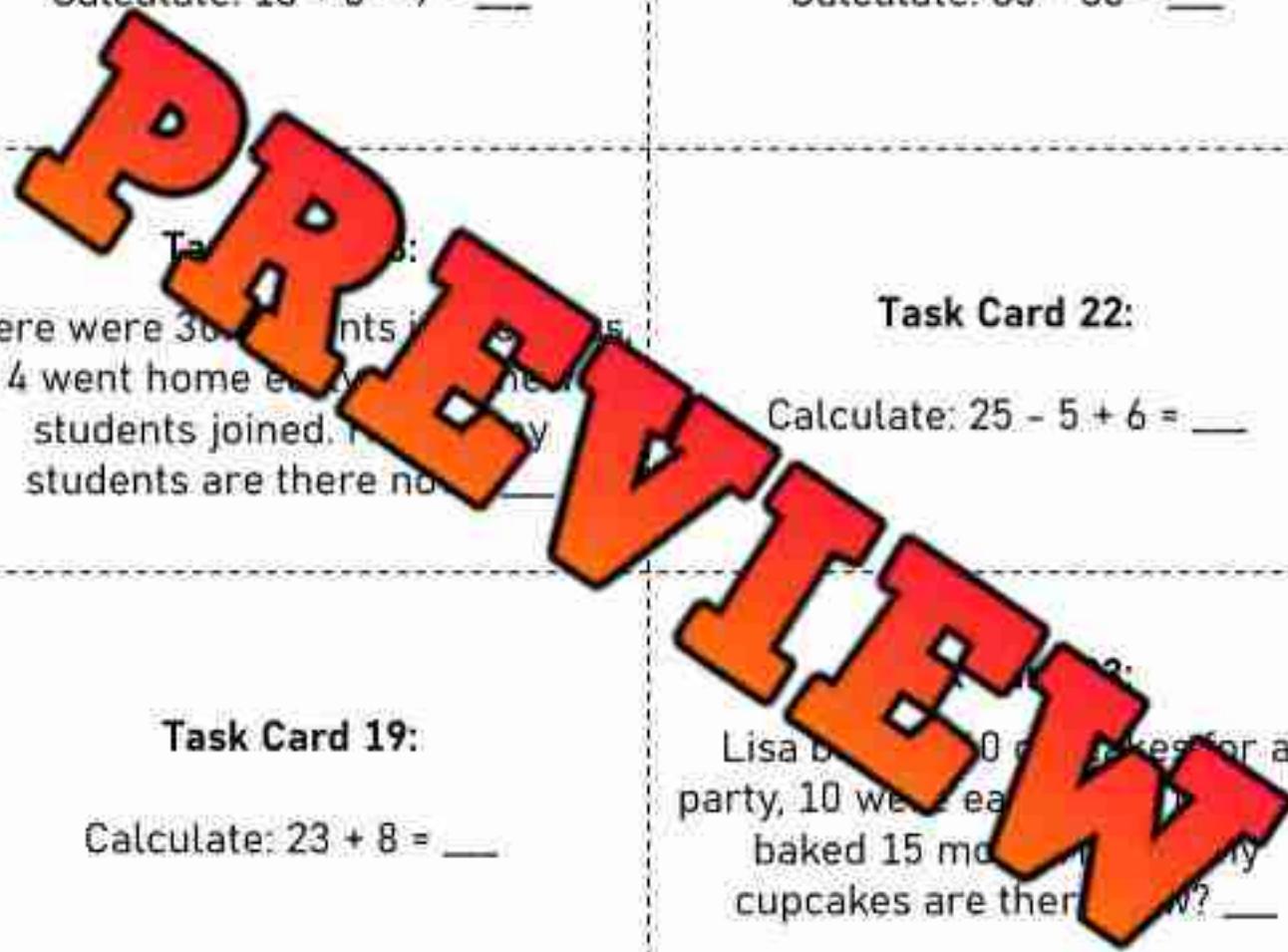
Task Card 14:

Calculate: $14 - 3 + 2 =$ _____

Task Cards

Cut out the task cards below

Task Card 17:

Calculate: $13 + 5 - 9 =$ _____

Task Card 21:

Calculate: $80 - 30 =$ _____

Task Card 22:

Calculate: $25 - 5 + 6 =$ _____

There were 30 students in the room. 4 went home early. 5 more students joined. _____ students are there now.

Lisa baked 10 cupcakes for a party, 10 were eaten. She baked 15 more. How many cupcakes are there now? _____

Task Card 24:

Calculate: $50 - 20 =$ _____

Task Cards: Addition and Subtraction

Answers

Record your answers below

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

Multiplication – Repeated Addition

Questions

Fill in the blanks below



$$6 + 2 \text{ or } 6 \times 2 = 12$$



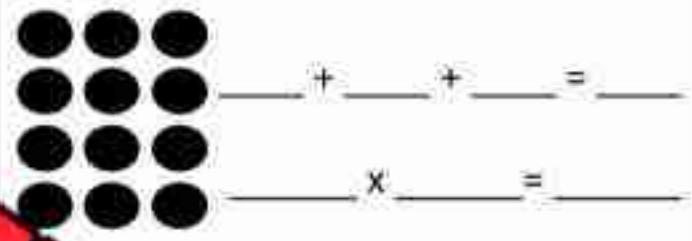
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

Multiplication – Repeated Addition

Part 1

Fill in the blanks below

$2 + 2 + 2 + 2 = 8$

$4 \times 2 = 8$

groups of 2

$5 + 5 + 5 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

groups of _____

$3 + 3 + 3 + 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

groups of _____

$8 + 8 + 8 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

groups of _____

$3 + 3 + 3 + 3 + 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

groups of _____

$1 + 1 + 1 + 1 + 1 + 1 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

groups of _____

$6 + 6 + 6 + 6 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

groups of _____

Part 2

Answer the question below

Billy cuts his neighbors grass each week for 6 weeks. He makes 10 dollars each time he cuts the grass. How much money does he make in the 6 weeks?

Addition Sentence - $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Multiplication Equation - $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Therefore, Billy _____

Multiplication – Number/Size of Group

Questions

Draw pictures of the size and number of groups. The first one is done for you

$$4 \times 2 = 8$$

Number of Groups = 4

Size of Each Group = 2

PREVIEW

$$2 \times 3 = 6$$

Number of Groups = _____

Size of Each Group = _____

Total = _____

$$3 \times 5 = 15$$

Number of Groups = _____

Size of Each Group = _____

Total = _____

$$5 \times 4 = 20$$

Number of Groups = _____

Size of Each Group = _____

Total = _____

$$5 \times 5 = ?$$

Number of Groups = _____

Size of Each Group = _____

Total = _____

$$4 \times 4 = ?$$

Number of Groups = _____

Size of Each Group = _____

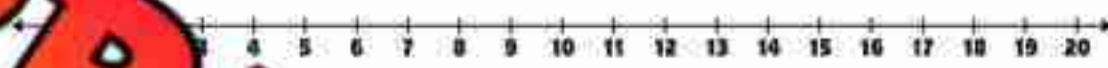
Total = _____

Number Line Multiplication – Repeated Addition**Questions****Fill in the blanks below**

$3 \times 3 = 9$



$5 \times$



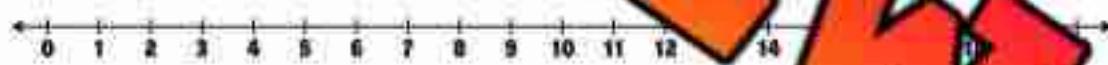
$4 \times 4 =$ _____



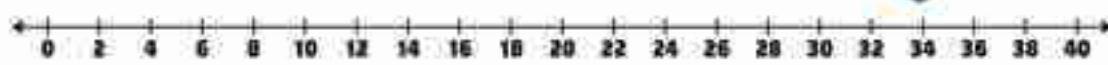
$6 \times 3 =$ _____



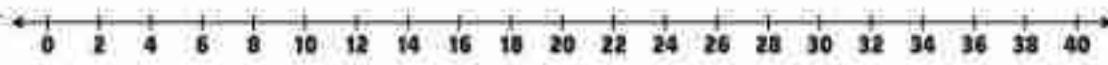
$2 \times 9 =$ _____



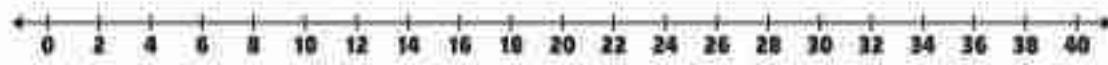
$4 \times 8 =$ _____



$10 \times 4 =$ _____



$4 \times 6 =$ _____



Multiplication and Division

Questions

Investigate the relationship between multiplication and division

12

$6 \times 2 = 12$

$2 \times 6 = 12$

$12 \div 6 = 2$

$12 \div 2 = 6$

PREVIEW

10

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

20

$\times \quad \div$

$\div \quad =$

$\div \quad =$

$\div \quad =$

16

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

14

$\times \quad \div$

$\div \quad =$

$\div \quad =$

$\div \quad =$

10

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

21

$\times \quad \div$

$\div \quad =$

$\div \quad =$

$\div \quad =$

18

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

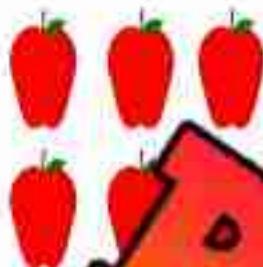
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

Multiplication and Division – Fact Families

Questions

Investigate the relationship between multiplication and division



$$3 \times 2 = 6$$

$$2 \times 3 = 6$$

$$6 \div 3 = 2$$

$$6 \div 2 = 3$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

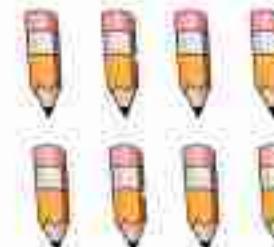


$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

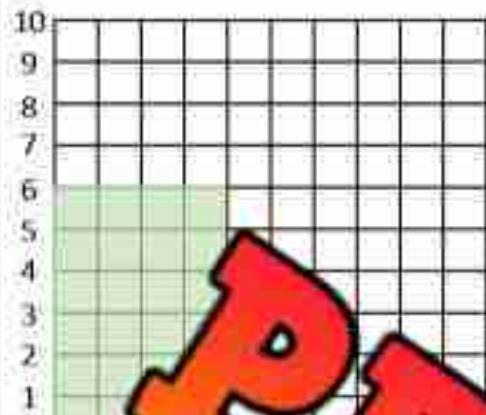
$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

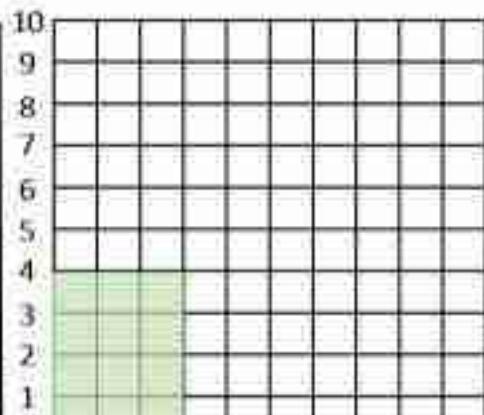
$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

Multiplication – Arrays**Questions**

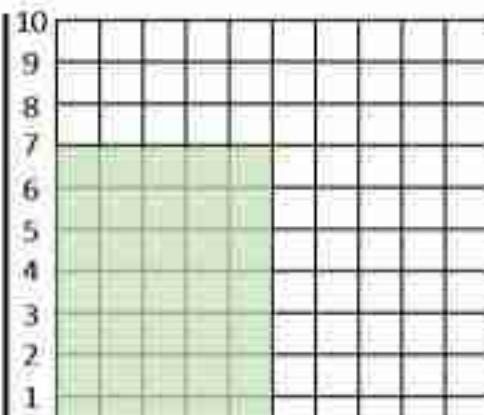
How much is shaded in? Answer the questions below.



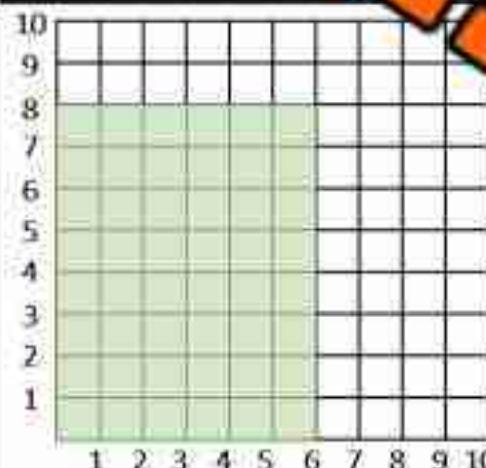
$$6 \times 4 = \underline{\hspace{2cm}}$$



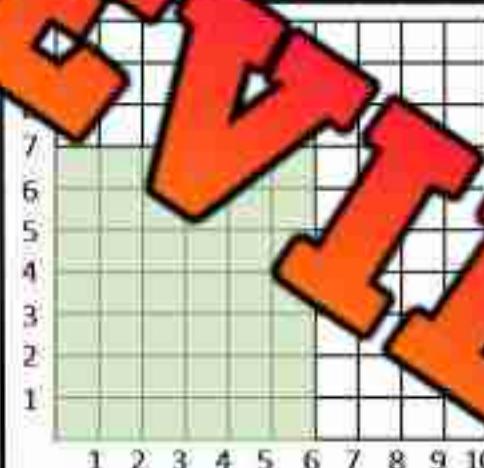
$$3 \times 3 = \underline{\hspace{2cm}}$$



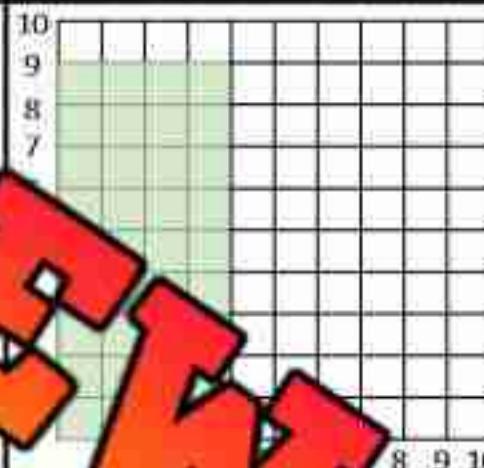
$$7 \times 5 = \underline{\hspace{2cm}}$$



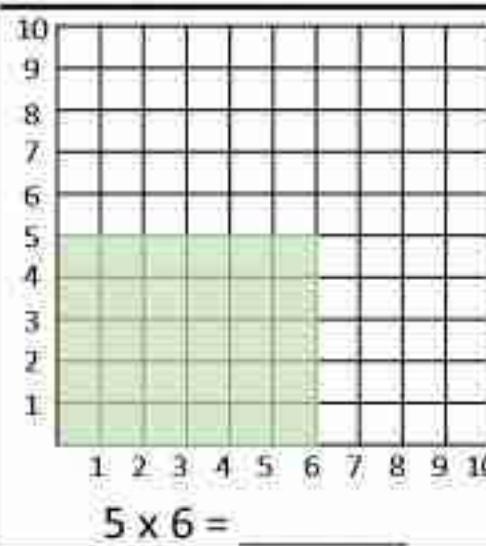
$$8 \times 6 = \underline{\hspace{2cm}}$$



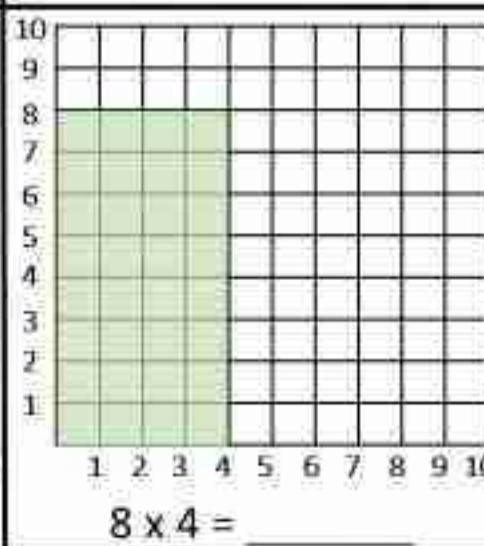
$$7 \times 6 = \underline{\hspace{2cm}}$$



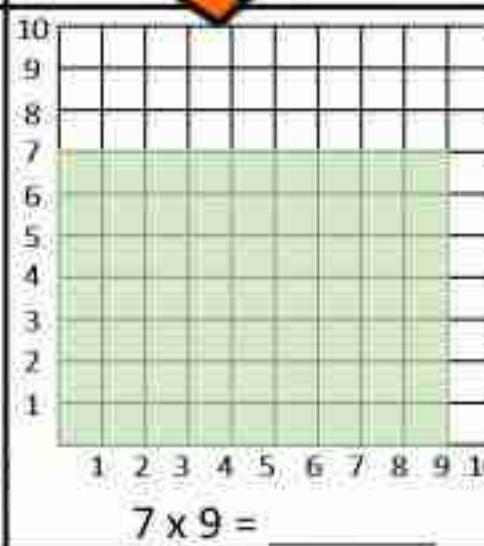
$$9 \times 7 = \underline{\hspace{2cm}}$$



$$5 \times 6 = \underline{\hspace{2cm}}$$



$$8 \times 4 = \underline{\hspace{2cm}}$$

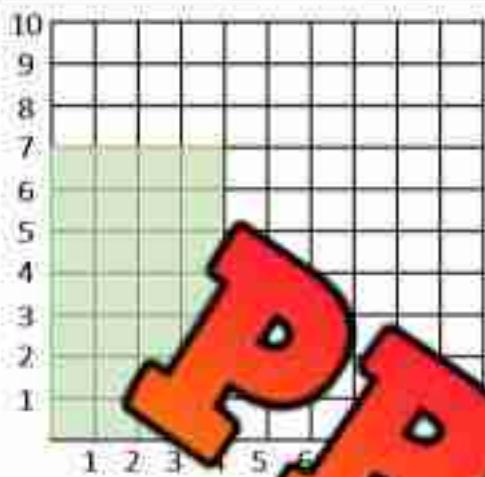


$$7 \times 9 = \underline{\hspace{2cm}}$$

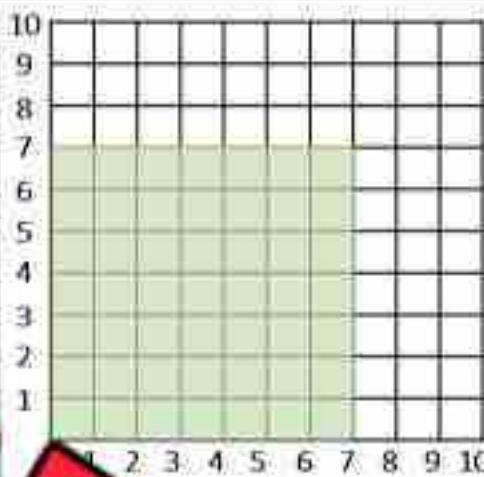
Division – Arrays

Questions

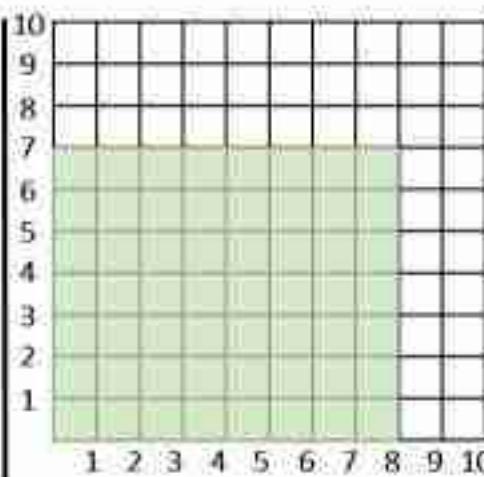
How is the shaded in area divided?



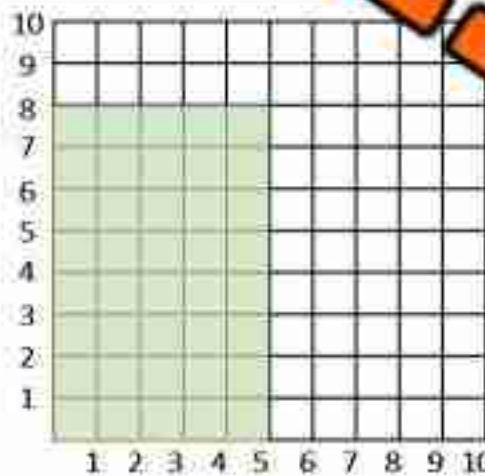
$28 \div 4 = \underline{\quad}$



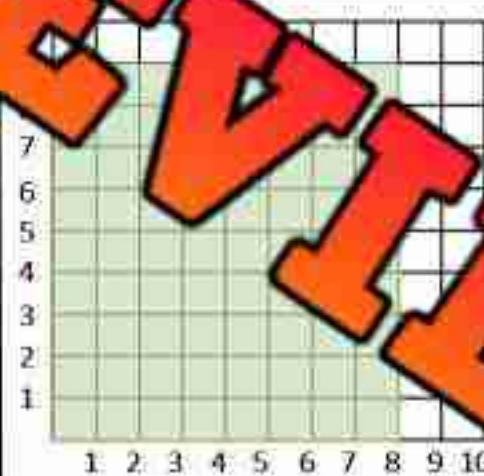
$7 = \underline{\quad}$



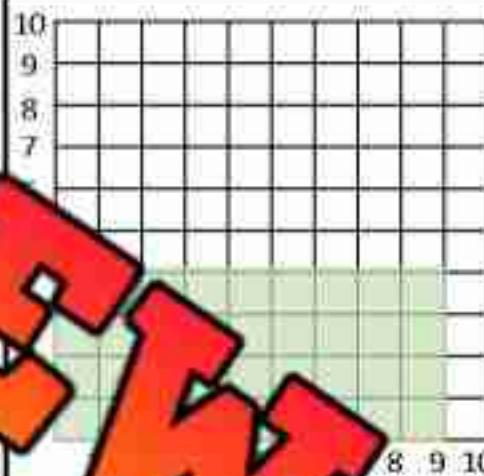
$56 \div 7 = \underline{\quad}$



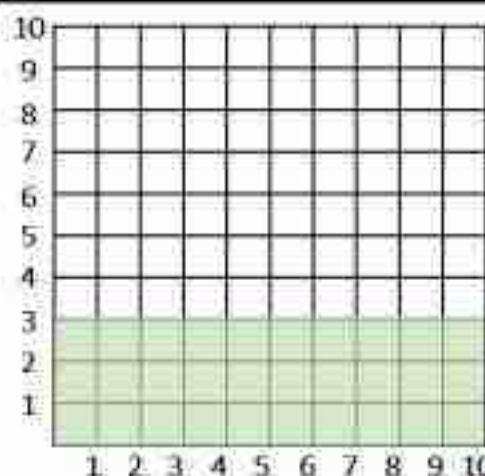
$40 \div 5 = \underline{\quad}$



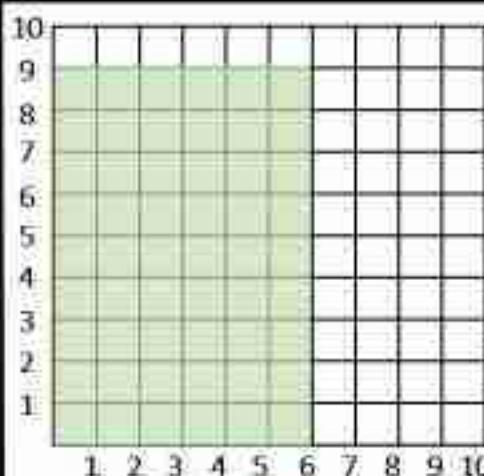
$72 \div 8 = \underline{\quad}$



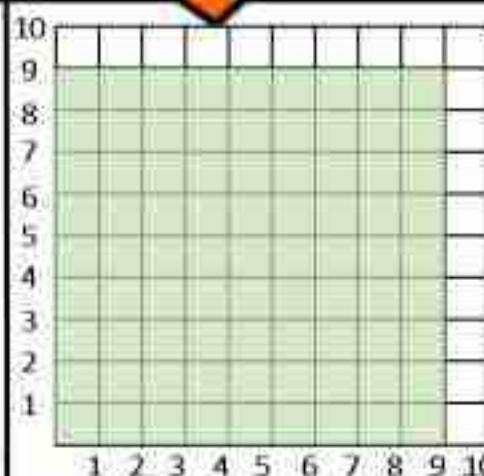
$36 \div 9 = \underline{\quad}$



$30 \div 3 = \underline{\quad}$



$54 \div 6 = \underline{\quad}$



$81 \div 9 = \underline{\quad}$

Division – Equal Sharing

Questions

If you were sharing the objects below, how would you split them up equally? Answer the questions below.

Objects	Questions
	How many objects are there?
	How many groups did you make?
	How many are in each group?
	Write the division sentence

Objects	Questions
	How many objects are there?
	How many groups did you make?
	How many are in each group?
	Write the division sentence

Objects	Questions
	How many objects are there?
	How many groups did you make?
	How many are in each group?
	Write the division sentence

Division – Equal Sharing

Questions

Friends are sharing the treats below. Answer the questions



How many donuts are there?

How many groups do you have to share the donuts?

How many donuts will be in each group?

Write the division sentence

How many donuts will each person get?

PREPARE



How many cupcakes are there?

How many groups do you have to share the cupcakes?

How many cupcakes will be in each group?

Write the division sentence

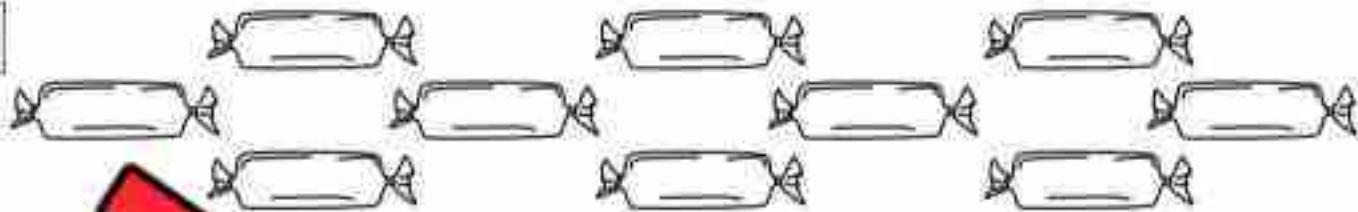
How many cupcakes will each person get?

Sharing

Sharing

Answer the questions below

1)



a) How many candies are there?

b) Sam and Joe want to share the candies equally. How many candies will each of them get?

c) Oh no, now more friends want to share the candies. If there are 5 friends total, how many candies will each friend get?

Sam

Joel

Jack

Nick

2)



a) How many cookies are there?

b) Clara and Ivy baked the cookies. Now they want to share them equally. How many cookies will they each get?

c) Julia just knocked on the door. Now she wants to share the cookies with Clara and Ivy. How many will they each get now?

Clara

Ivy

Julia

Sharing – Remainders

Sharing

Answer the questions below



a) How many coins are there?

b) Ryan and Jordan split the money above. If they split it equally, how many dollars will each get?

Ryan

Jordan

c) Ryan and Jordan have to split the money with Will, Jen, and Ben. How many dollars will they each get?

Ryan

Jordan

Will

Jen

Ben

Fractions and Repeated Addition

Fractions have two numbers that are important to remember. The **numerator** is the number on top and the **denominator** is the number on the bottom.

$\frac{1}{4}$ → Numerator – How many parts you have

$\frac{1}{4}$ → Denominator – The total number of parts in the whole

The whole is cut up into 4 equal pieces. The numerator tells us how many pieces are being counted. We can add pieces to our whole by using repeated addition.

Example:

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4}$$

Questions

1) $\frac{1}{6} + \frac{1}{6} = \underline{\hspace{2cm}}$

2) $\frac{2}{10} + \frac{2}{10} + \frac{2}{10} + \frac{2}{10} = \underline{\hspace{2cm}}$

3) $\frac{3}{12} + \frac{3}{12} + \frac{3}{12} = \underline{\hspace{2cm}}$

4) $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \underline{\hspace{2cm}}$

5) $\frac{2}{14} + \frac{2}{14} + \frac{2}{14} + \frac{2}{14} + \frac{2}{14} = \underline{\hspace{2cm}}$

Fractions and Repeated Addition

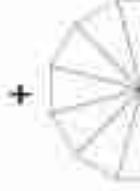
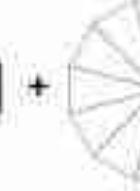
Questions

Shade in the last fraction shape and write the fraction using the line

1)  +  +  +  =  _____

2)  +  +  =  _____

3)  +  +  =  _____

4)  +  +  +  =  _____

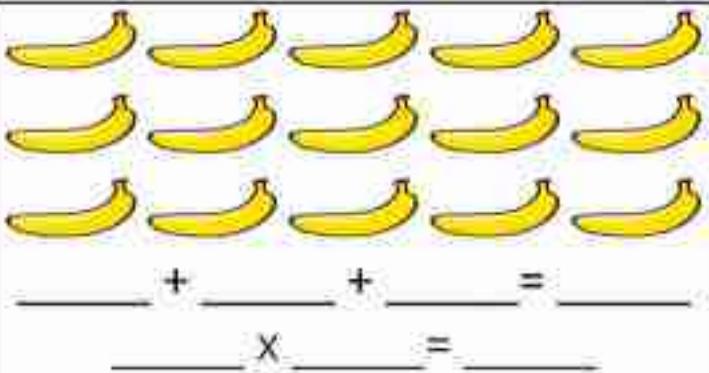
5)  +  +  =  _____

6)  +  +  +  +  =  _____

Operations Quiz

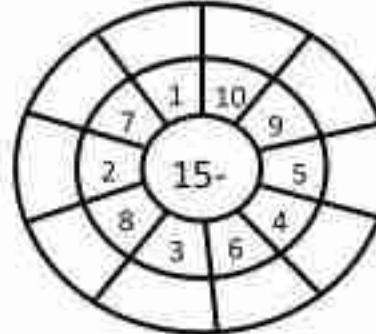
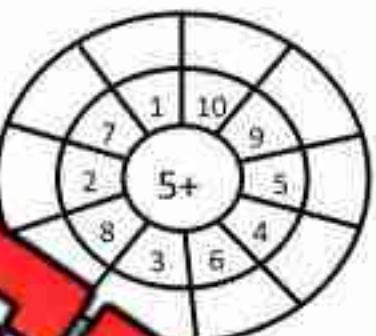
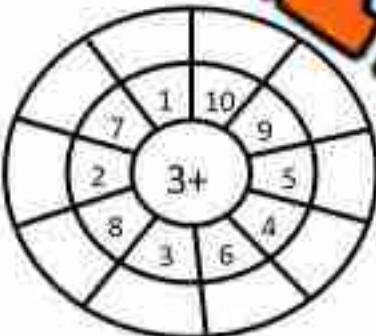
Part 1

Fill in the blanks with the addition and multiplication equations



Part 2

Fill in the missing numbers to get the center of the bullseye



Part 3

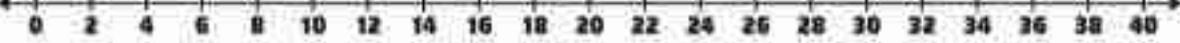
Fill in the blank using the information give to you

1)	If $2 + 4 = 6$ Then $6 - 2 = 4$	2)	If $5 + 3 = 8$ Then $8 - 3 =$ _____
3)	If $7 + 4 = 11$ Then $11 - 4 =$ _____	4)	If $10 + 4 = 14$ Then $14 - 10 =$ _____

Part 4

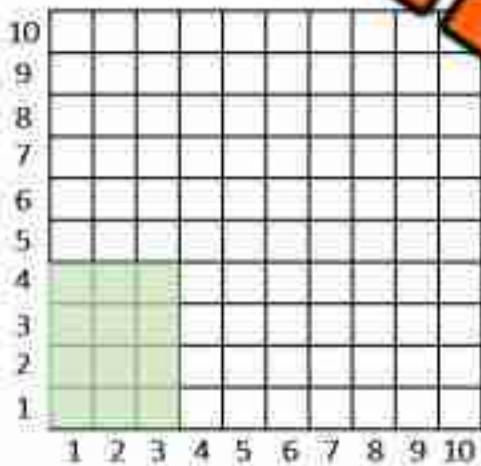
Use the number line to add and subtract the numbers below

$10 + 8 = \underline{\quad}$

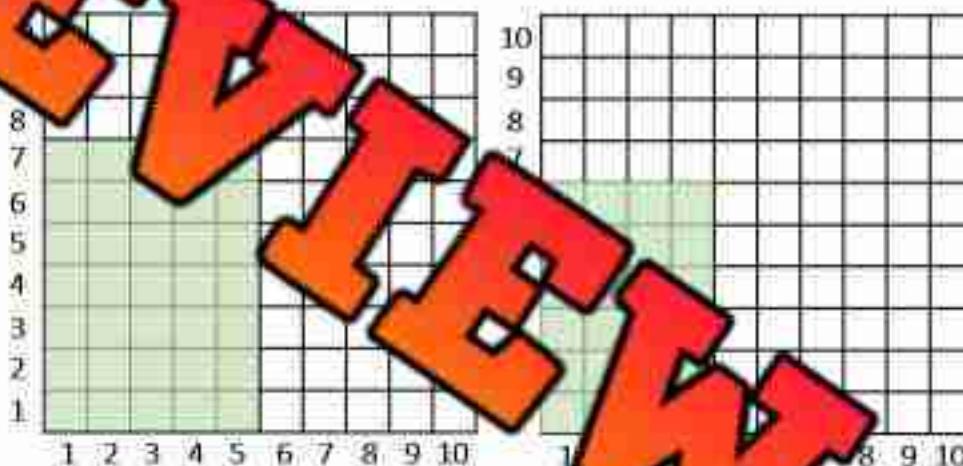

$20 + 10 = \underline{\quad}$


$50 - 30 = \underline{\quad}$


$80 + \underline{\quad} = 100$


Part 5 How many squares are shaded? Answer the questions below.

$4 \times 3 = \underline{\quad}$



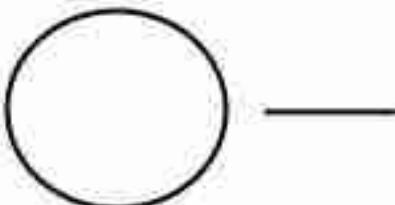
$7 \times 5 = \underline{\quad}$

$4 \times \underline{\quad} = 10$

Part 6

Solve the word problem below

Divide the cake into quarters so that you and your three friends get an equal amount of cake. Shade in the piece of cake that you want and write the fraction



—



Google Slides Lessons Preview





Ontario Math Curriculum

Financial Literacy Unit – Grade 2

3-Part Lesson Format

Part 1 – Minds On!

- Learning Goals
- Discussion Questions
- Quotes
- And More!

Learning Goal

We are learning to identify the different kinds of money, like coins and bills so we can explain how people use money to pay for the things they need and the things they like.

Counting Dollars

Drag the correct bills and coins to match the total amount.

Total Amount	\$10	\$50	\$40
Total Amount	\$20	\$80	\$60

A piggy bank icon is shown on the right.

Part 2 – Action!

- Surveys/Polls
- Matching
- Drag and Drop
- Videos
- And More!

Consolidation

Instructions: Drag "True" or "False" to show the question.

Question	Answer
1. Money is something people use to pay for things they need and want.	
2. Money can only be in paper bills nothing else.	
3. Coins are one type of money.	
4. People trade money to get food, clothes, or toys.	
5. A nickel is worth 10 cents.	
6. Two quarters are worth 50 cents.	
7. You can make 50 cents with only 5 coins.	
8. Four quarters equal one dollar.	
9. A dime and a penny together make 10 cents.	
10. 3 dimes equals one dollar.	

Part 3 – Consolidation!

- Exit Cards
- Quick Draw
- 3-2-1 Reflection
- One-Sentence Summary



Ontario Math Curriculum

Financial Literacy Unit – Grade 2

Representing Cents Up To 100

Represent the money amounts using the coins in the coin bank.

Coin Bank

Representing Dollars Up To \$1.00

Represent the money amounts using the coins in the coin bank.

Pay For Your Items Up To \$1.00

Pay for the items below by dragging the money you would use.

Sunglasses (\$2.00)	Headphones (\$8.00)	Baseball Cap (\$3.00)	Pop (50¢)	Skateboard (\$20.00)



Ontario Math Curriculum

Financial Literacy Unit – Grade 2

Paying For Things Up To 200 Cents
Drag the coins you will use to pay for the item.

Representing
Represent the money amounts using the bills in the money.

Would You Rather?
Mark next to the bag you would rather have.



Workbook Preview



Grade 2

F1 – Money and Finances

	Curriculum Expectations	Pages That Cover the Expectations
F1.1	Identify different ways of representing the same amount of money up to Canadian 200¢ using various combinations of coins, and up to \$200 using various combinations of \$1 and \$2 coins and \$5, \$10, \$20, \$50, and \$100 bills	6 - 69

Preview of 50 pages from
this product that contains
119 pages total.



NAME: _____

FINANCIAL LITERACY

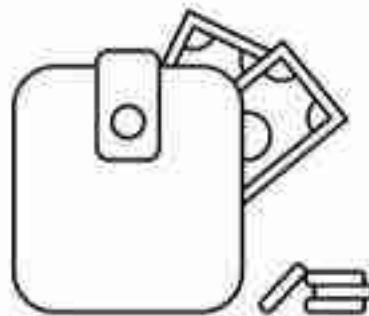
PREVIEW



What's In Your Wallet?

What Is Money?

Hi, future money masters! Ever thought about what's in your wallet or piggy bank? Money is a special tool we use every day to get the things we need and want. It's how we trade with others without having to swap our stuff. Cool, right?



Different Kinds of Money

Money comes in all kinds of forms:

- **Coins:** Shiny, small pieces of metal—each coin has its own value.
- **Bills:** Flat, paper money like \$1, \$5, \$10 bills, that's easy to carry.
- **Digital Money:** This is the invisible kind you use with a card or online—like magic!

Why Money Matters

Money is important because it helps us buy what we need, like food and what we want, like toys. It makes trading easy and fair because everyone agrees on how much things are worth.

Smart Money Tips

- **Know Your Money:** Learn the value of your coins and bills.
- **Save Up:** Instead of spending all your money, try saving some.
- **Think Before Spending:** Make sure you really need something before you buy it.

Making Connections

Do you save your money? What are you saving for?

True or False: is a state or false?

True	False
True	False

Word Search

Find the words in the wordsearch

Money	Wallet
Coins	Bank
Bills	Value
Save	Buy
Spend	Budget

VUEMPZNUTWALLETX
LZWYQCRBJGAYXSEM
BANKBUDGETOXZYUG
PESNIOCQAHHBOSWL
RUNAXGWLKPZNJP
BTAAQQZMLS
UNMONEYBILLSNOEG
YSQZVVBXRQC
OCCLRJM
XDMHEDRFT

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

Is the statement true or false?

1) Digital money is in your wallet.	T	F
2) Each coin has its own value.	T	F
3) Money is important because it helps us buy what we need.	T	F
4) Saving money is not important.	T	F

Name: _____

Is the statement true or false?

1) Digital money is in your wallet.	T	F
2) Each coin has its own value.	T	F
3) Money is important because it helps us buy what we need.	T	F
4) Saving money is not important.	T	F

Name: _____

Is the statement true or false?

1) Digital money is in your wallet.	T	F
2) Each coin has its own value.	T	F
3) Money is important because it helps us buy what we need.	T	F
4) Saving money is not important.	T	F

Name: _____

Is the statement true or false?

1) Digital money is in your wallet.	T	F
2) Each coin has its own value.	T	F
3) Money is important because it helps us buy what we need.	T	F
4) Saving money is not important.	T	F

Counting Dollars

				Total
\$100	\$50	\$20	\$20	\$190

Questions

Count the money in each column. Then add up the total

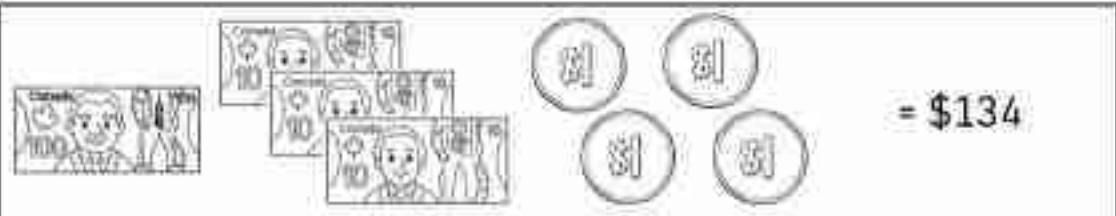
1) 			Total

2) 			Total

3) 				Total

4) 				Total

Counting Dollars – Base Ten



Questions

Count the money below

1) = _____

2) = _____

3) = _____

4) = _____

5) = _____

6) = _____

7) = _____

PREVIEW

Skip Counting Using Bills

Questions

Count the money and write down the total

1)



\$ _____

2)



\$ _____

3)



\$ _____

4)



\$ _____

5)



\$ _____

6)



\$ _____

7)



\$ _____

Counting Benchmark Cents



= 25¢



= 10¢



= 5¢



= 25¢

Questions

Count the money in each box to make a benchmark cent amount.



1) _____



3) _____



4) _____



5) _____



7) _____

8) _____

9) _____



10) _____

11) _____

12) _____

Counting Cents

				Total
50¢	20¢	15¢		85¢

Questions

Count the money in each column and then add up the total

1)				Total

2)				Total

3)				Total

4)				Total

Skip Counting Using Coins

Questions

Count the money and write down the total

1)



2)



3)



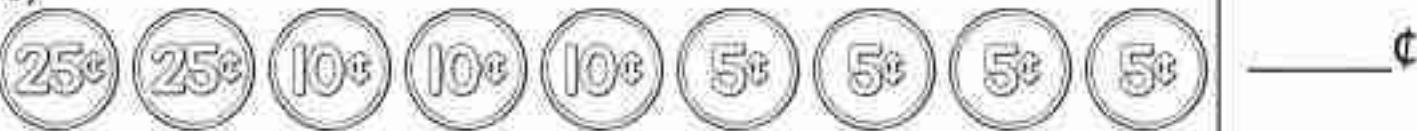
4)



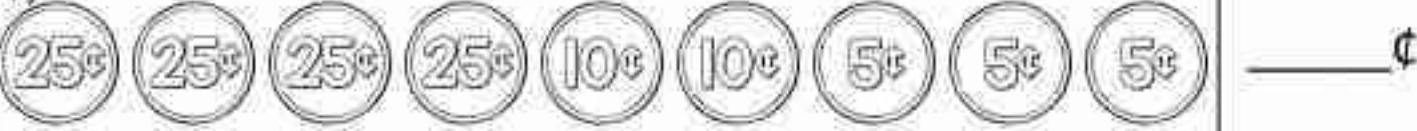
5)



6)



7)



Which Would You Rather?

Questions**Circle the bag of money would you rather have****PREMIUM****or****STANDARD****or****PREMIUM****or****STANDARD**

Which Would You Rather?

Questions

Circle the bag of money would you rather have

PRE

or

PE**EEF**

or

EEW**EEF**

or

EEW

Converting Cents to Dollars

Money can be written as cents or dollars. When we have less than 1 dollar, we use cents. When we have more than 1 dollar, we use dollars. If we have whole dollars and cents, we can combine the two.

Examples - $100\text{¢} = \$1.00$ $50\text{¢} = \$0.50$ $142\text{¢} = \$1.42$

Part 1

Convert the cents into dollars

	\$
100¢	1.00
200¢	
300¢	
400¢	
500¢	\$5.00
600¢	
700¢	
800¢	
900¢	\$9.00
1000¢	

¢	\$
150¢	\$1.50
250¢	
325¢	
	\$4.25
65¢	
	\$7.20
86¢	
999¢	

Part 2

Circle the biggest amount of money

1)	100¢	\$1.00	350¢	\$2.30
2)	200¢	\$3.00	750¢	\$3.50
3)	300¢	\$2.00	220¢	\$1.60
4)	400¢	\$4.00	575¢	\$5.25
5)	500¢	\$7.00	250¢	\$6.40
6)	600¢	\$3.00	450¢	\$8.00

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

a) Convert the cents into dollars

¢	\$
1	
	\$6.25
	\$7.55

b) Circle the biggest amount of money

1) 120¢	\$1.40	980¢
2) 60¢	245¢	\$0.90
3) 725¢	\$6.25	875¢
4) 120¢	\$1.25	80¢

Name: _____

a) Convert the cents into dollars

¢	\$
175¢	
	\$6.25
	\$7.55

b) Circle the biggest amount of money

1) 120¢	\$1.40	980¢
2) 60¢	245¢	\$0.90
3) 725¢	\$6.25	875¢
4) 120¢	\$1.25	80¢

Name: _____

a) Convert the cents into dollars

¢	\$
175¢	
	\$6.25
	\$7.55

b) Circle the biggest amount of money

1) 120¢	\$1.40	980¢
2) 60¢	245¢	\$0.90
3) 725¢	\$6.25	875¢
4) 120¢	\$1.25	80¢

Name: _____

a) Convert the cents into dollars

¢	\$
175¢	
	\$6.25
	\$7.55

b) Circle the biggest amount of money

1) 120¢	\$1.40	980¢
2) 60¢	245¢	\$0.90
3) 725¢	\$6.25	875¢
4) 120¢	\$1.25	80¢

Counting Canadian Coins



= 100¢ or \$1.00



= 10¢



= 200¢ or \$2.00



= 25¢



= 5¢



= 25¢

Questions

Count the coins below



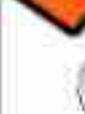
1) _____



3) _____



4) _____



5) _____



7) _____

8) _____

9) _____



10) _____

11) _____

12) _____

Representing Cents Up To 200

150¢

135¢

140¢

Questions:

Represent the money amounts up to 200 cents

PREVIEW

1) 120¢

3) 125¢

4) 105¢

5) 160¢

7) 115¢

8) 185¢

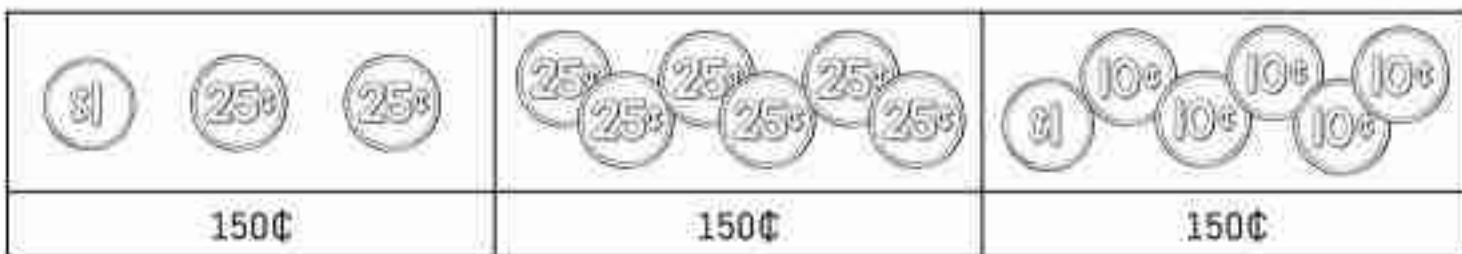
9) 190¢

10) 170¢

11) 195¢

12) 165¢

Representing Money in Different Ways



Questions: Represent the money amounts using different combinations of coins

1)

120¢

120¢

2)

135¢

135¢

5¢

3)

160¢

160¢

160¢

4)

185¢

185¢

185¢

Represent Money Up To \$50

		
\$40	\$37	\$23

Questions

Represent the money amounts up to \$50

PREVIEW

1) \$15

3) \$12

4) \$18

5) \$22

6) \$24

7) \$19

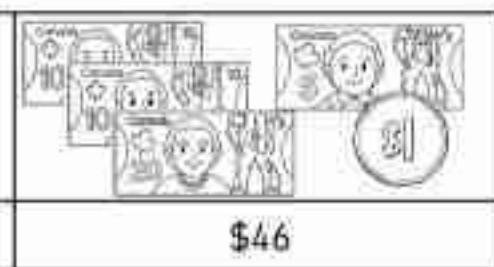
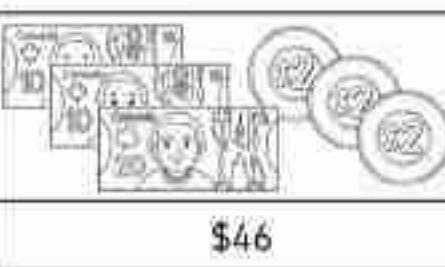
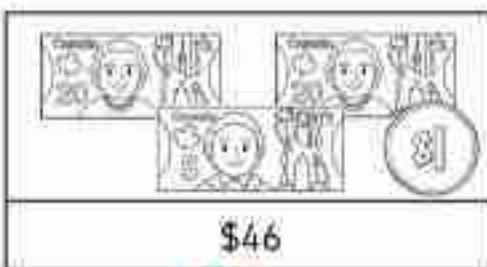
8) \$35

9) \$31

10) \$42

11) \$46

12) \$50

Represent Up To \$50 in Different Ways

Questions: Represent the money amounts using different combinations of bills/coins

1)

PREVIEW

\$30

\$30

2)

\$27

\$27

3)

\$38

\$38

\$38

4)

\$44

\$44

\$44

Represent Money Up To \$200

\$105	\$131	\$172

Questions

Represent the money amounts up to \$200

PREVIEW

1) \$101

3) \$155

4) \$111

5) \$130

7) \$140

8) \$180

9) \$146

10) \$165

11) \$175

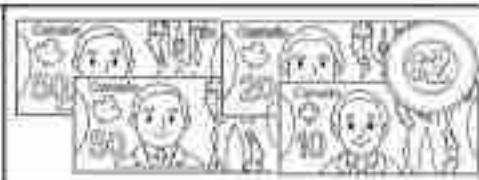
12) \$191

Represent Up To \$200 in Different Ways

\$132



\$132



\$132

Questions

Represent the money amounts up to \$200

1)

PREVIEW

\$130

\$130

2)

\$147

\$147

3)

\$165

\$165

\$165

4)

\$191

\$191

\$191

Memory Game – Representing Money Amounts

Objective**What are we learning about?**

To practice representing money amounts using bills up to \$200 and coins up to 200 cents in a fun game of matching.

**Mater...
ials** What you will need for the activity

- Memory Game cards with money amounts and visual coins and bills.
- A small table or clear area on the floor.

**Instructions****How you will complete the a...
ctivity**

1. Divide the class into groups of 3 or 4. Give each group a set of Memory Game cards. (Provided)
2. Have each group lay all the cards face down in a grid on a table or the floor.
3. The students take turns flipping over two cards at a time, trying to find a matching dollar or cent amount with their visual money amount.
4. If a student finds a match, they remove those cards from the grid and keep them.
5. If the cards do not match, they are turned back over, and the next student takes a turn.
6. The game continues until all the cards have been matched.
7. After the game, review the money amounts with the class.

Cards

Memory Game Cards

Money Amount

\$120

\$32

\$199

\$157

Bills and Coins



Cards

Memory Game Cards

Money Amount

\$185**PREVIEW****\$115****\$180****\$150**

Bills and Coins



Adding Money

		Total
\$ 30	\$ 15	\$ 45

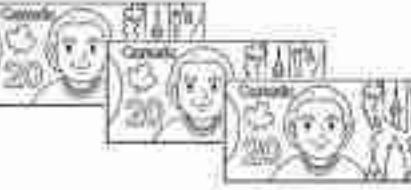
Questions

Add the money amounts

1) 		Total
\$ _____	\$ _____	\$ _____

2) 		Total
\$ _____	\$ _____	\$ _____

3) 		Total
\$ _____	\$ _____	\$ _____

4) 		Total
\$ _____	\$ _____	\$ _____

How Many Ways Can You Represent Money?



Questions

How many ways can you represent the following money amounts?

50 cents

PREVIEW

125 cents

How Many Ways Can You Represent Money?



Questions

How many ways can you represent the following money amounts?

52 dollars

PREVIEW

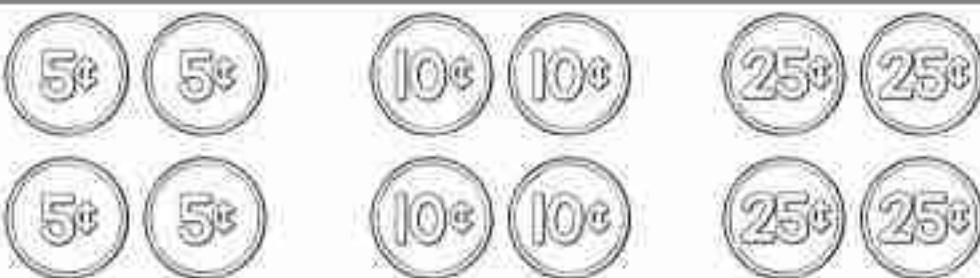
91 dollars

Finding Exact Change Up To 100 Cents

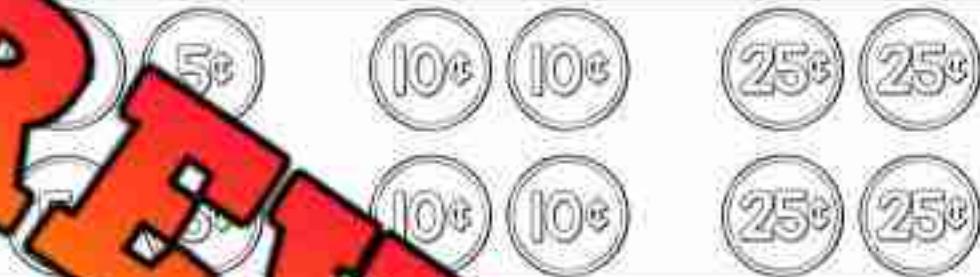
Questions

Circle the exact change you will use to pay for the item

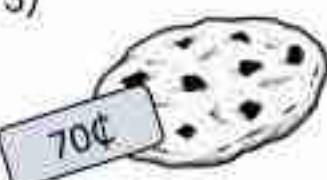
1)



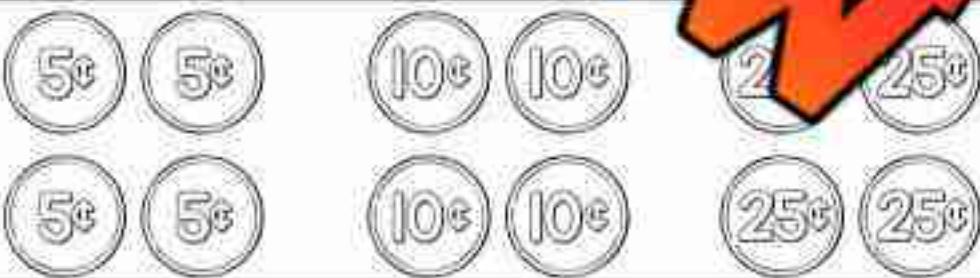
2)



3)



4)



5)



Finding Exact Change Up To 200 Cents

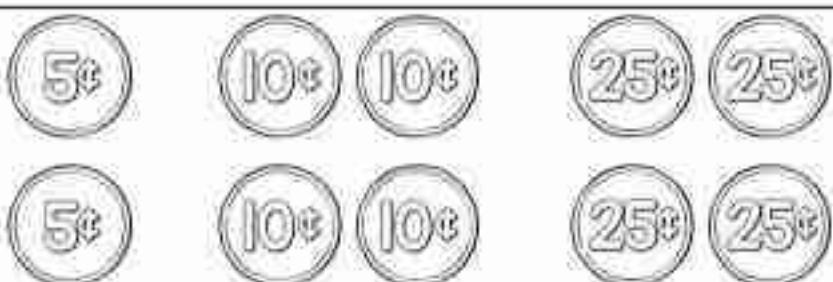
Questions

Circle the exact change you will use to pay for the item

1)



150¢



2)



190¢



3)



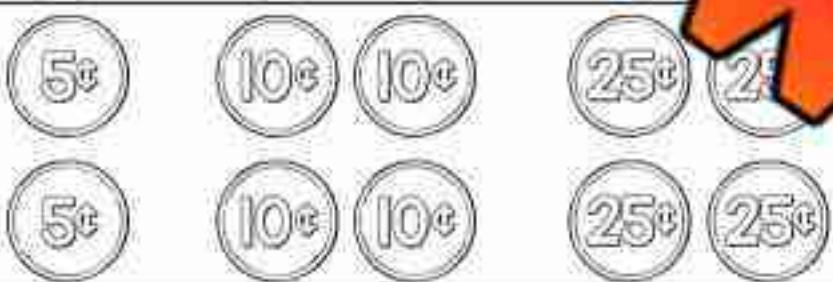
120¢



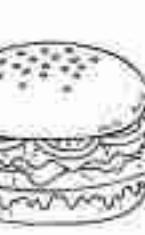
4)



140¢



5)



195¢



Word Problems - Change Up To 200 Cents

Questions**Answer the questions below.**

1) Emma buys a sticker for 35¢ and gives the cashier 50¢. How much change does she get back?

2) Liam bought a toy for 75¢. He paid with 100¢. How much change should he get back?

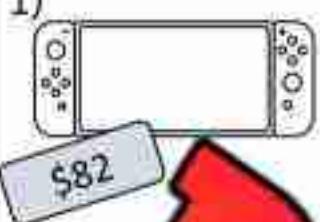
3) Noah buys a cookie for 65¢ and pays with 100¢. How much change does he get?

4) A toy car costs 125¢. Sarah gave the cashier 200¢. How much change should Sarah receive?

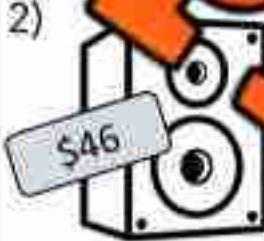
5) Olivia buys a bouncy ball for 45¢ and pays with 75¢. How much change does she get?

Paying For Things Up To \$100**Questions****Circle the money you will use to pay for the item**

1)



2)



3)



4)



5)



PREVIEW

Paying For Things Up To \$200**Questions****Circle the money you will use to pay for the item**

1)



2)



3)



4)



5)



PREDICTION

Word Problems - Change Up To 200 Dollars

Questions**Answer the questions below.**

1) Ethan has \$200. He buys a scooter for \$150. How much change does he get back?

2) Sofia has \$100. She buys a basket for \$75. How much money does she have left?

3) Noah has \$120. He buys a backpack for \$80. How much change does he get?

4) Olivia has \$90. She buys a pair of shoes for \$60. How much money does she have left?

5) Liam has \$200. He spends \$100 on a toy robot. How much money does he still have?

Challenge Word Problems - Change Up To 200 Dollars

Questions**Answer the questions below.**

1) Jackson had \$200. He went to the sports store and bought a soccer ball for \$60 and a jersey for \$85. Then he found \$10 in his pocket. How much money does Jackson have now?

2) Maya had \$150. She bought a shirt for \$40 and a doll for \$50. Her grandma gave her \$20 more to help her out. How much money does Maya have after all her shopping and the gift?

3) Ben had \$200. He spent \$90 on a toy car and \$30 on a book. Then he returned the toy car and got all his money back for it. How much money does Ben have now?

Counting Money

Questions

Count the money and write down the total

1)



\$ _____

2)



\$ _____

3)



\$ _____

4)



\$ _____

5)



\$ _____

Represent Up To \$200 in Different Ways

Questions

Represent the money amounts up to \$200

1)

PREVIEW

\$105.25

\$105.25

2)

\$175.75

\$175.75

\$175.75

3)

\$133.40

\$133.40

\$133.40

4)

\$196.80

\$196.80

\$196.80

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

Represent the money amounts up to \$200

1)

\$124	\$124.50	\$124.50
2)		
\$189.75	89.75	\$189.75

Name: _____

Represent the money amounts up to \$200

1)

\$124.50	\$124.50	\$124.50
2)		
\$189.75	\$189.75	\$189.75

Word Problems – Representing Dollars and Cent Values

Questions**Answer the questions below.**

1) Lily wants to buy a bike that costs \$143.75. Show which bills and coins she could use to pay for it.

2) A toy store has a toy that costs \$45.00. A child has \$50. How could you make that amount using bills and coins?

3) Sam has \$187.60 in his wallet. What might be some bills and coins he has?

4) You're given \$150.00 to spend. Show one way to represent that amount using as few pieces of money as possible.

Challenge Word Problems - Change Up To 200 Dollars

Questions**Answer the questions below.**

1) Create exactly \$188.65 using the fewest number of bills and coins.

2) Your friend says it is impossible to make \$132.25 using only a \$100 bill to make \$132.25. Prove them wrong by showing a different way.

3) Imagine you are a cashier and need to give a person \$15.00 in change from your till. Show two ways to count it out using bills and coins.

4) If you were only allowed to use 3 different money denominations (\$1, \$2, \$5, \$10, \$20, \$50, \$100 or 25¢, 10¢, 5¢), which 3 would you choose to make \$159.90?

Story: Why Do We Pay?

Draw**Draw pictures that show the story**

Max Discovers Goods and Services

One sunny afternoon, Max went to the grocery store with his mom. As they walked down the aisles, Max saw all kinds of things: shiny apples, boxes of cereal, even a toy car. "Mom, why do we pay for these things?" Max asked his mom. She smiled and said, "These are called goods, Max. Goods are things we can see and buy, like food, toys, and clothes."

PREVIEW

PREVIEW

Later that day, Max went to get a haircut. He sat in the big chair while the barber snipped away. When they were done, Max's mom paid the barber. "Why did we pay him, Mom?" Max wondered. "This is called a service," his mom explained. "A service is when someone does work for us, like cutting hair or fixing a car."

At home, Max thought about the grocery store and the barber. "So, we pay for things we can touch, like apples and toys, but we also pay for things people do for us, like haircuts?" he asked. His mom nodded. "Exactly, Max! Goods are things, and services are actions."

PREVIEW

PREVIEW

The next day, Max set up a lemonade stand. He sold lemonade (a good) and charged people for his service of making and selling it. Max realized that goods and services are all around us, and that's why we pay for them! In Canada, most families spend about 30% of their money on services each year, and now Max knew why!

Activity – Goods and Service Charades

Objective**What are we learning about?**

To help students understand why we pay for goods and services by acting them out through a fun charades game.

Materials**What you will need for the activity.**

- Samples of goods (e.g., toy, book, apple)
- Examples of services (e.g., haircut, cooking, cleaning)
- A container

**Instructions****How you will implement the activity**

1. Prepare slips of paper with examples of goods and services. Place these slips in a container.
2. Explain the game: one at a time, a student will draw a slip from the container and act out the good or service without speaking.
3. The rest of the class will guess what the student is acting out. Once they identify it, they must decide whether it is a good (something you can buy and touch) or a service (something done for you). After guessing, discuss why we pay for the good or service. Explain that goods are things we need or want, while services are actions where someone is helping or doing something for us.
4. Continue until all students have had a turn.
5. End with a discussion on why it's important to pay for both goods and services in everyday life.

Charade Cards

Cut out the cards below

Charade Cards

Book

Hat

Haircut

Notebook

Babysitting

Mail Delivery

Pet Grooming

Apple

Shoe Repair

Basket

Backpack

Baking a C.

Dental Checkup

Banana

Pizza Delivery

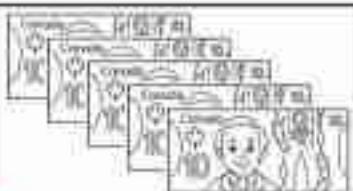
Cake

Glasses

Driving a School Bus

Financial Literacy Test

Part 1 Count the money in each column to make a benchmark dollar amount

			
1) _____	2) _____	3) _____	4) _____
			
5) _____	6) _____	7) _____	8) _____

Part 2 Count the money in each column. Then add up the total

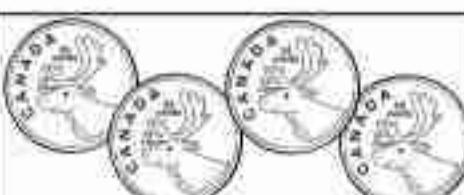
				Total
1) _____	_____	_____	_____	_____
				Total
2) _____	_____	_____	_____	_____
				Total
3) _____	_____	_____	_____	_____

Part 3

Count the coins and write the total below.



1) _____



2) _____



3) _____



4) _____



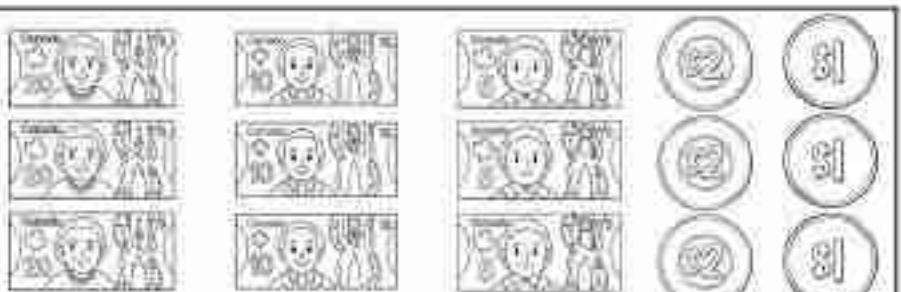
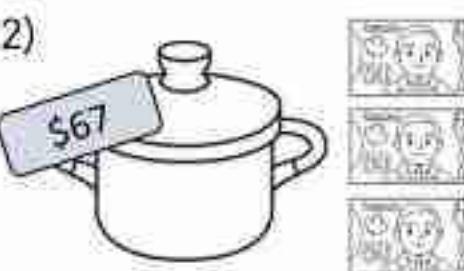
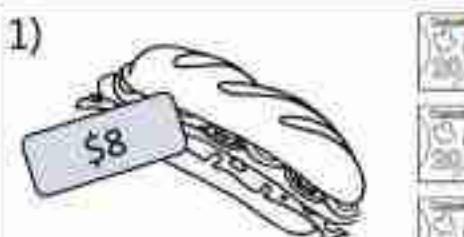
5) _____



6) _____

Part 4

Circle the coins you would use to pay for the item.



PREVIEW

Part 5

How many ways can you represent the following money amounts?

55 cents

90 cents

70 dollars

163 dollars

PREVIEW



Google Slides Lessons Preview





Ontario Math Curriculum Spatial Sense Unit – Grade 2

3-Part Lesson Format

Part 1 – Minds On!

- Learning Goals
- Discussion Questions
- Why Math is Important
- And More!

Learning Goal

We are learning to sort and identify two-dimensional shapes by comparing the number of sides, side lengths, and vertices so we can describe and understand the properties of different shapes.

Sorting Sides and Vertices

Sort the shapes by dragging them into the correct category.



Part 2 – Action!

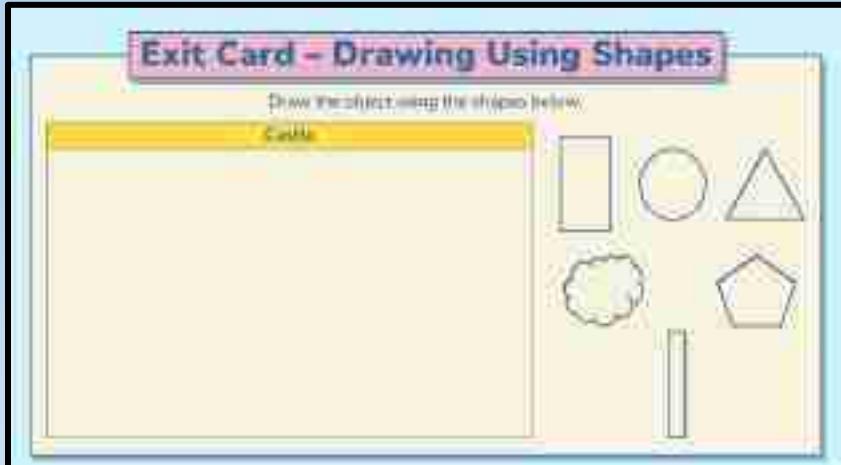
- Questions
- Matching
- Drag and Drop
- Videos
- And More!

Part 3 – Consolidation!

- Exit Cards
- Word Problems
- Quizzes
- Student Created Quizzes

Exit Card – Drawing Using Shapes

Draw the object using the shapes below.





Ontario Math Curriculum Spatial Sense Unit – Grade 2

Congruent Shapes

Find the shape that is congruent to each shape and drag it from the shape bank.

1)  2)  3)  4) 

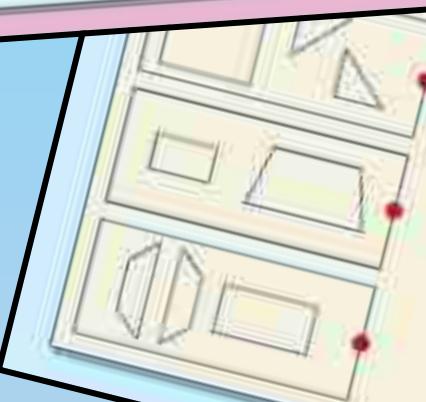
5)  6)  7)  8) 

SHAPE BANK



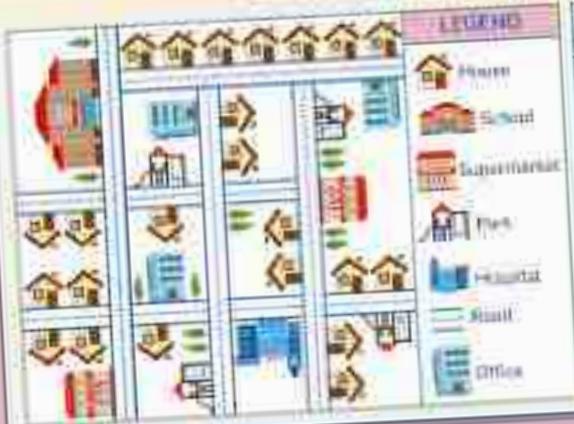
3D Shapes

Shapes to the shape they can be composed into.



Reading a Map – Happy Town

Answer the questions by reading the map.



LEGEND

- House
- School
- Supermarket
- Post
- Hospital
- Bank
- Office

1) How many supermarkets are there in Happy Town?
2) How many parks are there in Happy Town?
3) How many houses are there in Happy Town?
4) How many offices are there in Happy Town?
5) Can you name one building you would want to live in if you lived there? Which situation would you prefer to live in?
6) If you were at the school, which direction would you need to go to the hospital?



Ontario Math Curriculum Spatial Sense Unit – Grade 2

Map of Ontario Puzzle
Drag and rearrange the pictures to put together the map of Ontario.

Exit Card – Describe
After drawing a line through the maze, describe your path by dragging the labels.

Clocks
Digital clock displays showing time in hours, minutes, and seconds.



Workbook Preview



Grade 2
E1 – Geometric and Spatial Reasoning

	Curriculum Expectations	Pages That Cover the Expectations
E1.1	sort and identify two-dimensional shapes by comparing number of sides, side lengths, angles, and number of lines of symmetry	5 – 21, 24 – 27, 37 – 48
E1.2	compose and decompose two-dimensional	
Preview of 115 pages from this product that contains 260 pages total.		54
E1.3	matching them, and determine if the shapes are congruent	
E1.4	create and interpret simple maps of familiar places	55 – 59, 67 – 72
E1.5	describe the relative positions of several objects and the movements needed to get from one object to another	55 – 57, 60 – 72

Introduction to Polygons

YES

Polygons

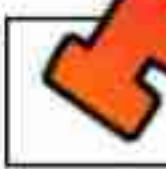
- Two-dimensional
- Closed shape
- Straight sides

NO

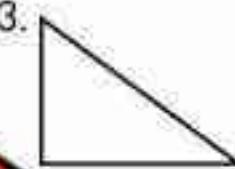
Part 1

Is the shape a polygon? Write yes or no below the shapes

1.



3.



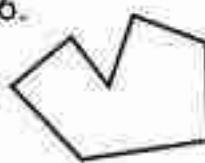
4.



5.



6.



7.



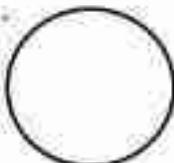
8.



9.



10.

**Part 2**

Draw polygons and non-polygons

1)

2)

3)

4)

Polygon

Polygon

Polygon

Polygon

Polygon

6)

7)

8)

9)

10)

Non-Polygon

Non-Polygon

Non-Polygon

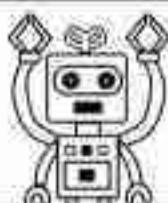
Non-Polygon

Non-Polygon

Polygon Word Problems

Questions:

Answer the questions below.



	Word Problems	Answers
1	Jack is making a picture with shapes. He draws a square, a triangle, and a circle. How many polygons did Jack draw?	
2	Sam is drawing shapes: a rectangle, a pentagon, a heart, a crescent moon. How many of these shapes are polygons?	
3	Liam says a shape with eight sides and no gaps is a polygon. Is Liam correct? Give an example of a shape he could be talking about.	
4	Polygon Robot: Design a robot using only polygons. What shapes will you use for the head, body, arms, and legs? Show me how many polygons you used.	

Regular vs Irregular Polygons

Regular**Regular Polygons**

- All sides are the same length
- All angles are the same

Irregular**Part 1**

Label the polygons regular or irregular

1.



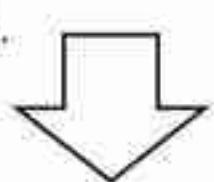
3.



4.



5.



6.



7.



9.



10.

**Part 2**

Draw regular and irregular polygons

1)

2)

3)

4)

Regular

Regular

Regular

Regular

Regular

6)

7)

8)

9)

10)

Irregular

Irregular

Irregular

Irregular

Irregular

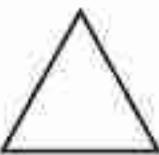
Sides of a Shape**Part 1**

How many sides does the shape have?

1.



2.



3.



4.



5.



6.



8.



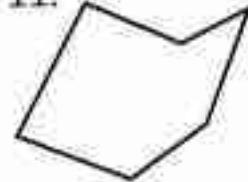
9.



10.



11.



12.



13.



14.



15.

Part 2

Draw a shape with the correct number of sides

1)

2)

3)

4)

5)

4

3

6

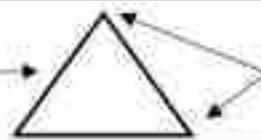
8

10

Sides and Vertices

Reminder:

Side →



Vertices

Part 1

How many sides and vertices does the shape have?

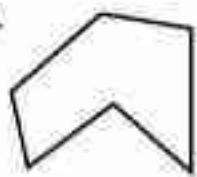
1.



2.



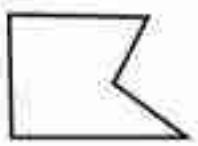
3.



4.



5.



_____ sides

_____ vertices

_____ sides

_____ vertices

_____ sides

_____ vertices

_____ sides

_____ vertices

6.



7.



8.



10.



_____ sides

_____ vertices

_____ sides

_____ vertices

_____ sides

_____ vertices

_____ sides

_____ vertices

Part 2

Draw a shape with the correct number of vertices and sides

1.

2.

3.

4.

5.

3 sides

4 sides

5 sides

6 sides

7 sides

3 vertices

4 vertices

5 vertices

6 vertices

7 vertices

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

How many sides and vertices does the shape have?

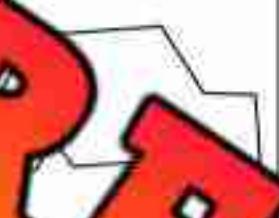
1.



sides

vertices

2.



vertices

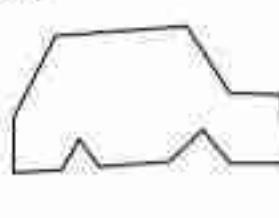
Name: _____

How many sides and vertices does the shape have?

1.



2.



sides

sides

vertices

vertices

Name: _____

How many sides and vertices does the shape have?

1.



2.



sides

vertices

sides

vertices

Name: _____

How many sides and vertices does the shape have?

1.



2.



sides

sides

vertices

vertices

Activity: Create and Sort: 2D Shape Challenge

Objective

What are we learning about?

Students will learn to identify and create 2D shapes based on the number of sides and vertices and sort them accordingly.

Materials

What you will need for the activity.

- Construction paper (various colours)
- Scissors
- Glue sticks
- Pencils
- Rulers
- Handouts with sorting criteria
- Markers

**Instructions**

How you will complete the activity

- 1) Introduce the different 2D shapes by showing examples of each (triangles, squares, rectangles, pentagons, hexagons, and circles). Discuss the number of sides and vertices for each shape.
- 2) Explain that today's activity is to create their own 2D shapes, cut them out, and sort them based on the number of sides and vertices.
- 3) Distribute construction paper, scissors, pencils, rulers, and glue sticks to each student.
- 4) Instruct students to look at the recording sheet and draw and cut out shapes that would match the criteria (number of sides and vertices.)
- 5) After cutting out the shapes, ask students to glue each shape onto their recording sheets above the correct category based on the number of sides and vertices.
- 6) Have a class discussion to review their work, discuss any challenges they faced, and reinforce the concept of sides and vertices in 2D shapes.

Recording Sheet

Cut out and paste shapes that match the criteria below



3

6 Sides

6 Vertices

4 Sides

4 Vertices

7 Sides

7 Vertices

5 Sides

5 Vertices

8 Sides

8 Vertices

Sides and Vertices Word Problems**Questions****Answer the questions below**

	Word Problems	Answers
1	A shape has 3 sides and 3 vertices. What is it?	
2	Solve this: a figure with 4 sides of equal length. How many vertices does it have?	
3	A shape has 5 vertices and 5 sides. What shape is it?	
4	A classroom door is shaped like a rectangle. How many sides and vertices does it have?	
5	A piece of fabric is 10 metres long and 6 metres wide. A tailor wants to cut it into a different shape that is 15 metres long. How wide will the new piece of fabric be if it has the same area?	
6	An octagon is featured on a sign. Count the sides and vertices.	
7	A hexagon-shaped frame holds a picture. How many sides and vertices does this shape have?	
8	If a shape has 6 sides, and all sides are equal, what is the number of vertices?	

Sorting Sides and Vertices

Part 1 Sort the shapes into the categories below



Shapes	Quadrilaterals	Pentagons	Hexagons
Letters			

Part 2 Sort the irregular shapes below into the following categories



Sides	7	8	
Letters			

Part 3 Draw irregular shapes below with the correct number of sides

Drawings				
Sides	7	8	9	10

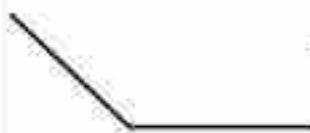
Shape Skyscraper

Draw**Follow the instructions below**

Design a skyscraper using regular and irregular polygons. How many regular polygons did you draw? How many irregular polygons?

PREVIEW

Number Of Regular Polygons	
Number Of Irregular Polygons	

Naming Angles= larger than
a right angle

= right angle

= smaller than
a right angle

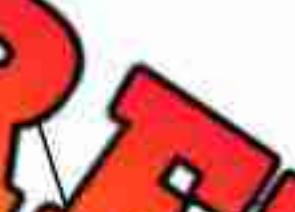
Questions

Label the angles in comparison to a right angle – larger, smaller, right angle

1)



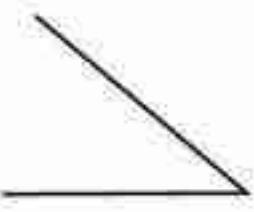
2)



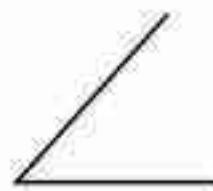
3)



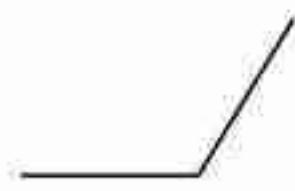
4)



5)



6)



7)



8)

9)



10)



11)



12)



Naming Angles

Part 1

Match the angle to its description by drawing a line

PREVIEW

Right

Larger angle

Smaller angle

Part 2

Answer the following word problems

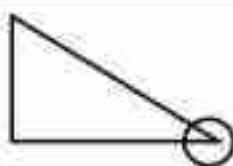
1) Liam's clock shows 3:00. What type of angle is formed between the hands of the clock?



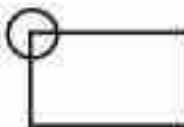
2) A pizza is cut into 8 equal slices. What type of angle is formed between each slice? Draw a picture to show this.

3) A pair of scissors is open wide. What type of angle is formed between the two blades? Draw an image of the scissors showing the angle.

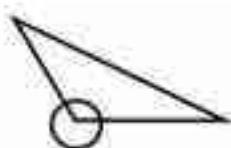
Naming Angles in Shapes



= smaller than
a right angle



= right angle



= larger than
a right angle

Part 1 Draw the angle that is circled. Then label it larger, smaller, or a right angle

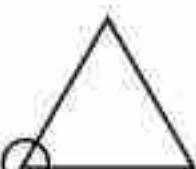
1)



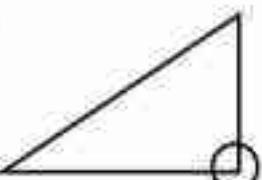
2)



3)

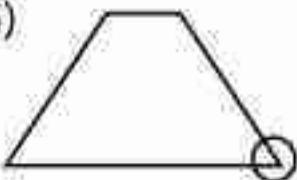


4)



Right Angle

5)



6)



8)

**Part 2**

Circle the angles below on the shapes

9)



Smaller than a right angle

10)



Larger than a right angle

11)



A right angle

Sorting Angles

Part 1 Sort the angles into the categories below



A	C	D	E	F	G	H	I	J
---	---	---	---	---	---	---	---	---

Angles	Larger Than A Right Angle	Smaller Than A Right Angle
Letters		

Part 2 Sort the angles into the categories below



A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---

Angles	Right Angle	Larger Than A Right Angle	Smaller Than A Right Angle
Letters			

Part 3 Circle the angles below

Drawings			
Angles	Right Angle	Larger than a right angle	Smaller than a right angle

Congruent Shapes

Questions

Circle the congruent shape

Congruent shapes have the same size and shape.
This means that the sides lengths and angles are the same.

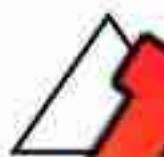


Congruent

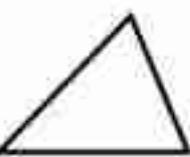


Not congruent

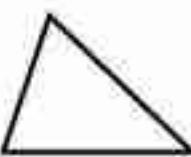
1)



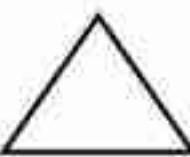
a)



b)



c)



2)



a)



b)



c)

3)



a)



c)

4)

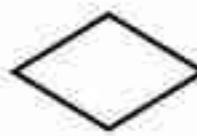


a)

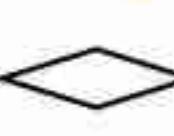


b)

5)



a)



c)

6)

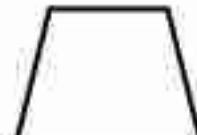


a)



c)

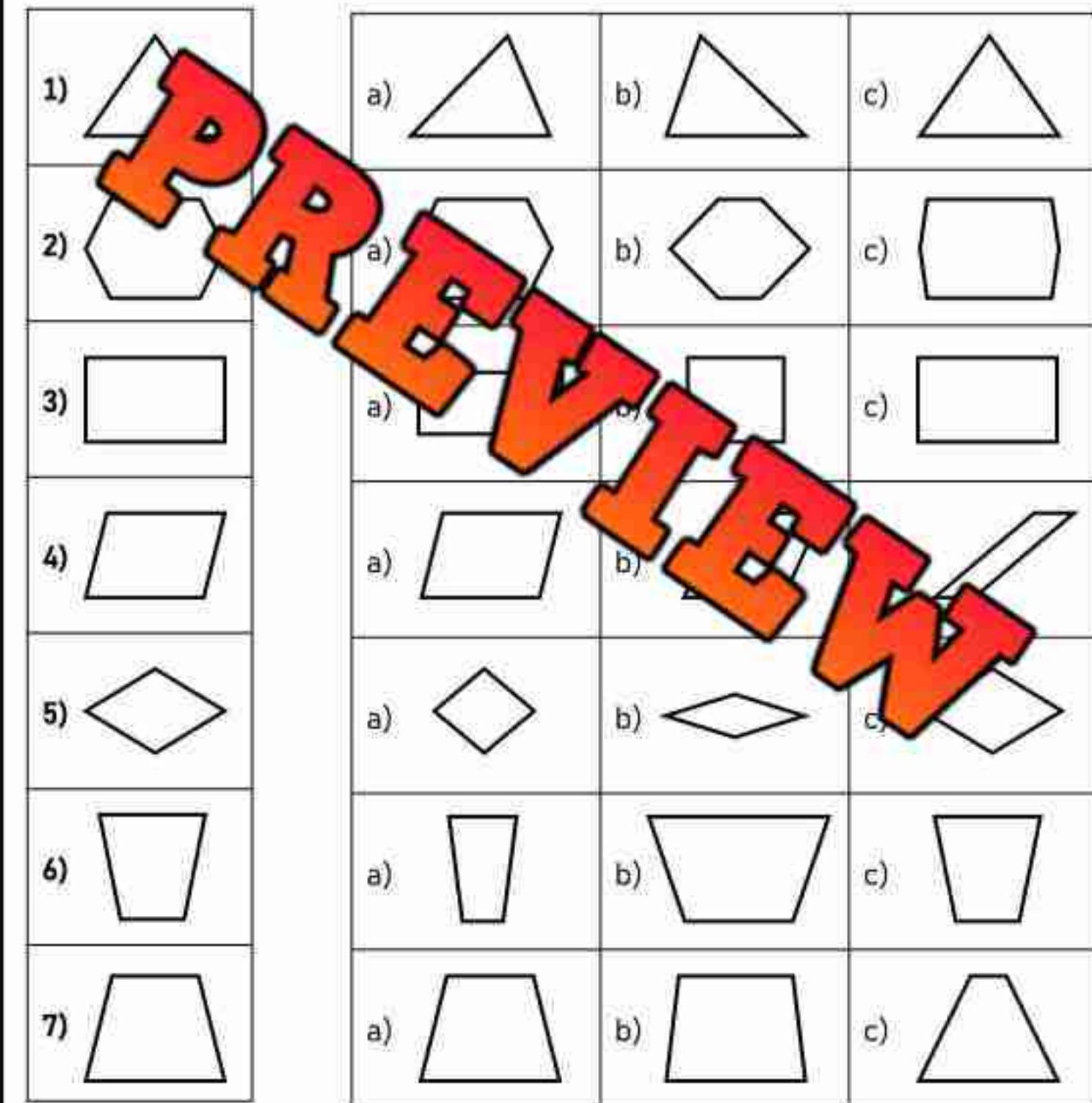
7)



a)



c)



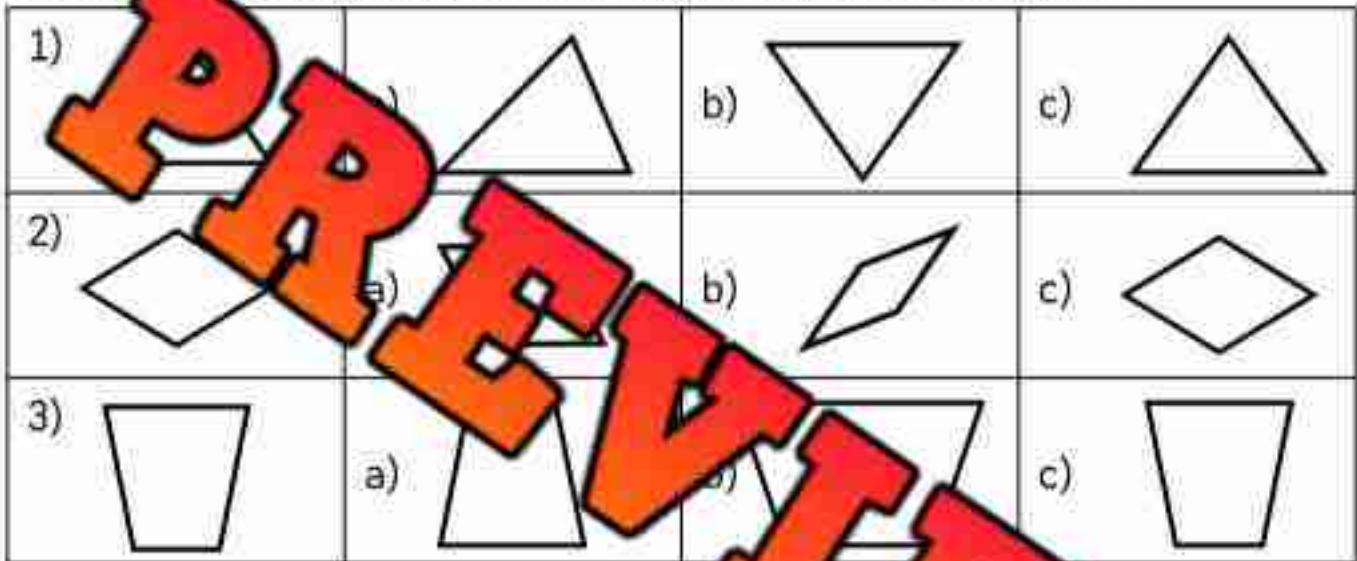
Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

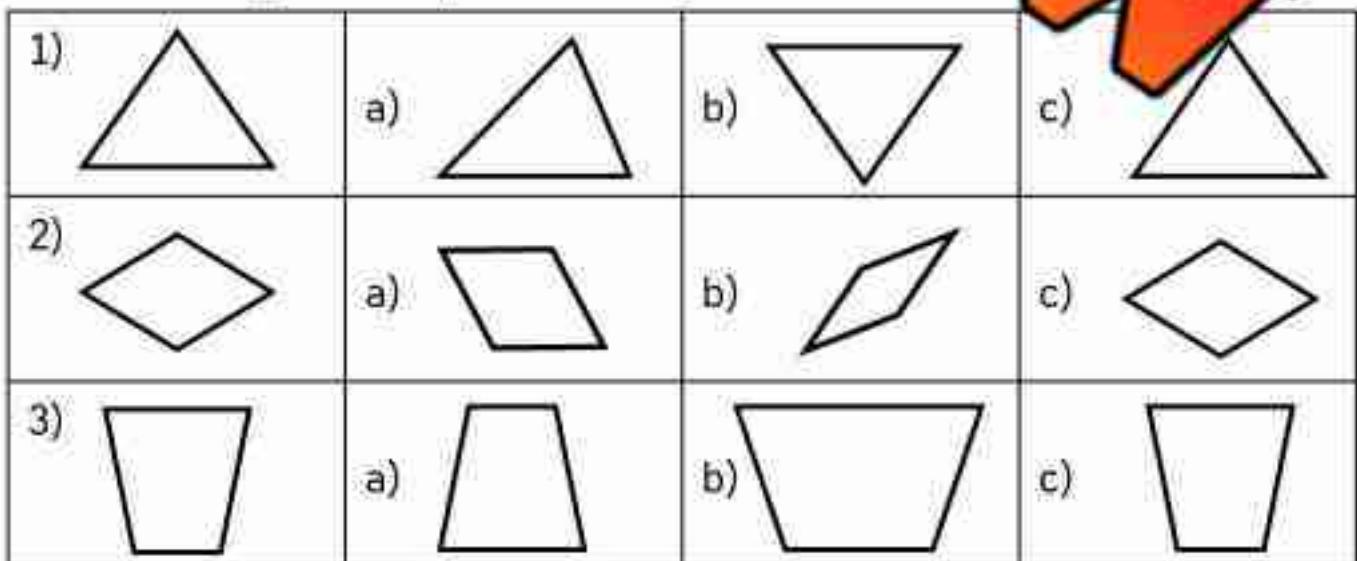
Name: _____

Colour the congruent shapes. There may be more than one answer.



Name: _____

Colour the congruent shapes. There may be more than one answer.



Create Your Own Congruent Shapes

Draw

Draw your own 3 congruent shapes of your choice

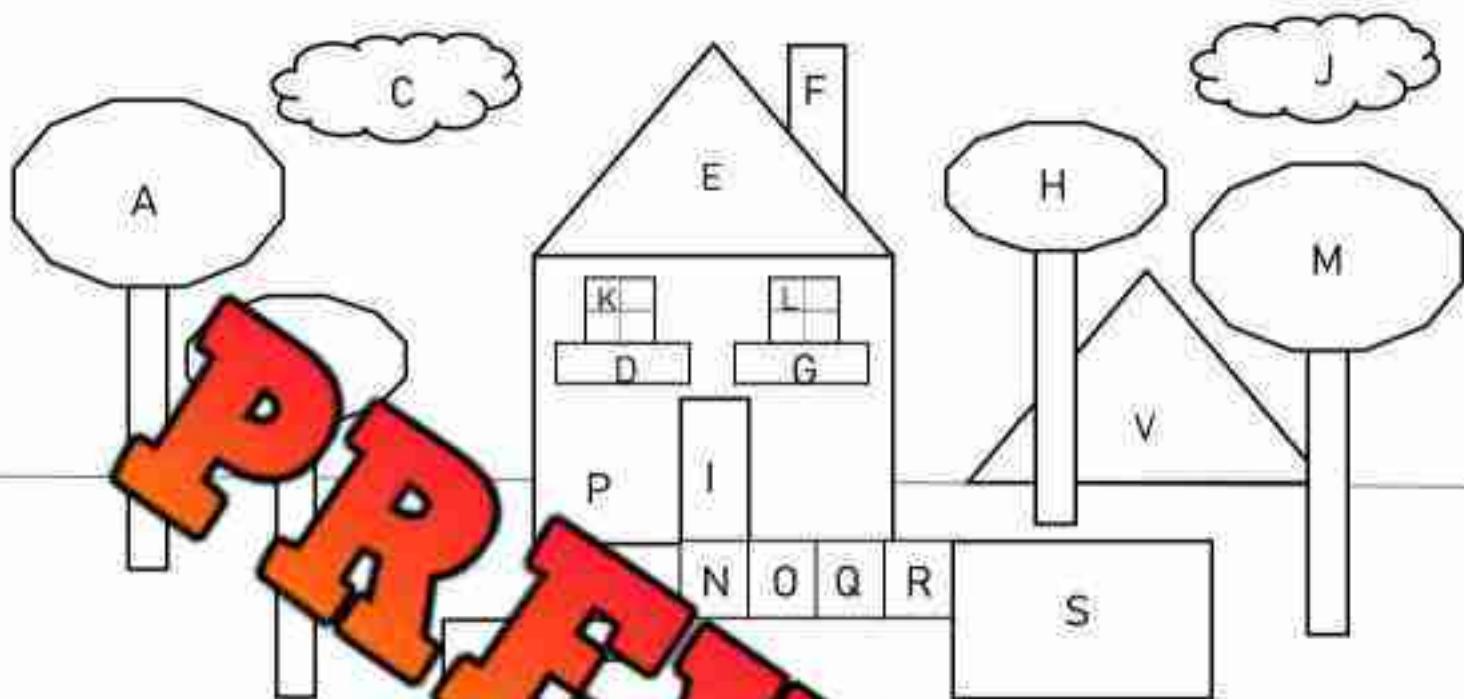
1

PREVIEW

2

3

The Congruent House

**Questions**

Answer the questions below by looking at the house above

1) Which shape is congruent to shape A?

2) Which shape is congruent to shape C?

3) Which shapes are congruent to shape N?

4) Which shape is congruent to shape B?

5) Which shape is congruent to shape E?

6) Which shapes are congruent to shape D?

7) Which shape is congruent to shape T?

8) Which shape is congruent to shape L?

PREDICT

Congruent Shapes

Questions

Measure the side lengths and circle the congruent shape

Measure each of the side lengths to make sure they are the same.



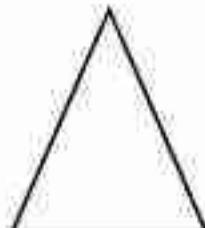
1)



a)



b)



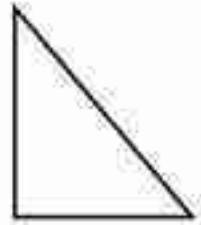
2)



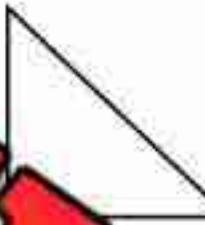
b)



3)



a)



4)



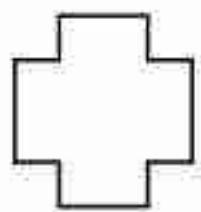
a)



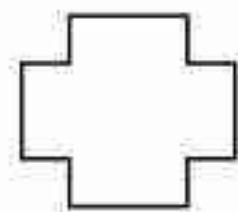
b)



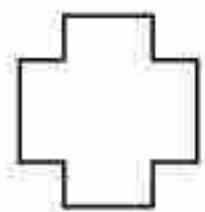
5)



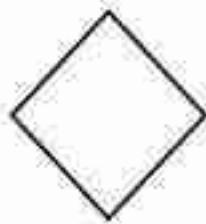
a)



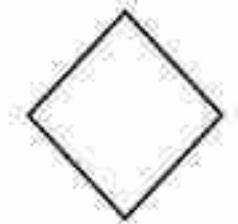
b)



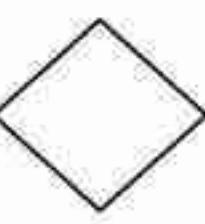
6)



a)



b)



Sorting Lines By Length

Questions

Sort the lines into the correct categories below

Shorter Than 3 cm

Longer Than 3 cm

PREVIEW

A	B	C	D	E

F	G	H	I	J

Sorting Shapes By Side Lengths

Questions

Sort the shapes into the correct categories below

Perimeter Longer Than 13 cm

Perimeter Shorter Than 13 cm

PREVIEW

A	B	C

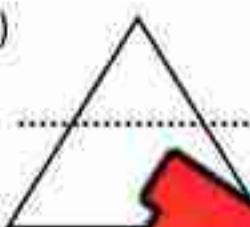
E	F	G	H

Line of Symmetry

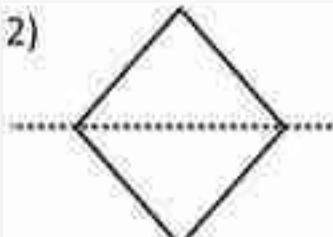
**Questions**

Is the dotted line a line of symmetry? Write yes or no.

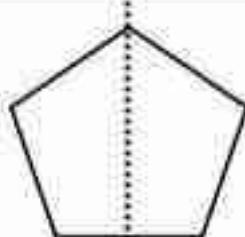
1)



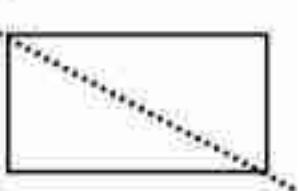
2)



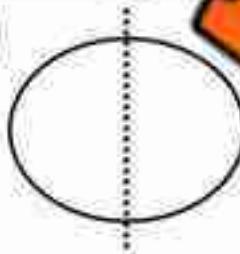
3)



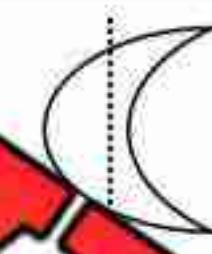
4)



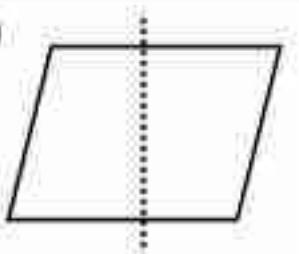
5)



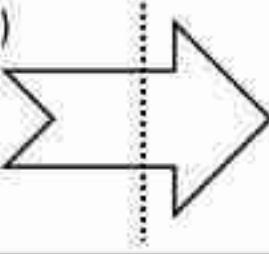
7)



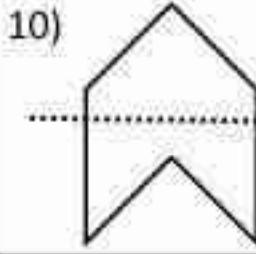
8)



9)



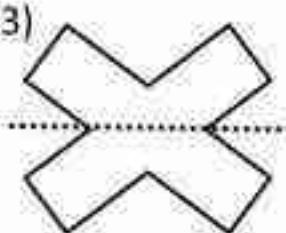
10)



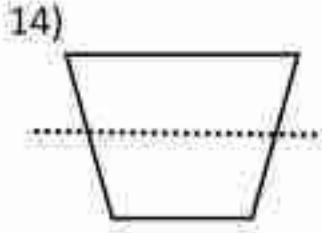
11)



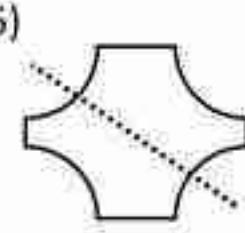
13)



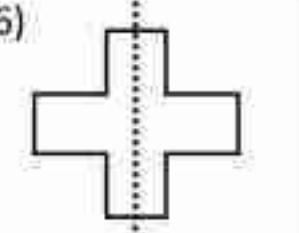
14)



15)



16)



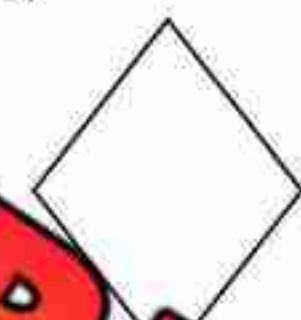
Drawing Multiple Lines of Symmetry

Questions**Draw 2 or more lines of symmetry on the shapes below**

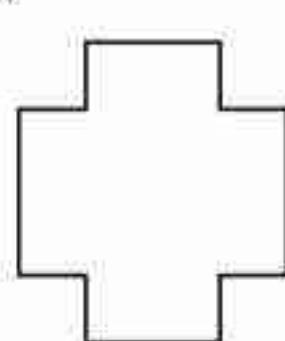
1)



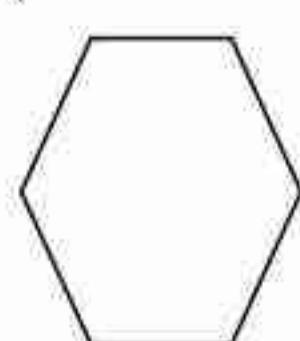
2)



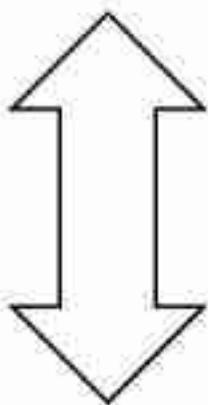
3)



4)



5)



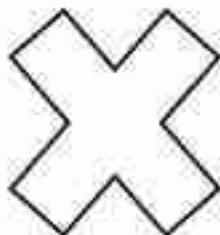
6)



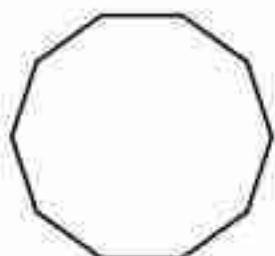
8)



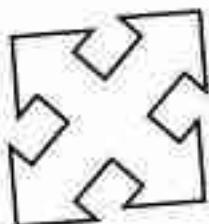
9)



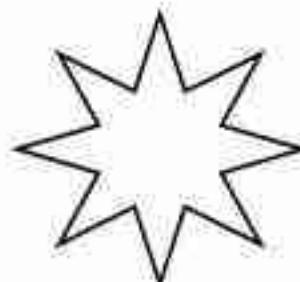
10)



11)



12)



Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

1) How many lines of symmetry does the shape have?



2) Draw the lines of symmetry on the shape below.



Name: _____

1) How many lines of symmetry does the shape have?



2) Draw the lines of symmetry on the shape below.

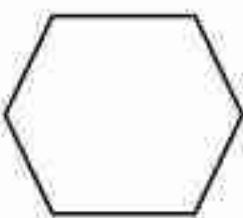


Name: _____

1) How many lines of symmetry does the shape have?



2) Draw the lines of symmetry on the shape below.

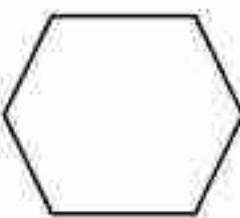


Name: _____

1) How many lines of symmetry does the shape have?



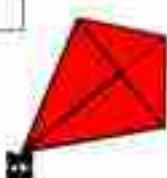
2) Draw the lines of symmetry on the shape below.



Lines of Symmetry Word Problems

Questions

Answer the questions below



	Word Problems	Answers
1	In art class, Sarah draws a square. How many lines of symmetry does her square have?	
2	As a trapezoid. If the flag is equilateral, how many lines of symmetry does it have?	
3	Aisha cuts out a heart shape for a project. How many lines of symmetry does the heart have?	
4	Jason draws a rectangle and then cuts it in half diagonally. How many lines of symmetry does the original rectangle have, and how many does each half have now?	
5	Jade examines an oval-shaped track. Determine the number of lines of symmetry the oval has.	
6	Liam folds a piece of paper into a kite shape. How many lines of symmetry are in Liam's kite?	

Drawing Lines of Symmetry on Real – Life Objects

Questions

Draw a line of symmetry on the real-life images below

1)



2)



3)



4)



5)



6)



8)



9)



10)



11)



12)



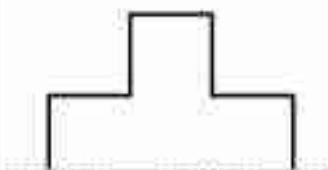
Drawing Mirror Image Using Line of Symmetry

Questions**Draw the mirror image of the shapes below**

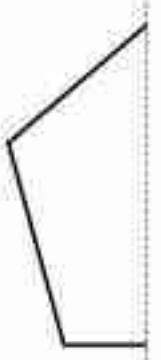
1)



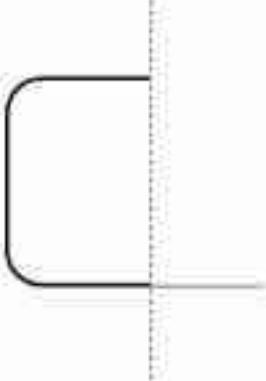
2)



3)



4)



5)



6)



8)



9)



10)



11)



12)



Drawing Mirror Objects Using Real – Life Objects

Questions

Draw the mirror image of the real-life objects below

1)



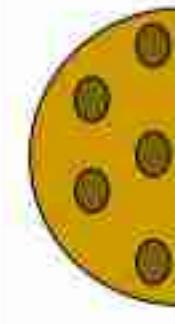
2)



3)



4)



5)



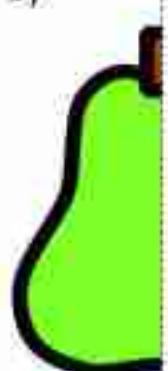
6)



8)



9)



10)



11)



12)



Draw the Mirror Image**Draw****Draw the mirror image of the real-life objects below**

1)



2)

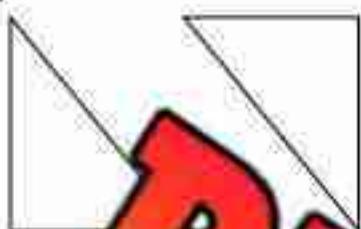


Composing Shapes

Questions

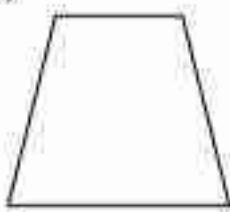
Circle the shape that will be made by combining the shapes below?

1)



Triangle

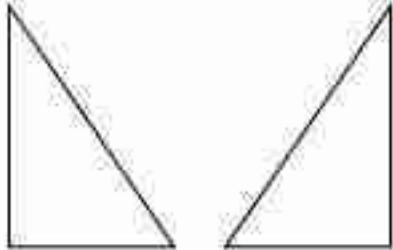
2)

Trapezoid
Triangle

3)

Square
Triangle

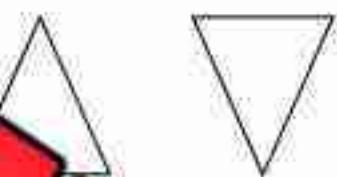
4)



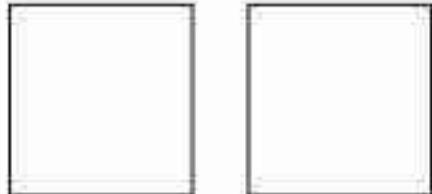
Triangle

Square

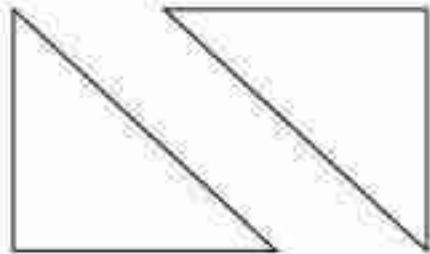
6)

Pentagon
Hexagon

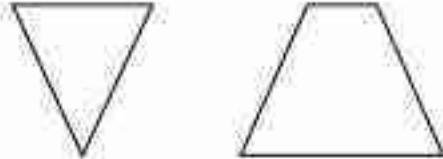
7)

Square
Rectangle

8)

Square
Rectangle

9)

Parallelogram
Rectangle

Draw The Combination

Draw:

Draw the shape that is formed when you combine the two shapes listed below.

	Question	Combined Shape
1	Triangle + Square	
2	Rectangle + Triangle	
3	Circle + Rectangle	
4	Hexagon + Triangle	

Decomposing Shapes

Questions**What smaller shapes can you use to make the bigger shape?**

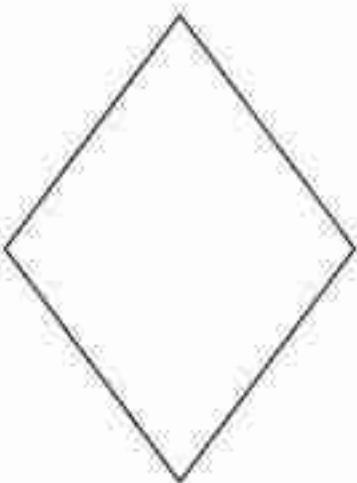
1)



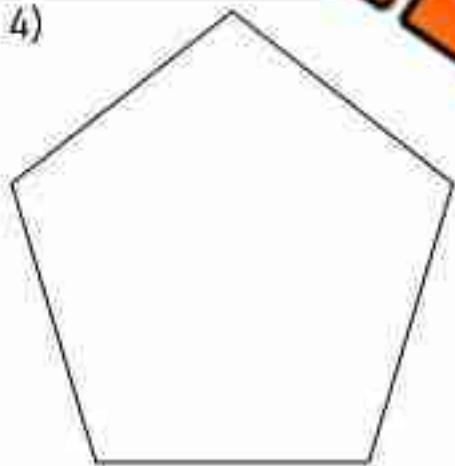
2)



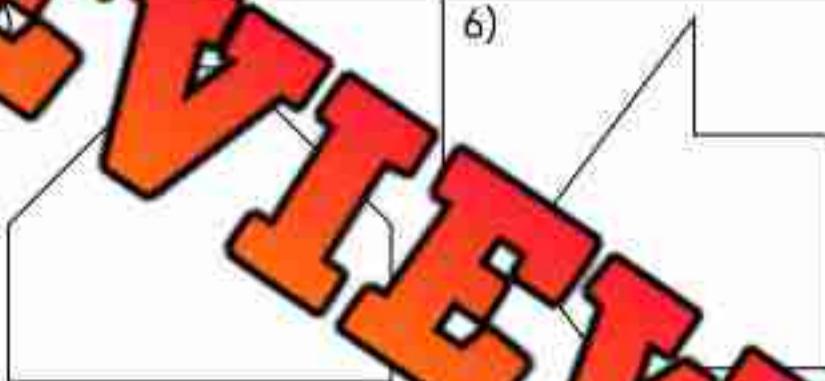
3)



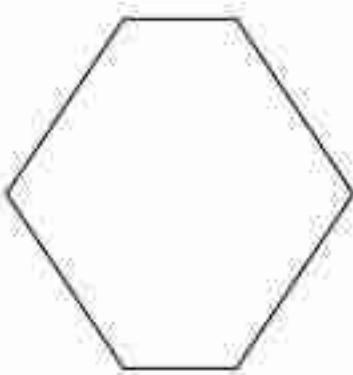
4)



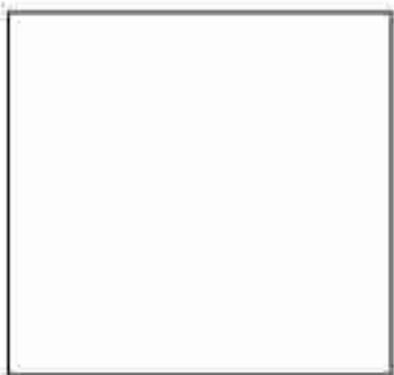
5)



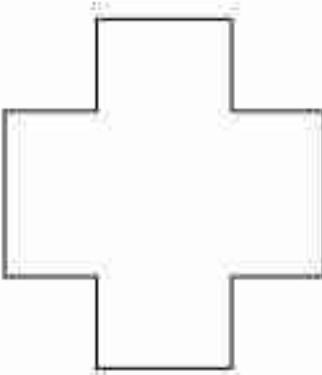
7)



8)

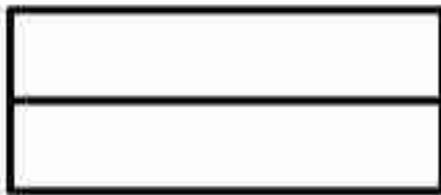
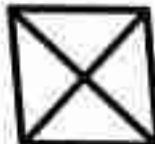
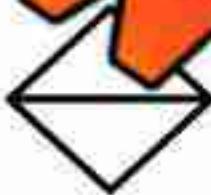
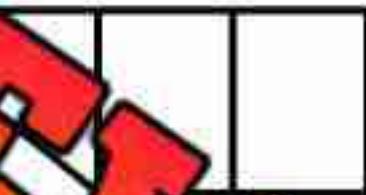
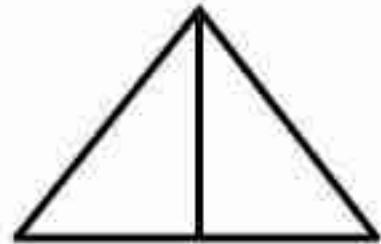
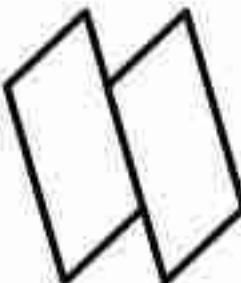
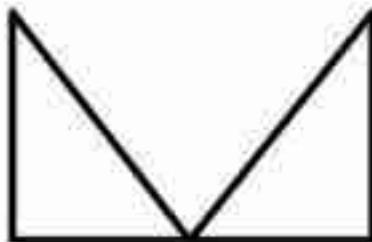


9)



Decomposing Shapes – Same Area

Instructions Draw a line to match the pairs of shapes that have the same area.



Decomposing Shapes – Same Area

Instructions

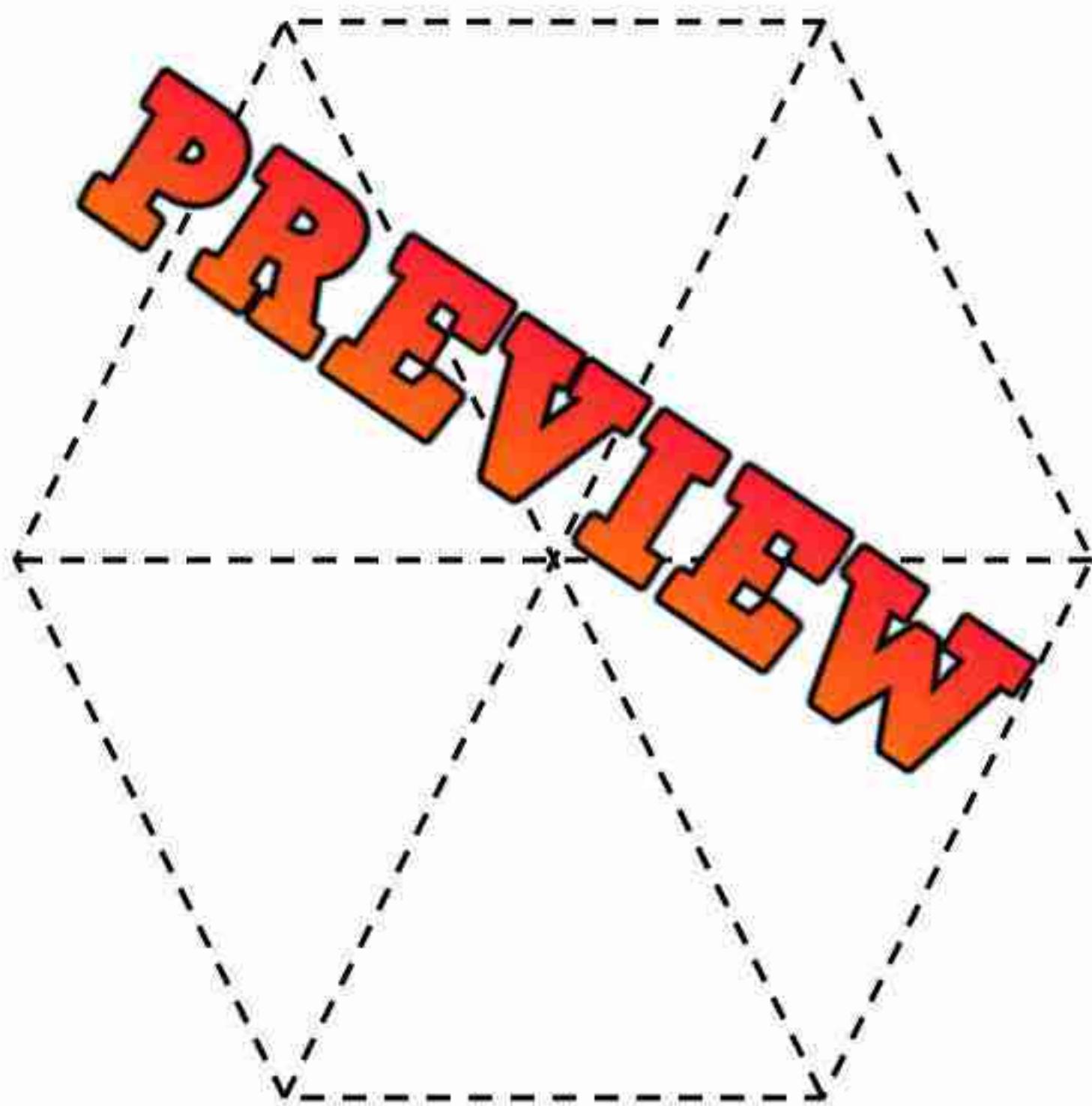
Cut out the triangles and rearrange them in a new position. Does the area of the square change?

PREVIEW

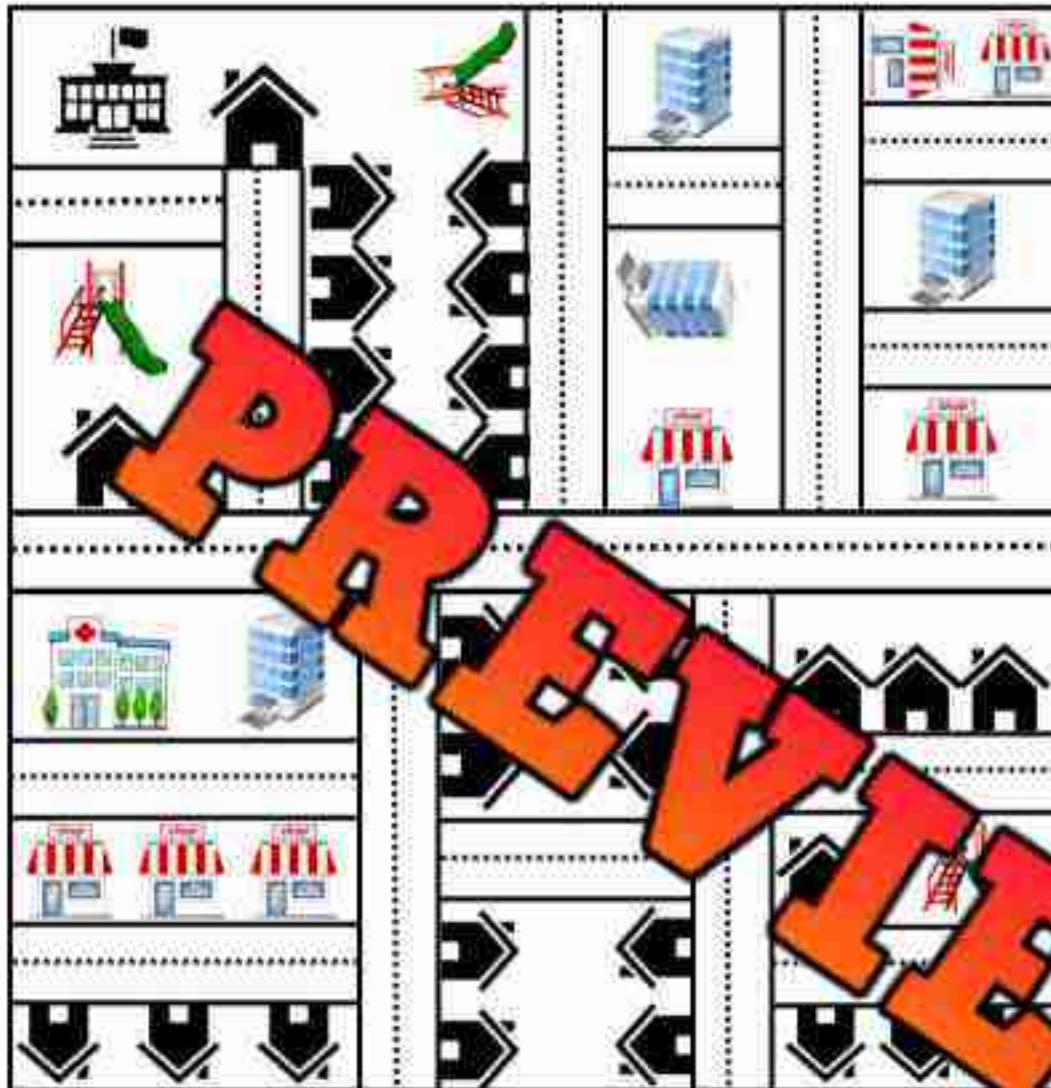
Decomposing Shapes – Same Area

Instructions

Cut out the triangles and rearrange them in a new position. Does the area of the hexagon change?



Reading a Map - Amazingville



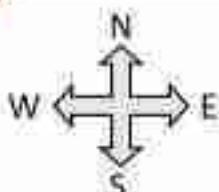
Legend

- House
- Park
- School
- Store
- Office
- Road
- Hospital

Questions

Answer the questions by reading the map

- 1) How many stores are there in Amazingville? _____
- 2) How many office buildings are there in Amazingville? _____
- 3) How many houses are there in Amazingville? _____
- 4) Circle the house you would want to live in. If you lived there, which direction would you go to get to school? _____
- 5) Draw a path of you leaving your home and going to a park to meet your friends. Which directions did you go? _____
- 6) If you were at the hospital, which direction do you need to go to get to school? _____



Reading a Map – Chester Zoo

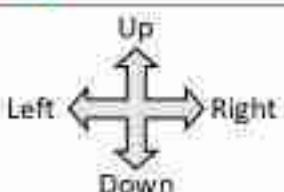
**Legend**

	Lions
	Monkeys
	Bathrooms
	Bears
	Pandas
Path	
	Food
	Elephants
	Eagles
	Trees

Questions

Answer the questions by reading the map

- 1) How many animals are at the Chester Zoo? _____
- 2) How many washrooms are at the Chester Zoo? _____
- 3) How many food stands are there at the Chester Zoo? _____
- 4) When you enter the zoo, which directions will you take to get to the elephants? Draw the path and explain the directions. _____
- 5) You are at the elephant exhibit and want to see the eagles. Which directions will you go? _____
- 6) If you were at the eagles, which direction would you go to see the bears? _____



Map of Canada Puzzle

Instructions

Cut out the puzzles pieces and put the map back together

PREVIEW



Draw a Map of Your Classroom

PREVIEW

Draw a Map of Your Bedroom

PREVIEW

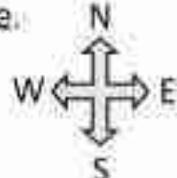
Movement – Cardinal Directions

When we move something or someone from one location to another, we describe the movement using direction and distance.

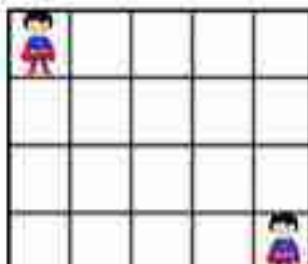
Directions – north, south, east, west

Distance – steps, metres

Example of movement – the child went south 3 steps, and east 4 steps.



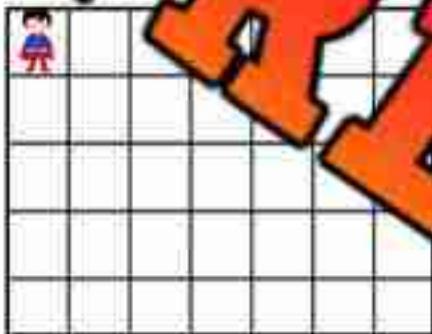
start



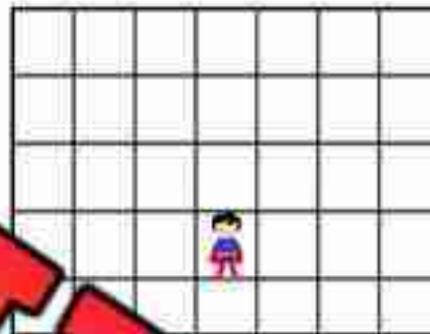
end

Question: Put an X where you think the child will end up

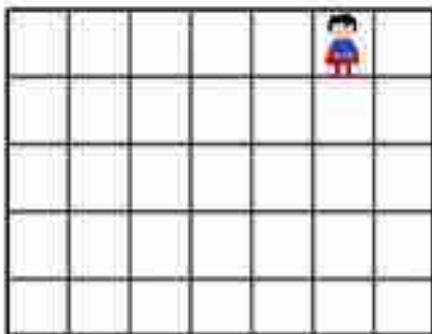
1) Directions – south 2 steps, east 3 steps



2) Directions – north 3 steps, west 2 steps



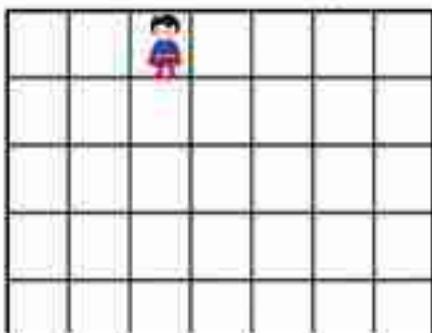
3) Directions – south 4 steps, west 4 steps



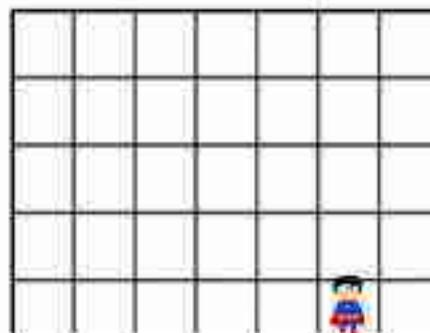
4) Directions – south 3 steps, east 6 steps



5) Directions – south 3 steps, east 4 steps



6) Directions – north 2 steps, west 3 steps

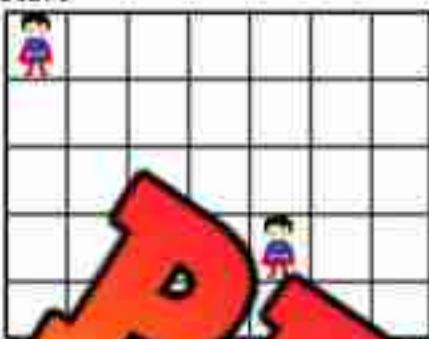


Describing Movement Using Cardinal Directions

Questions

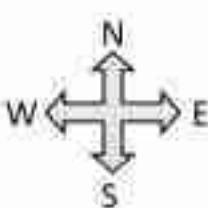
Describe how the child moved from the start to the end

1) start:

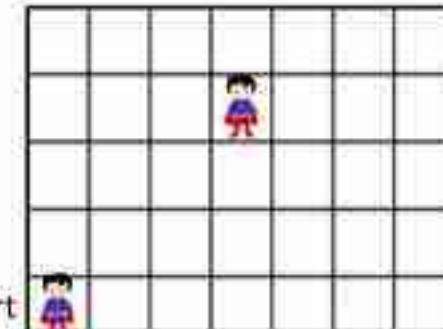


Move _____ spaces

Move _____ spaces



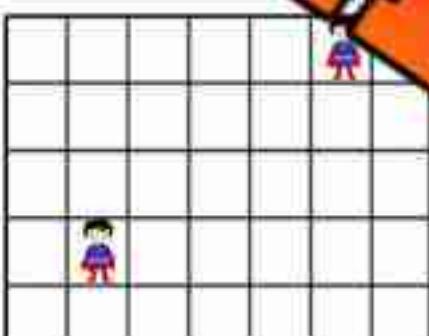
2)



Move _____ spaces

Move _____ spaces

3)

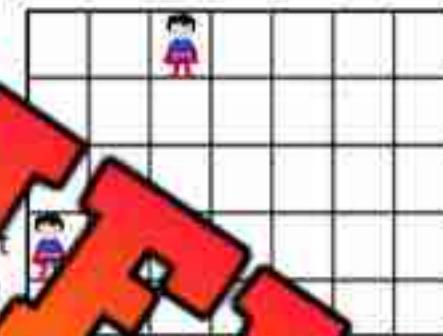


Move _____ spaces

Move _____ spaces



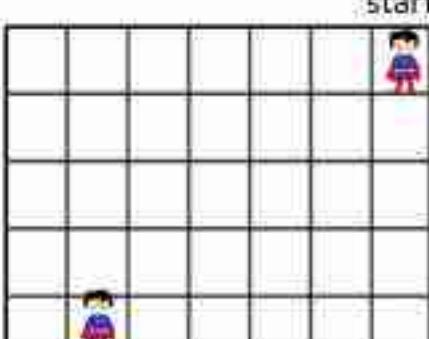
4)



Move _____ spaces

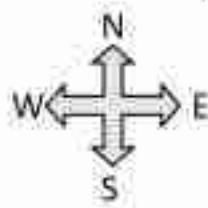
Move _____ spaces

5)



Move _____ spaces

Move _____ spaces



6)



Move _____ spaces

Move _____ spaces

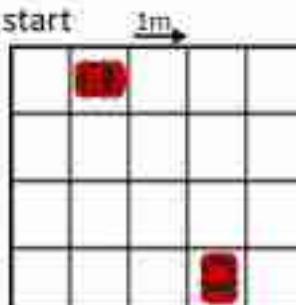
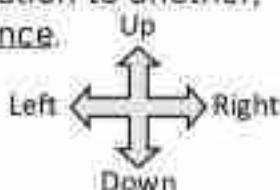
Movement – Left, Right, Down, Up

When we move something or someone from one location to another, we describe the movement using direction and distance. Up

Directions – left, right, down, up

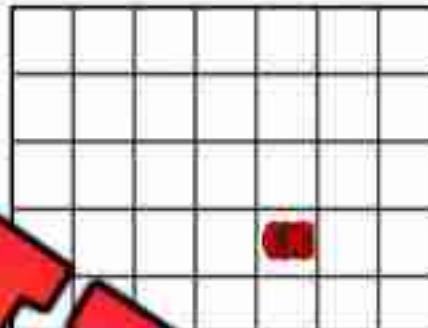
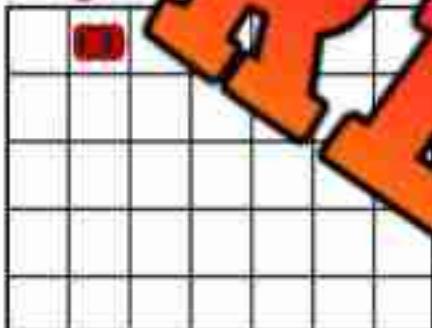
Distance – steps, metres

Example of movement – the car went right 2 metres, and down 3 metres.

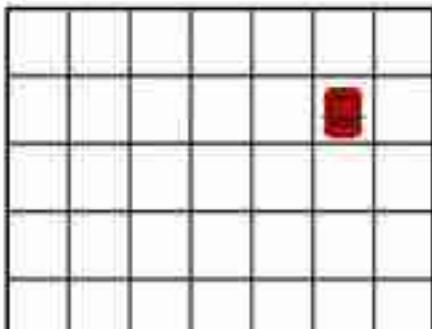


Question 10: Put an X where you think the car will end up.

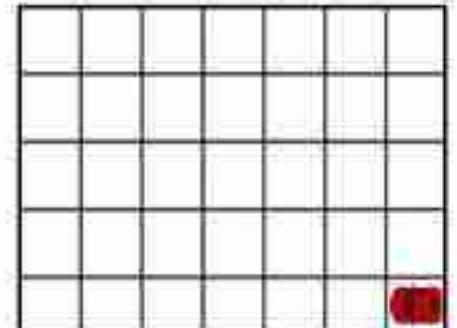
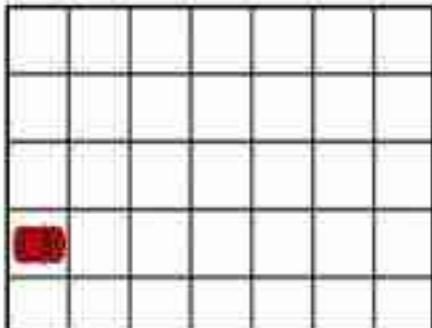
1) Directions – right down 3 metres 2) Directions – left 3 metres, up 2 metres



3) Directions – down 3 metres, left 4 metres



5) Directions – right 6 metres, up 3 metres



Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

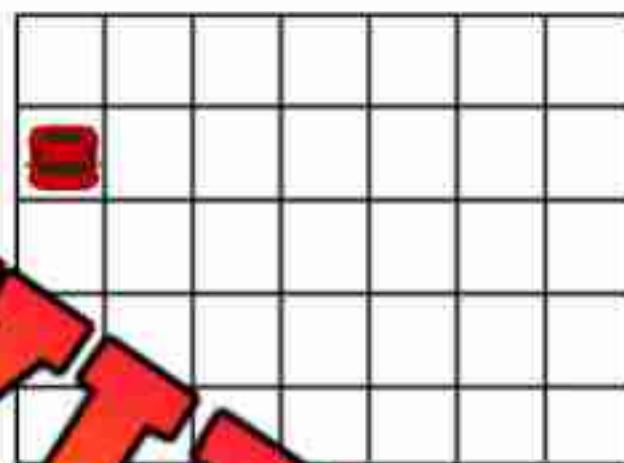
Name: _____

Right 5 metres, down 3 metres, right 1 metre



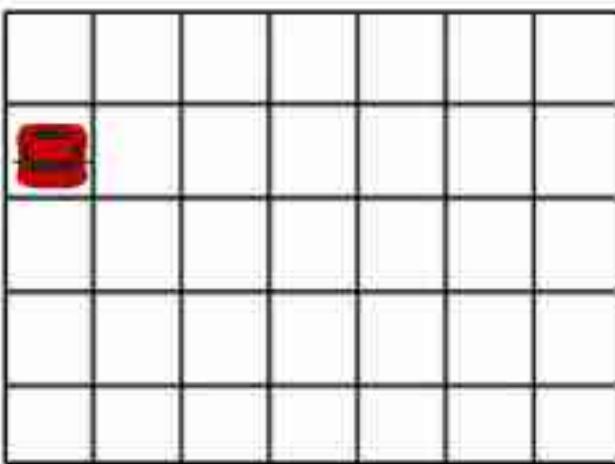
Name: _____

Right 5 metres, down 3 metres, right 1 metre



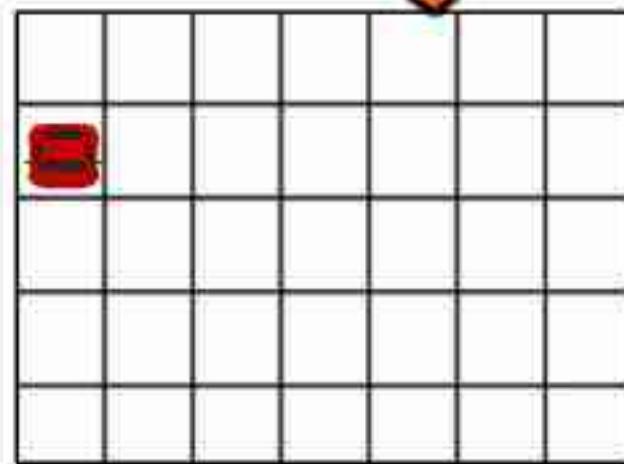
Name: _____

Right 5 metres, down 3 metres, right 1 metre



Name: _____

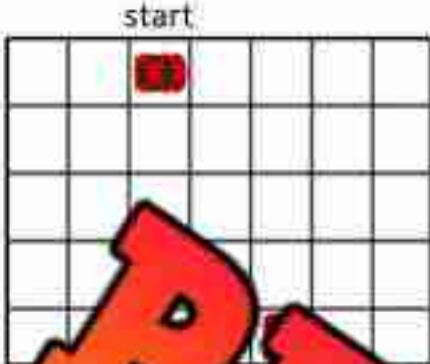
Right 5 metres, down 3 metres, right 1 metre



Describing Movement Using Left, Right, Up, Down**Questions**

Describe how the car moved from the start to the end

1)



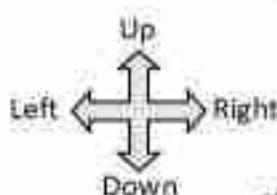
start

Move _____ metres

Move _____

PREDICTED

2)

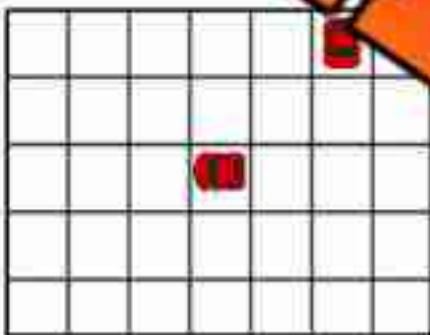


start

Move _____ metres

Move _____ metres

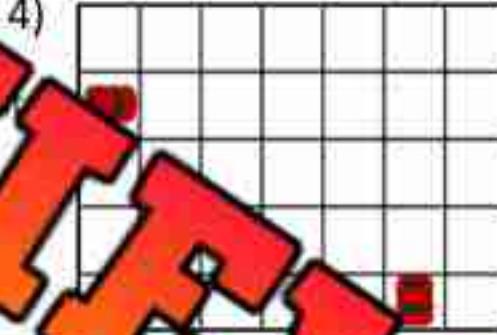
3)



Move _____ metres

Move _____ metres

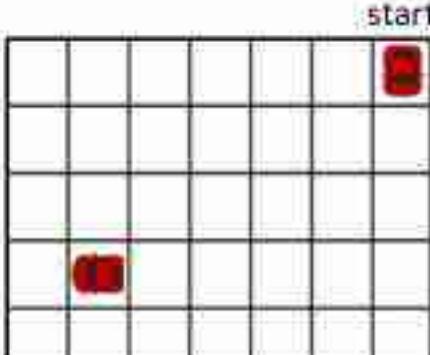
4)



Move _____ metres

Move _____ metres

5)

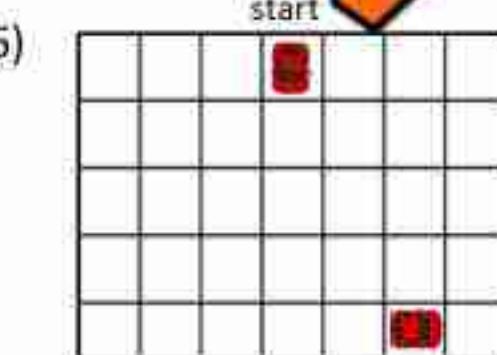


start

Move _____ metres

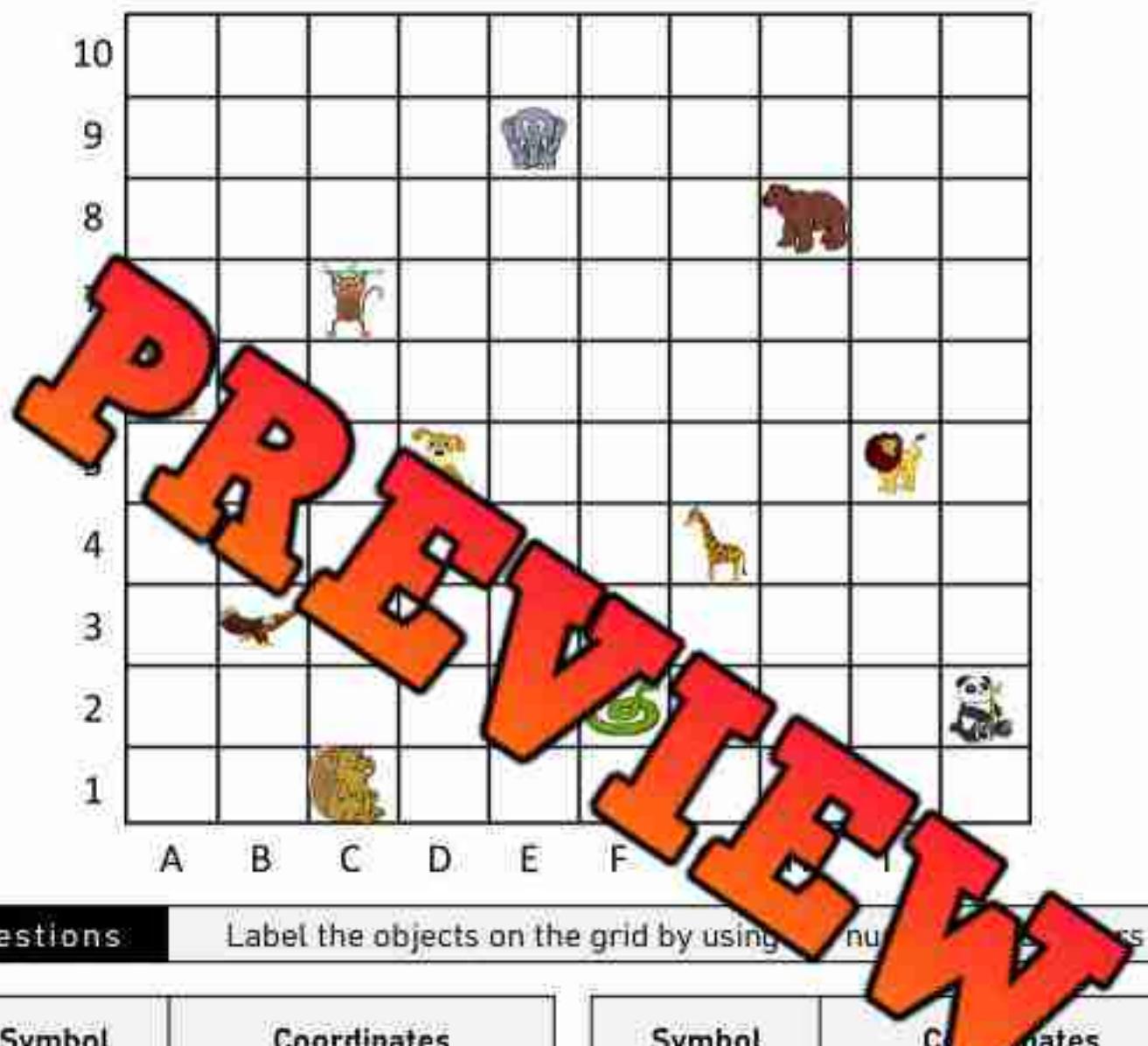
Move _____ metres

6)



Move _____ metres

Move _____ metres

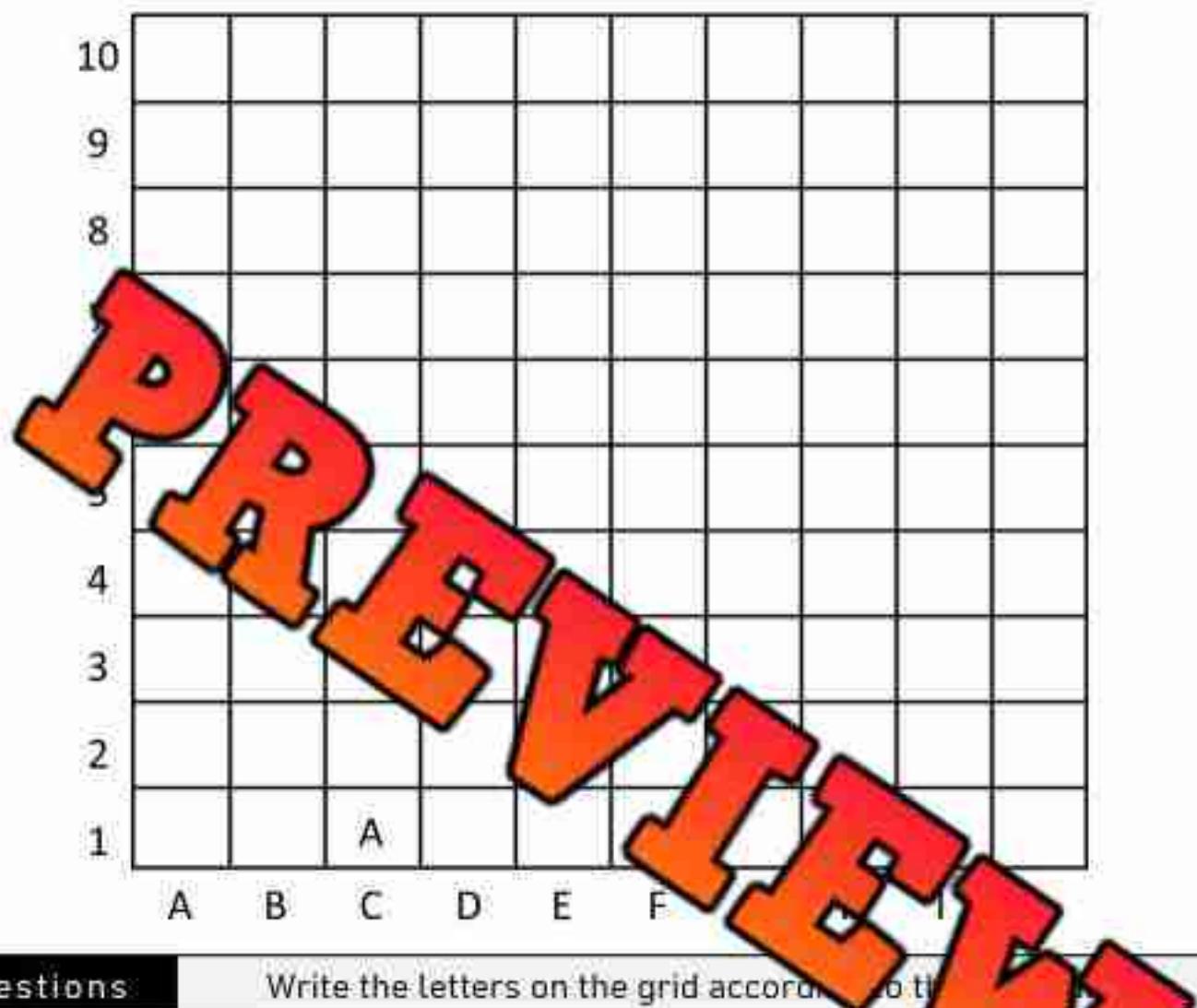
Using a Coordinate System**Questions**

Label the objects on the grid by using the numbers and letters as coordinates.

Symbol	Coordinates
	(F, 2)
	(B, 3)
	(F, 1)
	(A, 3)
	(C, 1)
	(G, 1)
	(E, 4)
	(D, 3)
	(C, 5)
	(D, 7)
	(E, 9)

Symbol	Coordinates
	(,)
	(,)
	(,)
	(,)
	(,)
	(,)
	(,)
	(,)
	(,)
	(,)

Using a Coordinate System

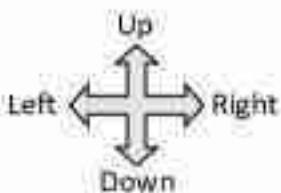
**Questions**

Write the letters on the grid according to the coordinates.

Letter	Coordinates
A	(C, 1)
B	(B, 5)
C	(J, 10)
D	(I, 7)
E	(F, 4)

Letter	Coordinates
F	(C, 7)
G	(A, 5)
H	(G, 3)
I	(D, 8)
J	(H, 9)

Using a Coordinate System

**Questions**

Explain the directions to get from the first symbol to the second.

Symbols**Directions**

Go right 4 and up 2



Geometry Test**Part 1**

How many sides does the shape have?

1.



2.



3.



4.



5.

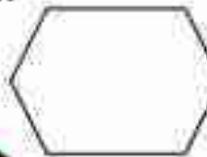
**Part 2**

Count the vertices and write how many vertices the shape has

1.



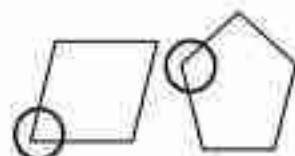
4.



5.

**Part 3**

Sort the angles into the categories below



A



B



C



D



E



F



G



H

I

Angles

Right Angle

Larger than a right angle

Smaller than a right angle

Letters

Angles	Right Angle	Larger than a right angle	Smaller than a right angle
Letters			

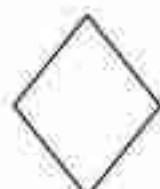
Part 4

Draw 2 or more lines of symmetry on the shapes below

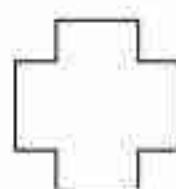
1)



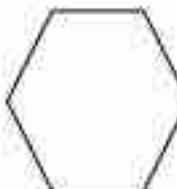
2)



3)



4)



Part 5

Use the coordinate grid to answer the questions below

1. Write the coordinates of the symbols



Symbol	Coordinates
	(A, 1)
	(C, 8)
	(D, 7)
	(E, 9)
	(G, 4)

Write the letters on the grid

Coordinates
(C, 1)
(A, 2)
(C, 2)

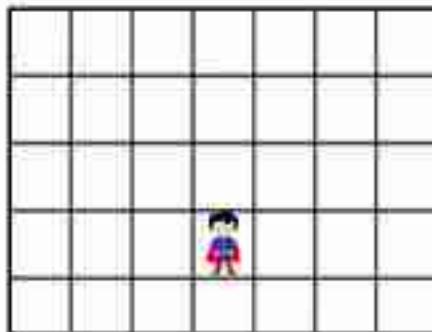
Part 6

Put an X where you think the child will end up

1) Directions – down 2 steps, right 3 steps



2) Directions – up 3 steps, left 2 steps



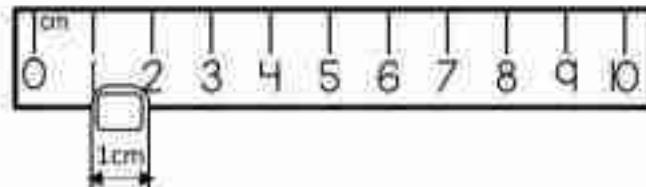
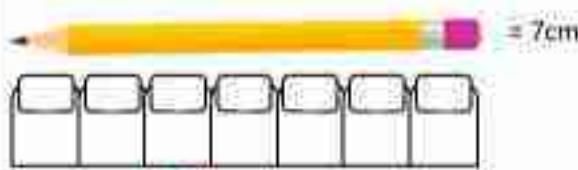
Grade 2

E2 – Measurement

	Curriculum Expectations	Pages That Cover the Expectations
E2.1	choose and use non-standard units appropriately to measure lengths, and describe the inverse relationship between the size of a unit and the number of units needed	74 - 87
E2.2	explain the relationship between centimetres and metres as units of length, and use benchmarks for these units to estimate lengths	97 - 108
E2.3	measure and draw lengths in centimetres and metres, using a measuring tool, and recognize the impact of starting at points other than zero	108 - 116
E2.4	use units of time, including seconds, minutes, hours, and non-standard units, to describe the duration of various events	109 - 149

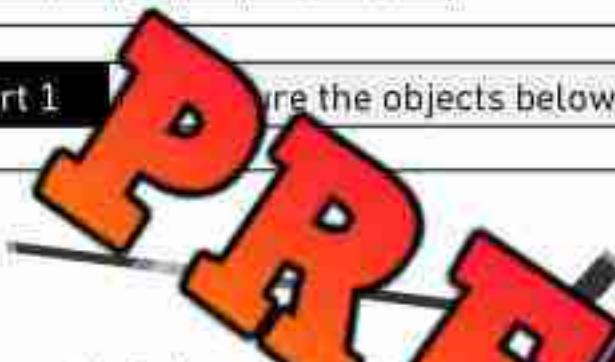
Estimating Lengths – Finger Benchmark

We can estimate the length of something by using our fingertip. Your fingertip is approximately 1 cm wide.



Part 1 Measure the objects below using your fingertip

1)



Approximately _____ cm

2)



Approximately _____ cm

3)



Approximately _____ cm

Approximate _____ cm

5)



Approximate _____ cm

6)



Approximate _____ cm

Part 2

Find objects in your class that you can measure

1) The pencil is approximately _____ cm

2) The _____ is approximately _____ cm

3) The _____ is approximately _____ cm

4) The _____ is approximately _____ cm

5) The _____ is approximately _____ cm

6) The _____ is approximately _____ cm

Estimating Lengths – Finger Benchmark

Questions

Measure the objects below using your fingertip

Flag



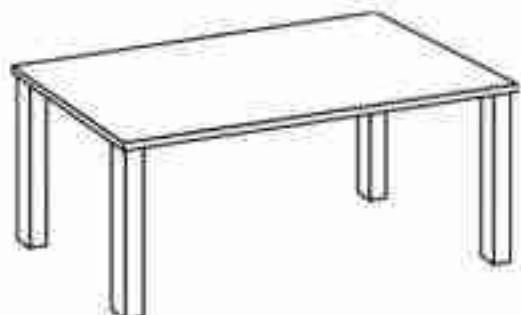
Approximately _____ cm

White Board



Approximately _____ cm

Table



Approximately _____ cm

Dog



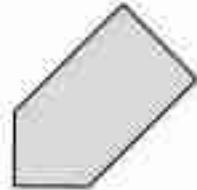
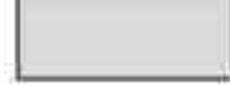
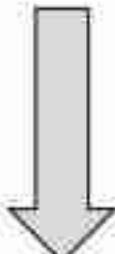
Approximately _____ cm

Measuring Objects – Changing Orientation

Questions

Measure the objects below using your fingertips

Measure the object in column 1 and column 2. These shapes are the same, but they have been moved or rotated.

Column 1	Column 2	Column 1	Column 2
1) 		4) 	
_____ fingertips	_____ fingertips	_____ fingertips	_____ fingertips
2) 		5) 	
_____ fingertips	_____ fingertips	_____ fingertips	_____ fingertips
3) 		6) 	
_____ fingertips	_____ fingertips	_____ fingertips	_____ fingertips

Using Non - Standard Units – Pencils

We can estimate the length of something by non-standard units. Try using your pencil to measure things.



≈ 6 units or 6 pencils

Directions

Find objects in the room that you can measure

Object Name

of Pencils

Object Name

Length
of Pencils

1)

5)

2)

6)

3)

7)

4)

8)

Using Non - Standard Units - Wingspan

When we need to measure the length of something longer, like a doorway, many people will use their arms to measure the length. This is a fast way to get a rough estimate of how long something is without using a measuring tape.



Doorway = 1 wingspan length

Our wingspan is used to measure longer distances.
Examples: width of classroom, length of gymnasium

Directions

Find a longer length in your school that you could measure with your wingspan. Note the length and how many wingspans it is.

Length Name	Length # of Wingspans	Length Name	Length # of Wingspans
1)		5)	
2)		6)	
3)		7)	
4)		8)	

Measuring Length – Which Unit ?

Directions: Circle which non-standard unit you would use to measure the lengths below

What You Are Measuring	Unit 1	Unit 2	Unit 3
1) The length of an apple	Paper Clip	Pencil	Wingspan
2) The width of a desk	Paper Clip	Pencil	Wingspan
3) The width of the classroom	Paper Clip	Pencil	Wingspan
4) The length of the gymnasium	Paper Clip	Pencil	Wingspan
5) The length of your finger	Paper Clip	Pencil	Wingspan
6) The length of a book	Paper Clip	Pencil	Wingspan
7) The length of a bus	Paper Clip	Pencil	Wingspan
8) The length of your foot	Paper Clip	Pencil	Wingspan
9) The length of a cookie	Paper Clip	Pencil	Wingspan
10) The width of a window	Paper Clip	Pencil	Wingspan

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Circle which non-standard unit you would use to measure the lengths below:

1) The height of a juice box.	Paper Clip	Pencil	Wing-span
2) The width of a hallway.	Paper Clip	Pencil	Wing-span
3) The height of your chair.	Paper Clip	Pencil	Wing-span

Name: _____

Circle which non-standard unit you would use to measure the lengths below:

1) The height of a juice box.	Paper Clip	Pencil	Wing-span
2) The width of a hallway.	Paper Clip	Pencil	Wing-span
3) The height of your chair.	Paper Clip	Pencil	Wing-span

Name: _____

Circle which non-standard unit you would use to measure the lengths below:

1) The height of a juice box.	Paper Clip	Pencil	Wing-span
2) The width of a hallway.	Paper Clip	Pencil	Wing-span
3) The height of your chair.	Paper Clip	Pencil	Wing-span

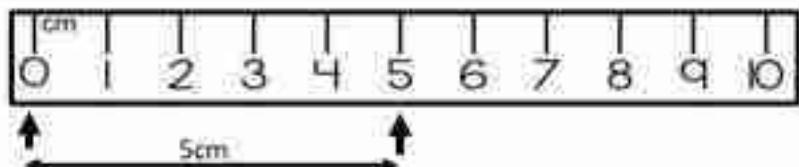
Name: _____

Circle which non-standard unit you would use to measure the lengths below:

1) The height of a juice box.	Paper Clip	Pencil	Wing-span
2) The width of a hallway.	Paper Clip	Pencil	Wing-span
3) The height of your chair.	Paper Clip	Pencil	Wing-span

Measuring in Centimeters

We can accurately measure the length of something by using a ruler.



Questions

Read the rulers below to find the distance between the arrows.

1)

2)

3)

4)

5)

6)

7)

8)

9)

cm

Measuring in Centimeters

Questions

Use a ruler to measure the lines below



1)



cm

2)



cm

3)

P

5)

R

4)



cm

7)

E

6)

V

cm

9)

E

8)

C

cm

11)

K

10)

W

cm

12)

Y

cm

cm

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Use a ruler to measure the lines below

1) _____ cm

2) _____ cm

3) _____ cm

Name: _____

Use a ruler to measure the lines below

1) _____ cm

2) _____ cm

3) _____ cm

Name: _____

Use a ruler to measure the lines below

1) _____ cm

2) _____ cm

3) _____ cm

Name: _____

Use a ruler to measure the lines below

1) _____ cm

2) _____ cm

3) _____ cm

Drawing Lengths Using a Ruler

Questions

Draw lines that are the lengths below



1)

5 cm

2)

6 cm

3)

PREVIEW

4)

9 cm

5)

4 cm

7 cm

6)

1 cm

8 cm

9)

2 cm

10 cm

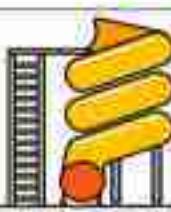
11)

14 cm

12)

17 cm

Ladder Challenge

Draw**Follow the instructions below**

A good ladder needs rungs that are the same size and evenly spaced, so it's safe to climb. Your challenge is to draw a ladder with perfect rungs. Can you make the safest ladder ever? Let's try!

PREVIEW

Measuring Height – Lollipops

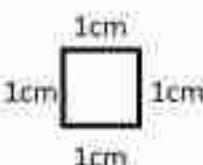
Questions

Measure the height of the lollipop sticks



Measuring Square Side Lengths

A square has 4 sides that are all the same length. We can find out if a shape is a square by measuring the side lengths.



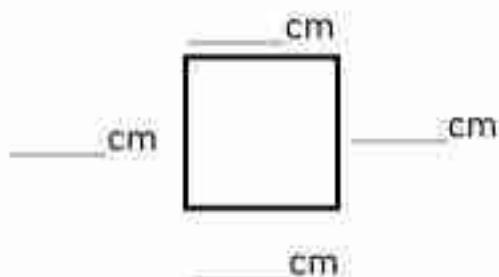
Part 1

Use a ruler to measure the squares below

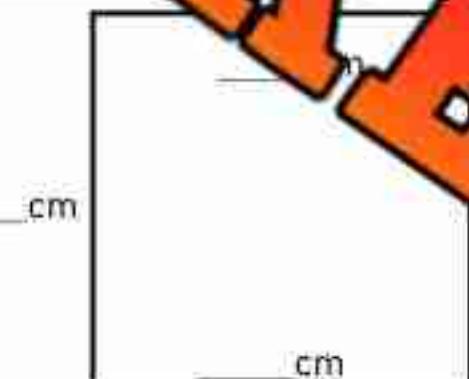
1)



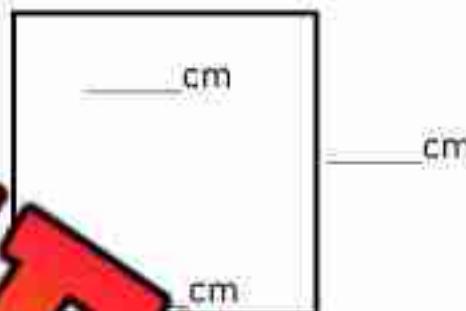
2)



3)



4)



Part 2

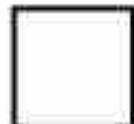
Are the shapes squares?

1)



Yes No

2)



Yes No

3)



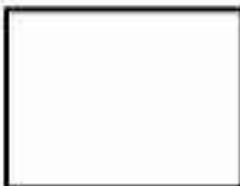
Yes No

4)



Yes No

5)



Yes No

6)



Yes No

Metric System – Meters and Centimeters

In Canada, we use the metric system. We use centimetres for smaller measurements and metres for larger measurements.



Centimetre (cm)

Approximately the width of your finger



Metre (m)

Approximately the width of a door

Question: What unit of measure would you use to measure the following distances?

1) The distance from your desk to the door

2) The length of your hair

3) The length of your eraser

4) The length of your classroom

5) The distance around a track

6) The distance of a 10 second race

7) The length of your shoe

8) The width of your fingernail

9) The height of the classroom door

10) The length of your school

Meters and Centimeters

In Canada, we use the metric system. Two common units of measurement are metres and centimetres.



BENCHMARKS

100cm = 1m

1m = 100cm



Part 1 Fill in the table below

100	1
300	3
400	4
	5
600	6
	7
800	8
	9
1000	

Part 2 Convert the units of measurement below

1) 1m _____ cm

2) 5m _____ cm

200cm _____ m

700cm _____ m

800cm _____ m

6) 800cm _____ m

7) 4m _____ cm

Part 3 Which unit would you use to measure the things below

CM	M	CM	CM
CM	M	CM	CM

Matching Game: Meters and Centimeters

Objective**What are we learning about?**

To help students practice converting centimeters to meters and vice versa by matching corresponding values.

Materials Materials you will need for the activity.

- Pre-prepared and cut matching game cards with values in meters and centimeters.
- Small bags or envelopes to hold the sets for each group

**Instructions** How you will complete the

1. Before the class, the teacher will cut out the pre-prepared matching game cards.
2. Divide the students into small groups and give each group a bag or envelope containing a set of the matching cards.
3. In their groups, students will spread out the cards face down on their table.
4. Each person takes a turn to try to match two cards – one set with values in centimeters with its matching value in meters.
5. If they find a correct match, they keep the cards out and continue with their next turn. If the cards don't match, they turn them back over in the same place, and the next player takes a turn.
6. The activity continues until all pairs are correctly matched within each group.

Cards

Matching Game Cards

Meters (m)**Centimeters (cm)**

1 m

100 cm

3 m

200 cm

4 m

400 cm

5 m

500 cm

PREVIEW

Cards

Matching Game Cards

Meters (m)**Centimeters (cm)**

6 m

600 cm

8 m

700 cm

9 m

900 cm

10 m

1000 cm

PREVIEW

Cards

Matching Game Cards

Meters (m)**Centimeters (cm)**

11 m

1100 cm

13 m

1200 cm

14 m

1400 cm

15 m

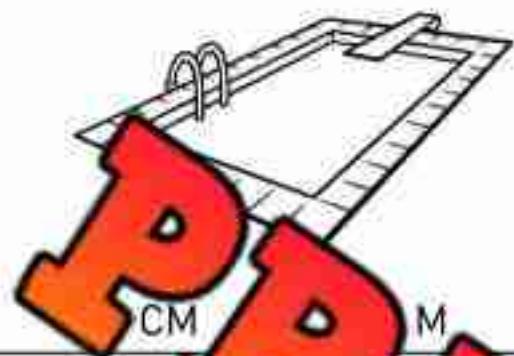
1500 cm

PREVIEW

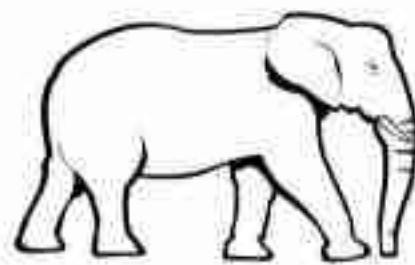
Measure Treasure Hunt

Questions

Circle the unit you would use to measure the things below

**PREVIEW**

CM M



CM M



CM M



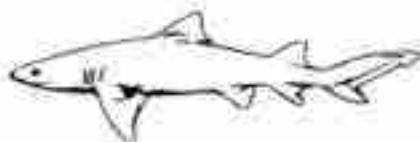
CM M



CM M



CM M



CM M



CM M

Which is Longer

Part 1

Which distance is farther? Circle the longest distance.

1)	10m	200cm	500cm	7m
2)	20cm	200cm	5m	500m
3)	5m	500cm	10m	50cm
4)	2m	300cm	1m	
5)	500cm	200cm	3m	

Part 2

Read the problems and solve them below.

1. Steve is trying to buy a long baseball bat. One bat is 98cm long and the other is 1m long. Which bat is longer?

2. Bella is 1 metre tall. Emily is 125cm tall. Who is taller? Explain.

3. Kyle and Simon are arguing over whose wingspan is longer. Kyle's wingspan is 525cm wide. Simon's wingspan is 6m wide. Whose wingspan is wider?



Ordering Measurements

Part 1

Order the measurements from shortest to longest

Measurements	Order (Shortest to Longest)		
1) 150 cm, 2 m, 120 cm	120 cm	150 cm	2 m
2) 4 m, 2 m, 1 m			
3) 1 m, 100 cm, 50 cm			
4) 250 cm, 2 m, 1 m			
5) 700 cm, 6 m, 550 cm			

Part 2

Order the measurements from longest to shortest

Measurements	Order (Longest to Shortest)		
1) 700 cm, 6 m, 3 m, 500 cm			
2) 2 m, 250 cm, 175 cm, 1 m			
3) 800 cm, 5 m, 4 m, 450 cm			
4) 3 m, 299 cm, 2 m, 250 cm			
5) 150 cm, 1 m, 90 cm, 125 cm			

Measurement Word Problems

Questions**Answer the questions below****Word Problems**

1 A giraffe in the zoo is 5 metres tall, an elephant is 4 metres tall, and a zebra is 375 cm tall. Order the animals from the tallest to the shortest.

2 The track and field is 300 metres long. The basketball court is 30 metres long. The soccer field is 12,500 cm long. Order the lengths of the track and field, basketball court from longest to shortest.

3 Three poles are being installed. The green pole is 8 metres tall, the red is 720 cm tall, and the blue is 7 metres and 50 cm tall. Convert all the measurements to centimetres and order the poles from tallest to shortest.

4 a) Which tree is the tallest?

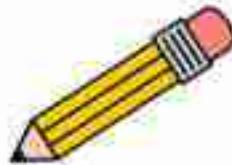
b) How much taller is it than the shortest tree?

Estimate the Distance

In life, we often need to be able to estimate the distance or length of things. We first need to choose the correct unit of measurement – cm, m. Then we estimate by using our understanding of these units.

Example

- my walk to school is around 500m
- my pencil is approximately 10cm long



Question: Answer the questions below by estimating the distances

1) How far do you walk to the school?

2) How wide is your desk?

3) How wide is your thumbnail?

4) How tall is your desk/table?

5) How tall are you?

6) How tall is your water bottle?

7) How far is the nearest grocery store?

8) How long is a school bus?

9) How wide is your gym?

10) How thick is the last book you read?

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

a) Convert the unit of measurement below

- $7 \text{ m} = \text{ } \text{cm}$
- $900\text{cm} = \text{ } \text{m}$

b) Paul is comparing two desks; one is 120cm long and the other is 1.1 meters long. Which desk is longer?

Name: _____

a) Convert the unit of measurement below

- $7 \text{ m} = \text{ } \text{cm}$
- $900\text{cm} = \text{ } \text{m}$

b) Paul is comparing two desks; one is 120cm long and the other is 1.1 meters long. Which desk is longer?

Name: _____

a) Convert the unit of measurement below

- $7 \text{ m} = \text{ } \text{cm}$
- $900\text{cm} = \text{ } \text{m}$

b) Paul is comparing two desks; one is 120cm long and the other is 1.1 meters long. Which desk is longer?

Name: _____

a) Convert the unit of measurement below

- $7 \text{ m} = \text{ } \text{cm}$
- $900\text{cm} = \text{ } \text{m}$

b) Paul is comparing two desks; one is 120cm long and the other is 1.1 meters long. Which desk is longer?

Non – Standard Units of Time - Hours

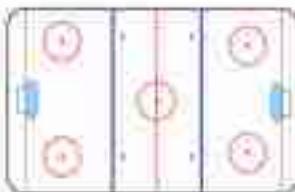
We don't always use hours, minutes, and seconds for time. We can also use non-standard units.



Math Class



Movie = 2 Hours



Hockey Game = 3 hours

Elapsed Time: Non-Standard Units - How Much Time Has Passed?

1) 4 hours 2) 1 hour 3) 6 hours 4) 5 hours 5) 3 hours 6) 7 hours 7) 9 hours

2) 1 hour

3) 6 hours

4) 5 hours

5) 3 hours

6) 7 hours

7) 9 hours

PREVIEW

Non – Standard Units Word Problems

Questions

Answer the questions below using the non-standard units of time on the last page

Word Problems

1 Sophie went to one hockey game and watched one movie. How many hours did she spend?

2 Isabella attended a math class, watched one movie, and played one game. How many hours did she spend in total?

3 Chloe spent 9 hours on activities. She went to three hockey games, how many hours were?

New Non-Standard Units:

Reading a book = 4 hours

Swimming session = 2 hours

Breakfast = 1 hour

Word Problems

1 Olivia read two books and went swimming once. How many hours did she spend on these activities?

2 Ethan spent 18 hours swimming. How many swimming sessions did he complete?

3 Jack spent 24 hours doing activities. If he baked cookies twice, how much time was left for other activities?

Non – Standard Units of Time - Hours

Questions

Use non-standard units to estimate how much time the event would take

Event	How Much Time Would Pass
Driving Across Saskatoon in a van	 2 hockey games
Driving to the beach	
Playing a round of golf	
Playing with a friend after school	
Going to a restaurant	
Going shopping	
Going swimming	
Going fishing	
Playing on the computer	

Non – Standard Units of Time - Hours

Questions

Think of 3 non-standard units for each of the times below

Time	Your Own Non-Standard Units		
1 Hour	1		
	2		
	3		
2 Hours	1		
	2		
	3		
3 Hours	1		
	2		
	3		

Non – Standard Units of Time - Minutes

We don't always use hours, minutes, and seconds for time. We can also use non-standard units.



Bathroom Break = 5 minutes



Shower = 10 minutes



Lunch Time = 20 minutes

PREDICTION

Elapsed Time = How Much Time Has Passed?

1) 20 minutes or 2 showers or 4 bathroom breaks

2) 10 minutes

3) 15 minutes

4) 40 minutes

5) 50 minutes

6) 45 minutes

7) 55 minutes

Non – Standard Units of Time - Minutes

Questions

Use non-standard units to estimate how much time the event would take

Event	How Much Time Would Pass
Having dinner	1 lunch time and 1 bathroom break
Preparing a sandwich	
Eating dessert	
Reading a book	
Cleaning your room	
Shoveling the driveway	
Making breakfast	
Exercising or Yoga	
Driving to the grocery store	

Non – Standard Units of Time - Seconds

We don't always use hours, minutes, and seconds for time. We can also use non-standard units.



Blinking = 1 second



Usain Bolt runs 100m
= 10 seconds



Washing Hands = 20 seconds

Elapsed Time:

How Much Time Has Passed?

1) 10 seconds

in Bolt 100m race or 10 blinks

2) 30 seconds

3) 15 seconds

4) 45 seconds

5) 55 seconds

6) 20 seconds

7) 40 seconds

PREVIEW

Non - Standard Units of Time - Seconds

Questions Use non-standard units to estimate how much time the event would take

Event	How Much Time Would Pass
Having a glass of water	3 blinks
1000 things	
Walking to the bathroom	
Writing your name	
Reading a page of a book	
Singing Happy Birthday	
Logging on to a school computer	
Making a sandwich	
Saying your name 5 times fast	

How Long Does It Take?

Part 1

Write how long it would take you to do the things below

Activity	Minutes	Hours	Days
1. Build a Lego set			
2. Clean my room			
3. Go on a vacation			
4. Finish a puzzle			
5. Learn how to ride a bike			

Part 2

Write how long it would take you to do the following

Activity	Weeks	Months	Years
1. Wait for the next summer vacation			
2. Learn how to speak a new language			
3. Wait for your next birthday			
4. Build a robot out of Legos			
5. Learn how to play the piano			

Activity Title: Time Tracker

Objective

What are we learning about?

Students will understand the concept of the passage of time by relating everyday activities to both standard (minutes, hours) and nonstandard units of time (number of songs, episodes of a TV show).

Materials

What you will need for the activity.

- Stopwatch or timer
- Blank sheets of paper
- Pencils
- A list of activities to time

**Instructions**

How you will complete the activity

- 1) Introduce the concept of time to the students, showing standard units (seconds, minutes, hours) and nonstandard units (like time it takes to sing a song).
- 2) Distribute the pre-made tables to each student. Each table has three columns: Activity, Standard Time, and Nonstandard Time.
- 3) As a demonstration, use the stopwatch to time a common activity, such as one on the provided list, such as reading a page from a book.
- 4) Ask each student to select 3 activities from the provided list of activities, which includes tasks like writing a short paragraph, solving a math problem, or crafting a simple origami.
- 5) Students predict how long each selected activity will take in both standard and nonstandard units and record their predictions in the table.
- 6) Have students time their selected activities using the stopwatch to determine the actual duration, and then fill in the Standard Time and Nonstandard Time in their tables.
- 7) Discuss as a class why understanding time is important and how different activities can take up different amounts of time.

Options

Select three activities from the table below

Option 1:**Reading a page from a book:**

Time how long it takes to read a single paragraph aloud.

Option 2:**Drawing a simple picture:**

Draw a house or a tree.

Option 3:**Shoelace Speed Race:**

See how quickly you can tie your shoelaces.

Option 4:**Copywriting Exercise:**

Copy a short text from the board as quickly as you can.

Writing Practice: Write a few sentences as quickly as possible.

Option 5:**Vocabulary Speed Test:**

List as many words as you can about the weather.

Standard Units of Time

Ten Deep Breaths

One Teeth Brushing Session

One Page Read

Three Microwave Beeps

Twenty Jumping Jacks

Happy Birthday

Answers

Record your answers below

Activity**Standard Time****Prediction****Actual Time****Prediction****Actual Time****Prediction****Actual Time****Prediction****Actual Time****Prediction****Actual Time****Prediction****Actual Time**

Reflection

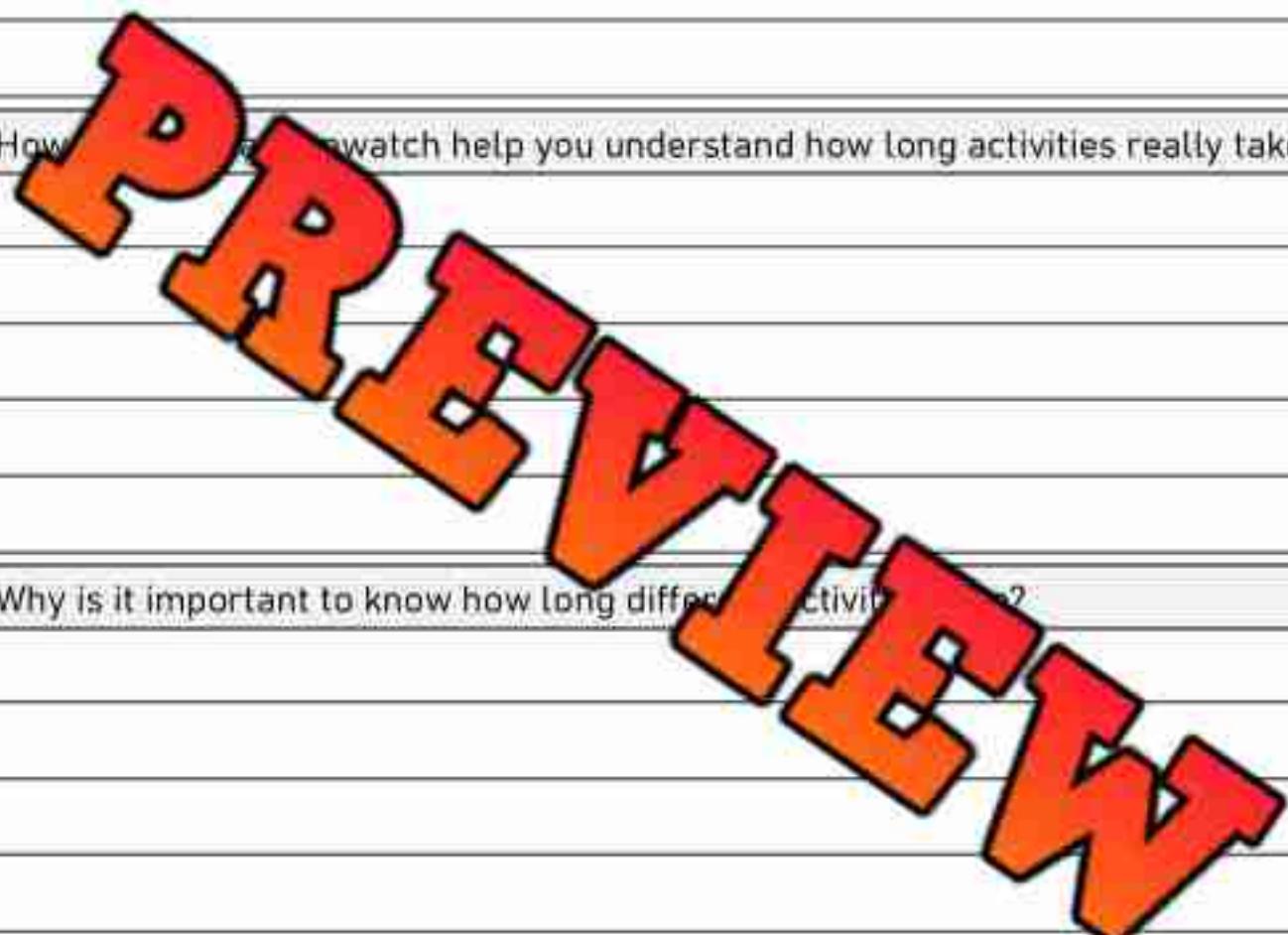
Answer the questions below.

1) Which activity took longer than you expected? Why do you think that was?

2) How does a stopwatch help you understand how long activities really take?

3) Why is it important to know how long different activities take?

4) Can you think of a situation outside of school where it would be important to know how long something will take?



Telling Time – Digital Clocks

A **digital clock** tells us what time it is using numbers. The first number before the colon tells us what hour it is. The second set of numbers tells us how many minutes have passed the hour.

Examples

7:20

Hour = 7 Minutes = 20

2:47

Hour = 2 Minutes = 47

Part 1

Fill in the answers below – Hours and Minutes

1)

PREP

Hour = _____

Minutes = _____

2)

1:58

Hour = _____

Minutes = _____

3)

9:28

Hour = _____

Minutes = _____

4:37

5)

11:42

Hour = _____

Minutes = _____

6)

1:55

Hour = _____

Minutes = _____

Part 2

Fill in the answers below – Hours, Minutes and Seconds

Example

10:24:18

Hour = 10 Minutes = 24 Seconds = 18

1)

3:17:12

Hour = _____

Minutes = _____ Seconds = _____

2)

12:43:35

Hour = _____

Minutes = _____ Seconds = _____

3)

9:12:38

Hour = _____

Minutes = _____ Seconds = _____

4)

5:23:02

Hour = _____

Minutes = _____ Seconds = _____

Analog Clock

An **analog clock** tells us what time it is. The short hand tells us what hour it is. When the hour hand moves around, it goes up by 1 each time. The long hand tells us how many minutes have gone by in the hour. The long hand goes up by 5 minutes at each interval.

Part 1 Fill in the minutes around the clock. Then label the hour and minute hand



Part 2 How many minutes have gone by in the hour?



Telling Time – Nearest Hour

Questions

What time is it? Write the times on the digital clocks below

1)



2)



:00

3)



:00

4)



:00

5)



:00

6)



:00

7)



:00

8)

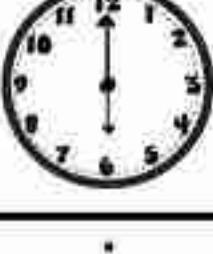


:00

How Many Hours Have Passed ?

Questions

Label the clocks and determine how many hours have gone by?

Start Time	End Time	How Much Time Has Passed?
1) 	 _____ Hours	
2) 	 _____ Hours	
3) 	 _____ Hours	
4) 	 _____ Hours	

How Many Hours Have Passed?

Questions

Read the digital clocks. How many hours have gone by?

Start Time	End Time	How Much Time Has Passed?
4:00	6:00	_____ Hours
7:00	9:00	_____ Hours
6:00	10:00	_____ Hours
2:00	7:00	_____ Hours
5:00	9:00	_____ Hours
8:00	12:00	_____ Hours
7:00	11:00	_____ Hours

How Many Hours Have Passed ?**Questions**

How many hours have gone by?

Start Time	End Time	How Much Time Has Passed?
1) 	 _____ Hours	
2) 	 _____ Hours	
3) 	 _____ Hours	
4) 	 _____ Hours	
5) 	 _____ Hours	

Time Duration Word Problems

Questions

Answer the questions below



	Word Problems	Answers
1	Emma started reading her book at 2:00 PM and finished at 5:00 PM. How many hours did she spend reading?	
2	The play started at 7:00 PM and ended at 9:00 PM. How long was the play?	
3	Jack left home to visit his grandparents at 10:00 AM and returned home at 3:00 PM. How many hours was Jack away?	
4	Lily started her art project at 1:00 PM and finished it at 2:00 PM. How many hours did she work on her art project?	
5	Noah went to a birthday party that began at 4:00 PM and lasted for 4 hours. What time did he leave the party?	
6	The zoo opens at 9:00 AM, and the family stayed for 6 hours. What time did they leave the zoo?	
7	Olivia began playing with her toys at 8:00 AM and stopped 5 hours later. What time did she stop?	
8	Ethan went to sleep at 9:00 PM and woke up at 7:00 AM the next day. How many hours did Ethan sleep?	

Time Duration Word Problems

Questions

Answer the questions below



Word Problems

1 Sarah started her painting at 10:00 AM. She worked on it for 3 hours, then took a 2-hour break. After the break, she worked for another 2 hours. What time did Sarah finish her painting?

2 Emma started reading a book at 2:00 PM and read for 2 hours. Then, she stopped for lunch for 1 hour. After lunch, she read for 3 more hours.

a) What time did Emma finish reading?

b) How many hours did she spend reading in total?

3 Sophie started her Saturday by going to the library at 9:00 AM, where she stayed for 2 hours. After the library, she went to a soccer game that lasted 3 hours. After her game, she took a 1-hour break before heading to a friend's house for 4 hours. When Sophie got home, she spent 2 hours reading a book.

a) What time did Sophie finish her day?

b) How many hours did she spend outside her house?

How Many Minutes Have Passed?

Questions

Read the digital clocks. How many minutes have gone by?

Start Time	End Time	How Much Time Has Passed?
4:00	4:15	15 minutes
1:00	1:27	_____ minutes
3:00	3:15	_____ minutes
5:02	5:12	_____ minutes
7:24	7:31	_____ minutes
9:00	9:59	_____ minutes
11:35	11:48	_____ minutes

How Many Minutes Have Passed?

Part 1

Fill in the table below with suggested times that make sense

Activity	Start Time	End Time	Time Passed?
1. Breakfast Time	7:15	7:30	15 minutes
2. Make a sandwich			
3. Wash your face and brush your teeth			
4. Play with your friends			
5. Do your homework			

Part 2

Are the statements true or false?

Activity	True	False
1. If a movie starts at 2:00 PM and ends at 3:30 PM, 90 minutes have passed.		
2. If you start eating lunch at 12:15 and finish at 12:45, you spent 20 minutes eating.		
3. If you start your homework at 4:10 PM and finish at 4:35 PM, you worked for 25 minutes.		
4. If you start a puzzle at 2:40 PM and finish at 3:10 PM, 25 minutes have passed.		
5. A walk that begins at 6:10 PM and ends at 6:40 PM lasts 20 minutes.		

Time Duration Word Problems

Questions**Answer the questions below****Word Problems**

1 A basketball practice starts at 4:15 PM and lasts for 1 hour and 45 minutes. After practice, the coach holds a 20-minute team meeting. If the team leaves the gym right after the meeting, what time do they leave?

2 Jasmine began her art project at 1:30 PM and worked for 50 minutes. She then took a 20-minute break. After her break, she worked on her project for another 35 minutes. What time did she finish her art project?

3 A movie starts at 6:50 PM and lasts for 2 hours and 40 minutes. After the movie, it takes 25 minutes to drive home. What time does Liam get home after the movie?

4 Liam began studying for his math test at 10:10 AM. He studied for 30 minutes, took a 15-minute snack break, and then studied for another 40 minutes. What time did Liam finish his study session?

How Many Seconds Have Passed ?

Questions

Read the digital clocks. How many seconds have gone by?

Start Time	End Time	How Much Time Has Passed?
3 : 17 : 12	3 : 17 : 20	8 seconds
5 : 00 : 00	5 : 00 : 15	_____ seconds
2 : 10 : 00	2 : 10 : 17	_____ seconds
5 : 17 : 10	5 : 17 : 25	_____ seconds
4 : 35 : 22	4 : 35 : 30	_____ seconds
7 : 29 : 36	7 : 29 : 41	_____ seconds
9 : 38 : 48	9 : 38 : 57	_____ seconds

How Many Seconds Have Passed ?

Questions

Read the digital clocks. How many seconds have gone by?

Event	Elapsed Time
1) Writing their full name	 _____ seconds
2) Drawing an apple	 _____ seconds
3) Doing 10 jumping jacks	 _____ seconds
4) Doing 5 squats	 _____ seconds
5) How long they can balance on one foot with their eyes closed	 _____ seconds
6) Saying their name 5 times fast	 _____ seconds
7) How long they can do a wall sit for	 _____ seconds
8) How long it takes them to do 5 burpees	 _____ seconds

Time Duration Word Problems

Questions**Answer the questions below****Word Problems**

1

The time was 8:30:45. If 15 seconds passed, what time is it now?

2

_____ w 20. After 35 seconds passed, what time is it now?

3

The clock showed 10:15. After 20 seconds passed, what time is it now?

4

The time was 11:00:15. If 30 seconds passed, what time is it now?

5

The time was 4:50:30. After 20 seconds passed, what time is it now?

6

It was 7:00:15. If 50 seconds passed, what time is it now?

7

The clock read 6:25:40. After 30 seconds passed, what time is it now?

Time Duration Word Problems

Questions:**Answer the questions below.****Word Problems**

1 The time is 8:00:45. First, you play a game for 30 seconds. After that, you pause for 15 seconds to rest, then continue playing for another 10 seconds. What time is it when you finish playing?

PREVIEW

2 The clock shows 2:20. You spend 10 seconds tying your shoes, 20 seconds putting on your jacket, and 25 seconds packing your bag. What time is it when you're ready to leave?

3 The time is 6:10:35. You watch a quick video for 15 seconds, then spend 10 seconds answering a text message, and finally wait for 20 seconds for your computer to turn on. What time is it when everything is done?

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

1) What time is it?



2) How long can you hold your breath while sitting still? How many seconds have gone by?

_____ seconds

Name: _____

1) What time is it?



2) How long can you hold your breath while sitting still? How many seconds have gone by?

_____ seconds

Name: _____

1) What time is it?



2) How long can you hold your breath while sitting still? How many seconds have gone by?

_____ seconds

Name: _____

1) What time is it?



2) How long can you hold your breath while sitting still? How many seconds have gone by?

_____ seconds

Matching Game: Telling Time To The Nearest Minute

Objective

What are we learning about?

To help students practice telling time to the nearest minute by matching digital times to their analog counterparts.

Materials What you will need for the activity.

- Pre-prepared and cut matching game cards with digital times and analog clocks.
- Small bags or envelopes to hold the sets for each group

**Instructions** How you will complete the

1. Before the class, the teacher will cut out the pre-prepared matching game cards.
2. Divide the students into small groups and give each group a small envelope containing a set of the matching cards.
3. In their groups, students will spread out the cards face down on their table.
4. Each person takes a turn to try to match two cards – one digital time with its matching analog clock.
5. If they find a correct match, they keep the cards out and continue with their next turn. If the cards don't match, they turn them back over in the same place, and the next player takes a turn.
6. The activity continues until all pairs are correctly matched within each group.

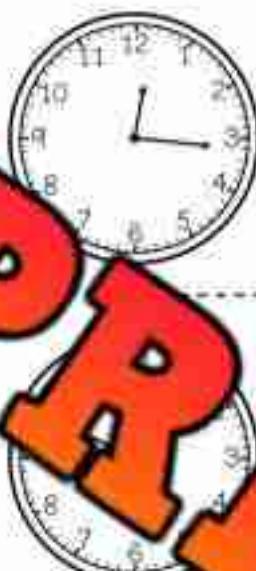
Cards

Matching Game Cards

Analog Clock

Digital Clock

PREVIEW



12:16



1:50



8:16



9:38

Cards

Matching Game Cards

Analog Clock

Digital Clock

PREVIEW



12:21



3:44



5:52



12:53

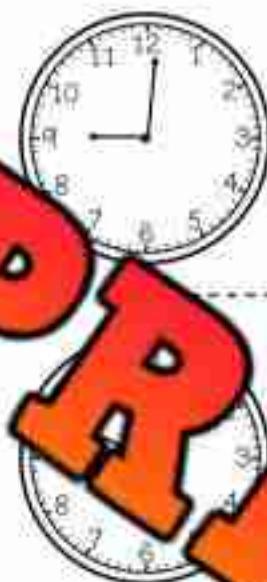
Cards

Matching Game Cards

Analog Clock

Digital Clock

PREVIEW



9:01



4:50



2:27



10:58

Measurement Unit Test

Part 1

Use a ruler to measure the lines below

1)



cm

2)



cm

3)



cm

Part 2

Show a line that is the correct length

1)

5 cm

2)

3 cm

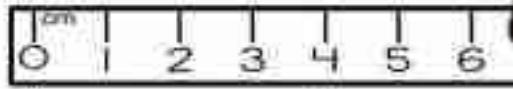
3)

4 cm

Part 3

Read the ruler to find the distance between the arrows

1)



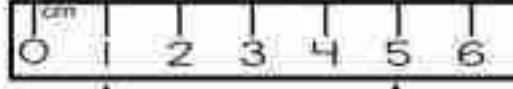
cm

2)



cm

3)



cm

4)



cm

Part 4

Which distance is farther? Circle the longest distance.

1)

1m

200cm

500cm

3m

2)

20cm

300cm

1m

200m

3)

5cm

500cm

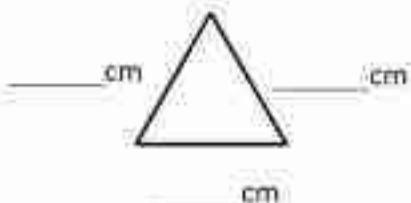
10m

50cm

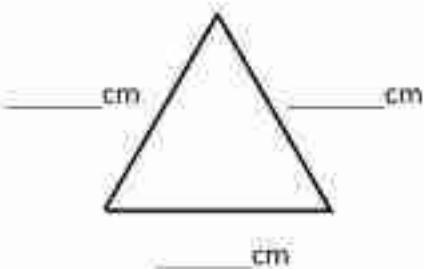
Part 5

Use a ruler to measure the equilateral triangles

1)



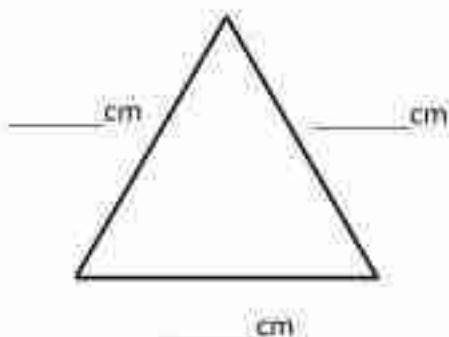
2)



3)



4)



Part 6

How much time has passed?

Start Time

End Time

Time Has Passed?



1 : 00



3 : 00

4 : 15

4 : 26

_____ minutes

5 : 17 : 10

5 : 17 : 30

_____ seconds

Part 7

Answer the questions below

Word Problems

1 The time is 2:15. After 20 minutes pass, what time is it now?

2 It is 9:45 AM. If you take a break for 45 minutes, what time will it be when you

3 The clock shows 11:15. If 15 minutes pass, what time will it be?

4 The clock shows 1:00 PM. If 8 hours pass, what time will it be?

5 The time was 10:59:50. After 5 seconds passed, what time is it now?

6 It was 7:00:15. If 50 seconds passed, what time is it now?

Part 8

Answer the questions below.

Word Problems

The time is 5:00:20. You spend 15 seconds preparing your backpack and then 10 seconds putting on your shoes. Afterward, you wait for 20 seconds for your sibling. What time is it now?

1

PREDICTION

It is 3:30 PM. You have to eat dinner, eat lunch, then take a 15-minute walk, and finally go for a 10-minute run. What time is it now?

2

The time is 6:00 AM. You spend 2 hours hiking, then drive for 1 hour to visit a friend. After spending 3 hours with your friend, you drive back home for 1 more hour. What time is it when you get home?

3



Google Slides Lessons Preview





Ontario Math Curriculum

Algebra – Patterns, Equations – Grade 2

3-Part Lesson Format

Part 1 – Minds On!

- Learning Goals
- Discussion Questions
- Quotes
- And More!



Repeating A/B Patterns

Continue the repeating patterns below by dragging the objects from the box:

Part 2 – Action!

- Writing
- Matching
- Drag and Drop
- Drawing
- And More!

Repeating Patterns - Pattern Core

Circle the pattern core and continue the repeating pattern by dragging the shapes:

Part 3 – Consolidation!

- Exit Cards
- Quizzes
- Reflection
- And More!



Ontario Math Curriculum

Algebra – Patterns, Equations – Grade 2

Creating Repeating Patterns - Changing Directions

Drag the shapes from the shape bank to create repeating patterns with changing directions.

1) 2) 3) 4) 5)

SHAPE BANK

Creating Patterns - Animal Colour

Drag the coloured animals from the shape bank to create repeating patterns with different coloured animals.

1) 2) 3) 4)

SHAPE BANK

Repeating Patterns

Drag the textures from the texture bank to create repeating patterns of your own choice and colour.

1) 2)

TEXTURE BANK



Ontario Math Curriculum

Algebra – Patterns, Equations – Grade 2

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Increasing Patterns - Shapes

Drag the blocks to draw the next figure in the pattern (by adding two blocks). Use the red block to highlight the newly added blocks.

#	Figure 1	Figure 2	Figure 3	Figure 4
1				
2				
3				
4				

Increasing Number Patterns 1 - 20

Drag the numbers to extend the patterns below.

1	2	3	4	5
1	3	5	7	9
2	4	6	8	10



Workbook Preview



Grade 2
C1. Patterns and Relationships

	Curriculum Expectations	Pages
C1.1	identify and describe a variety of patterns involving geometric designs, including patterns found in real-life contexts	5 – 56
C1.2	Preview of 120 pages from this product that contains 358 pages total.	
C1.3	determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns represented with shapes and numbers	57 – 116
C1.4	create and describe patterns to illustrate relationships among whole numbers up to 100	7, 11 – 13, 84 – 103, 105 – 116

Repeating Patterns

Questions

Label the images as A/B patterns and continue the pattern



Repeating Pattern Cores – 2 Elements

Part 1

Core = Part that repeats – Circle the pattern core



Part 2

Create A/B patterns below that have different repeating units



Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Circle the pattern core

- 1) X, Y, Z
- 2) A, B, C
- 3) M, N, O, M, N, O
- 4) 1, 2, 3, 3, 1, 2, 3, 3

Name: _____

Circle the pattern core.

1) X, Y, Y, Z, X, Y, Y, Z

2) 

3) M, N, O, M, N, O

4) 

3 1 2 3 3

Name: _____

Circle the pattern core

1) X, Y, Y, Z, X, Y, Y, Z

2) 

3) M, N, O, M, N, O

4) 1, 2, 3, 3, 1, 2, 3, 3

Name: _____

Circle the pattern.

1) X, Y, Y, Z, X, Y, Y, Z

2) 

3) M, N, O, M, N, O

4) 1, 2, 3, 3, 1, 2, 3, 3

Repeating A/B Patterns

Questions

Label the A/B patterns below and then extend the pattern



Repeating A/B Patterns

Part 1

Label the A/B/C patterns below and then continue the pattern

**Part 2**

Create patterns that use the given A/B/C pattern

1)

A	B	B	A	B	B	A	B	B
---	---	---	---	---	---	---	---	---

2)

A	A	B	C	A	A	B	C	A
---	---	---	---	---	---	---	---	---

3)

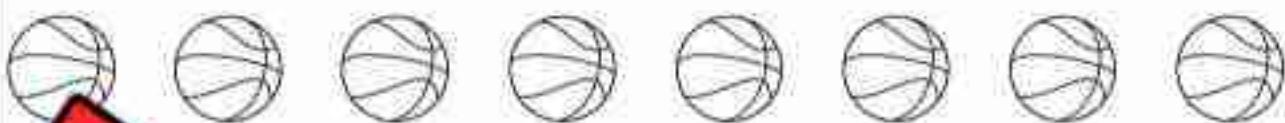
A	B	C	A	A	B	C	A	A
---	---	---	---	---	---	---	---	---

Creating Repeating Patterns - Colours

Questions

Colour the shapes below in different colours by creating a pattern

1)



2)



3)



4)



5)



6)



7)



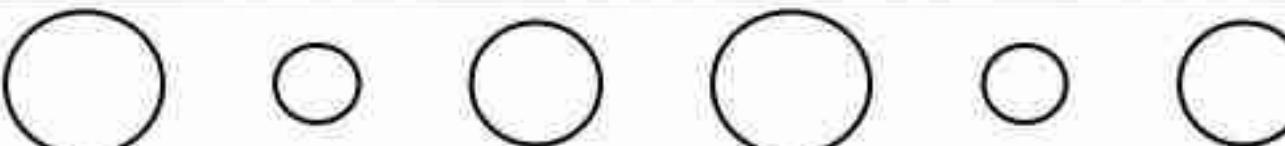
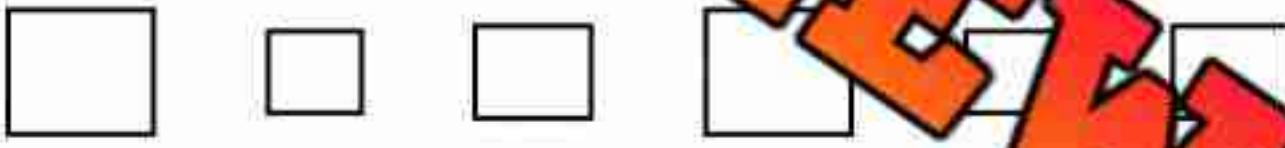
8)



Creating Repeating Patterns – Shape Size

Questions

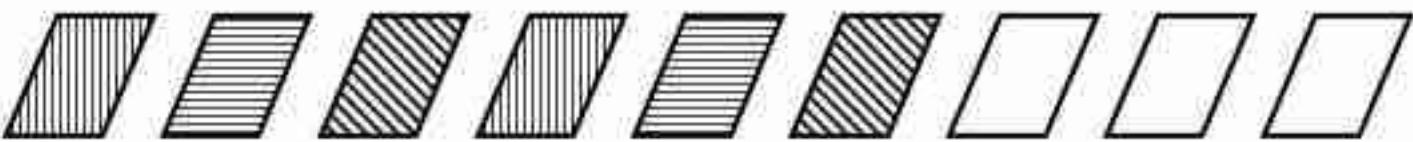
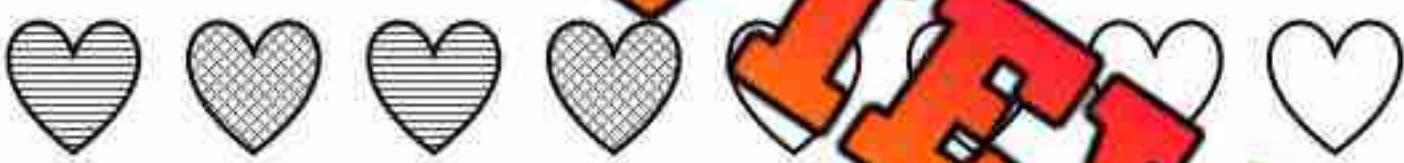
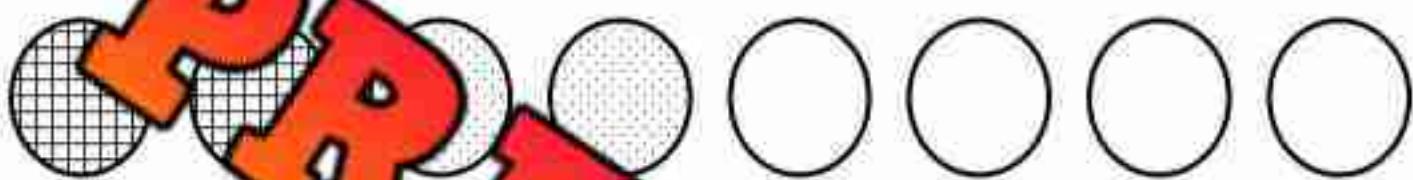
Write big, small or medium under the shapes depending on their size



Extending Repeating Patterns - Texture

Questions:

Extend the pattern by looking for a pattern in the textures



Activity Title: Sound Clap Patterns

Objective**What are we learning about?**

Students will create and recognize patterns using clapping and other sounds. This activity helps students understand and identify patterns through a fun and interactive method.

Materials: What you will need for the activity.

- None

Instructions: How you will complete the activity.



1. Begin by explaining to the students that they will create patterns using clapping and other sounds, like snapping or stamping.
2. Demonstrate a simple pattern, such as "clap, snap, snap," and have the students repeat it.
3. Divide the students into small groups and ask each group to come up with their own unique sound pattern.
4. Allow each group to perform their pattern in front of the class.
5. After each performance, ask the rest of the class to identify and extend the pattern. For example, if the pattern is "clap, clap, snap, snap," the next part could be "clap, clap, snap, snap, clap, clap, snap, snap."
6. Repeat the process with each group, encouraging creativity and variation in the patterns they create.

Reflection

Answer the questions below.

1) Describe your pattern below.

2) Describe the pattern of another group.

3) Translate the pattern another group made into shapes. For example, if the pattern was clap, clap, snap, clap, clap, then you would do square, square, circle, square, square, circle.

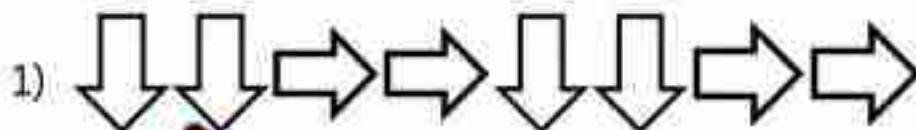
4) Translate the pattern another group made.

PREDICTION

Extending Repeating Patterns – Changing Directions

Questions

Continue the repeating patterns below with three more shapes

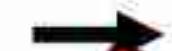


Creating Repeating Patterns – Changing Directions

Questions

Use the shapes to create a pattern with changing directions

1)



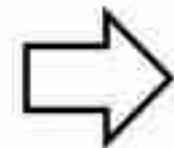
2)



3)



4)



5)



6)



7)

P R E V I E W

Extending Repeating Patterns - Letters

Questions:

Continue the pattern below by writing more letters

1) A B A A B A A A

2) P R S P R S

3) S N E E D E S N

4) E L P E D I B E E L

5) Y B L Y S B E

6) A A C A B A C B

7) P K P E K E E

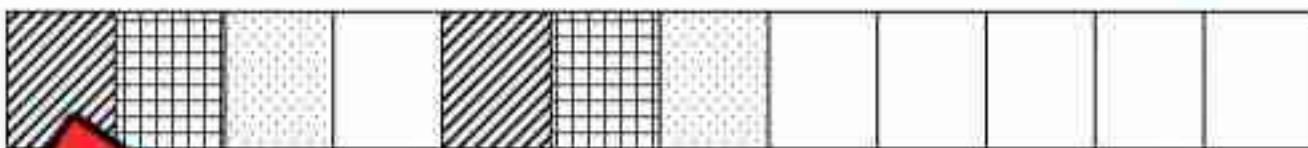
Repeating Patterns - Bracelets

Questions

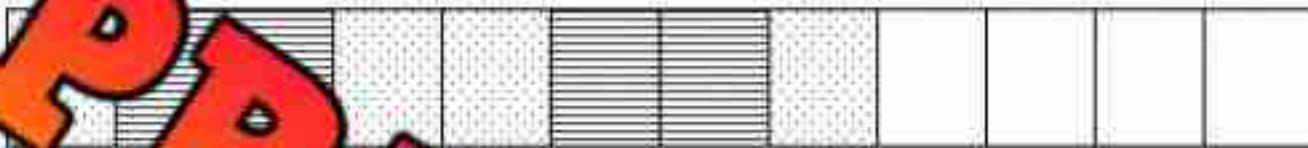
Draw the repeating patterns on the bracelets



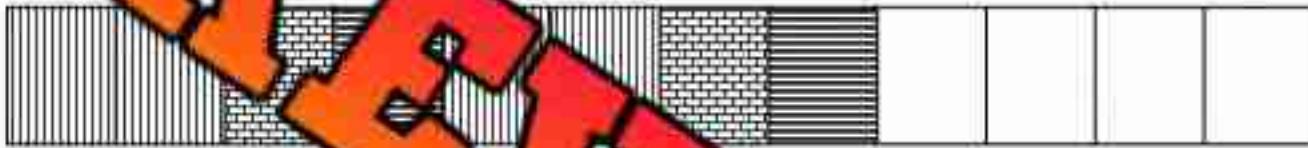
1)



2)



3)



4)



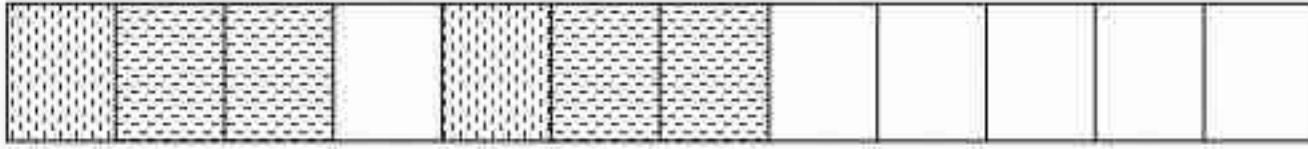
5)



6)



7)



8)



Repeating Patterns - Bracelets

Questions Draw your own bracelets using repeating patterns.

P R E V I E W

Repeating Patterns - Necklace

Questions

Draw your own necklace using a repeating pattern



Extending Repeating Patterns – Word Problems

Questions**Answer the question below**

A traffic light follows a sequence of colours: red, green, yellow, red, green, yellow, ...

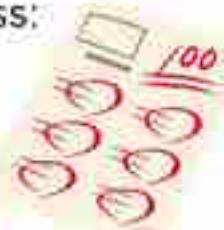
Based on the repeating pattern, what will be the colour of the traffic light on the 12th change?



1)

PREVIEW

A teacher uses a variety of teaching tools for her class: flashcards, video, quiz, classmate, ...



Identify the repeating pattern and determine which teaching aid will be used on the 15th day.

2)

A gardener plants flowers in a row, following a specific pattern: roses, tulips, lilies, sunflowers, roses, tulips, lilies, sunflowers, ...

According to the repeating pattern, what type of flower will be planted in the 28th position?



Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

In a toy factory, cars are painted in a sequence of colours: red, red, blue, green, yellow, red, red, blue, green, yellow. According to the repeating pattern, which colour will be used for the 20th car?

Answer: _____

Name: _____

In a toy factory, cars are painted in a sequence of colours: red, red, blue, green, yellow, red, red, blue, green, yellow. According to the repeating pattern, which colour will be used for the 20th car?

Answer: _____

Name: _____

In a toy factory, cars are painted in a sequence of colours: red, red, blue, green, yellow, red, red, blue, green, yellow. According to the repeating pattern, which colour will be used for the 20th car?

Answer: _____

Name: _____

In a toy factory, cars are painted in a sequence of colours: red, red, blue, green, yellow, red, red, blue, green, yellow. According to the repeating pattern, which colour will be used for the 20th car?

Answer: _____

Translating Patterns – AB Patterns

Translating Patterns

The pattern red, blue, red, blue can be translated to clap, stomp, clap stomp. These are both A/B patterns.



Questions

Translate the first pattern into a new pattern using different colours.

1)	B	A	B	A	B
Translated		▲	▲	▲	▲

2)	A		A	B	B
Translated	▲	▲	▲	▲	▲

3)	A	B	C		C
Translated	▲	▲	▲	▲	▲

4)	A	A	B	A	A	B
Translated	▲	▲	▲	▲	▲	▲

5)	A	B	A	A	B	A
Translated	▲	▲	▲	▲	▲	▲

Translating Patterns – AB Patterns

Questions

Create a new pattern that is a translation of the other pattern

1)



Translated



Translated



3)



Translated



4)



Translated



5)



Translated



6)



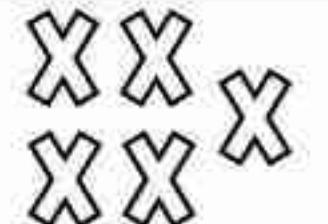
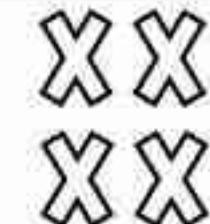
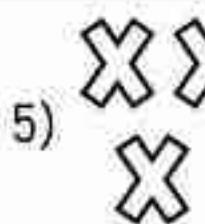
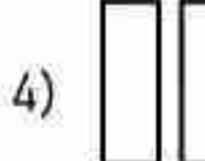
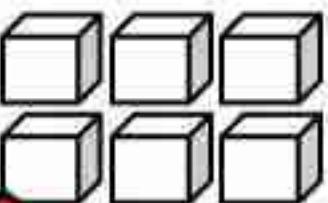
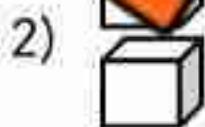
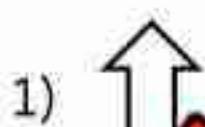
Translated



Increasing Patterns - Shapes

Questions

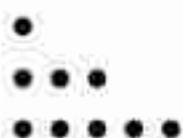
Draw the shapes in the last column



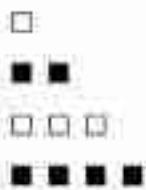
Increasing Patterns - Shapes

Questions**Draw the next line of the increasing pattern**1) Draw the next line in the pattern.

Answer

2) Draw the next line in the pattern.

Answer

3) Draw the next line in the pattern.

Answer

4) Draw the next line in the pattern.

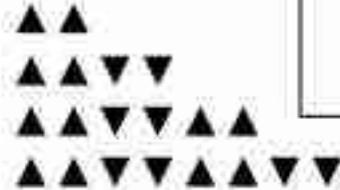
Answer

5) Draw the next line in the pattern.6) Draw the next line in the pattern.

Answer

7) Draw the next line in the pattern.

Answer

8) Draw the next line in the pattern.

Answer

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Draw the next 2 lines in the pattern.

**PREVIEW**

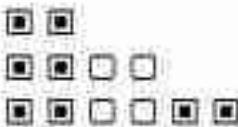
Name: _____

Draw the next 2 lines in the pattern.



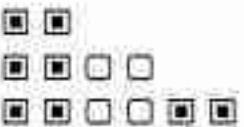
Name: _____

Draw the next 2 lines in the pattern.



Name: _____

Draw the next 2 lines in the pattern.



Increasing Patterns – Shapes

Part 1 Shade in the block that was added to the pattern



1) Figure 1



Figure 2

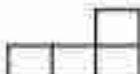


Figure 3



Figure 4

2) Figure 1



Figure 2



Figure 3

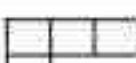


Figure 4

3) Figure 1

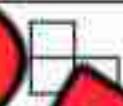


Figure 2

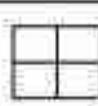


Figure 3

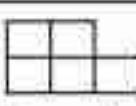


Figure 4

4) Figure 1



Figure 2



Figure 3



Figure 4

Part 2 Shade in the two blocks that were added to the pattern



1) Figure 1

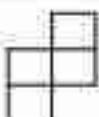


Figure 2



Figure 3

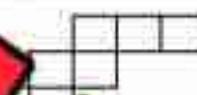


Figure 4

2) Figure 1



Figure 2

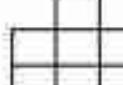


Figure 3



Figure 4

3) Figure 1

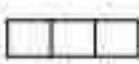


Figure 2

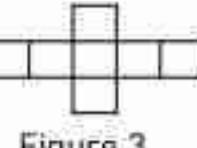


Figure 3

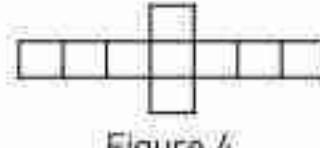


Figure 4

4) Figure 1



Figure 2

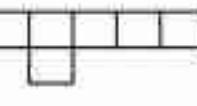


Figure 3

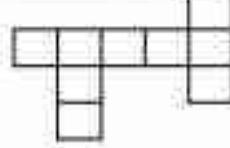


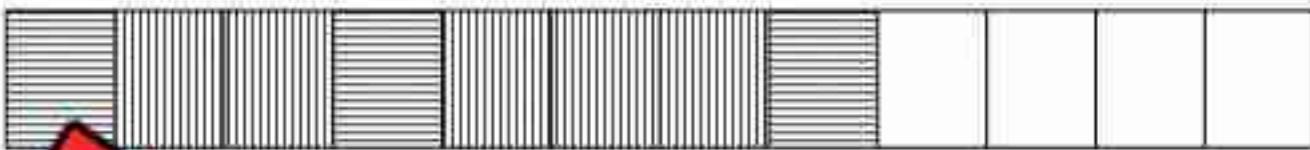
Figure 4

Increasing Patterns - Beading

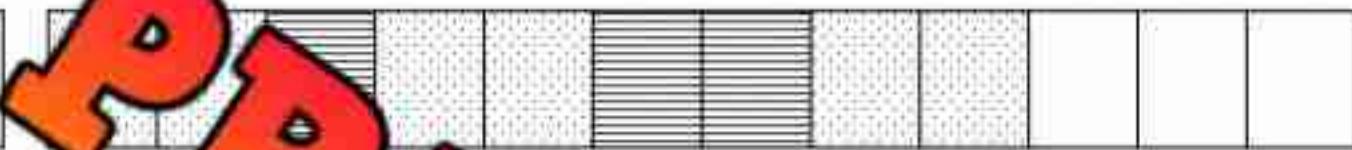
Questions

Draw the remaining patterns on the bracelets

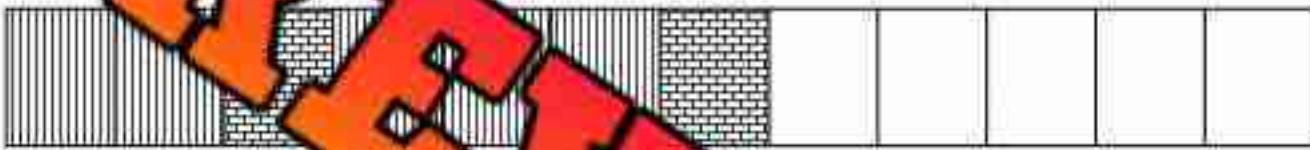
1)



2)



3)



4)



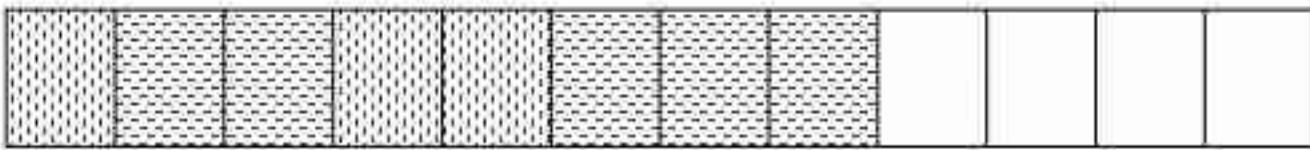
5)



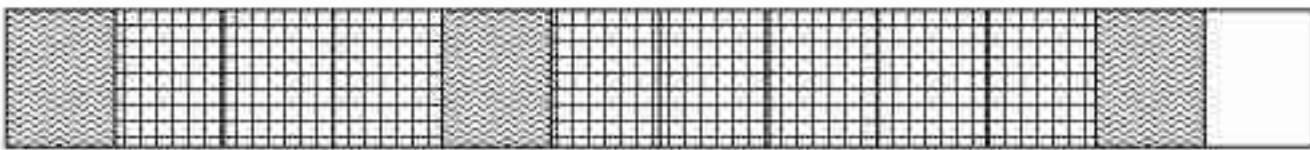
6)



7)



8)





Increasing Patterns - Bracelets

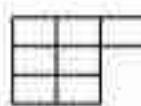
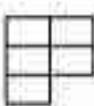
Questions Draw your own bracelets using increasing patterns.

PREVIEW

Representing Picture Sequence With Numbers

Questions

Write the numerical sequence that represents the picture sequence



1) Figure 1 Figure 2

Figure 3

Numerical Sequence

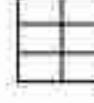


2) Figure 1

Figure 2

Figure 3

Numerical Sequence

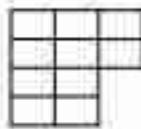


3) Figure 1

Figure 2

Figure 3

Numerical Sequence

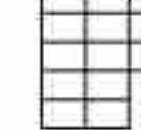
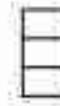


4) Figure 1

Figure 2

Figure 3

Numerical Sequence



5) Figure 1

Figure 2

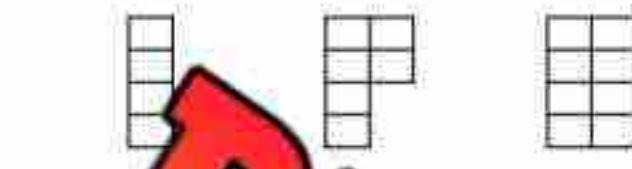
Figure 3

Numerical Sequence

Representing Picture Sequence With Numbers

Questions

Write the numerical sequence that represents the picture sequence



1) Figure 1 Figure 2 Figure 3 Figure 4

Numerical Sequence

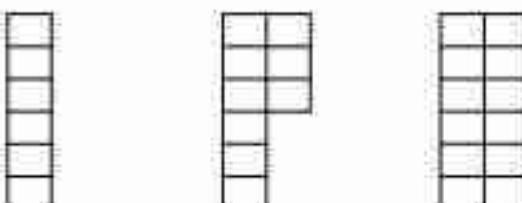
--	--	--	--



2) Figure 1 Figure 2 Figure 3 Figure 4

Numerical Sequence

--	--	--	--



3) Figure 1 Figure 2 Figure 3 Figure 4

Numerical Sequence

--	--	--	--



4) Figure 1 Figure 2 Figure 3 Figure 4

Hundreds Chart Patterns

Questions

Fill in the missing numbers

1	2	3		5	6	7	8		10
11			14	15	16		18	19	20
21			24		26	27	28		30
31			34	35	36		38	39	40
	42	43			46	47	48		50
51	52	53			56			59	60
61			63	64	65			68	
71	72		74	75	76	77		79	
	82	83	84		86	87	88		
91	92		94	95	96		98	99	100

Directions:

Follow the instructions below.

1) Colour the odd numbers



2) Colour the even numbers



Hundreds Chart Patterns

Directions

Follow the instructions below

Colour the pattern rule: start at 3, add 3 each time

1	2	3	4	5	6	7	8	9	10
11		13	14	15	16	17	18	19	20
21		23	24	25	26	27	28	29	30
31		33	34	35	36	37	38	39	40
41	42		44	45	46	47	48	49	50
51	52				56	57	58	59	60
61	62	63			66	67	68	69	70
71	72	73				77	78	79	80
81	82	83	84			86	88	89	90
91	92	93	94	95		97		99	100

Colour the pattern rule: start at 1, add 1 each time

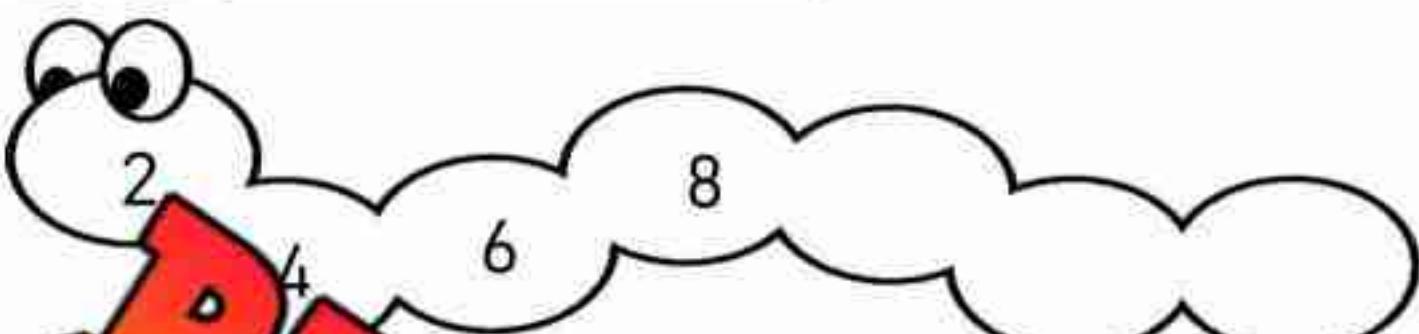
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17			20
21	22	23	24	25	26	27	28		30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Number Patterns 1 - 20

Questions

Fill in the blanks below

1.



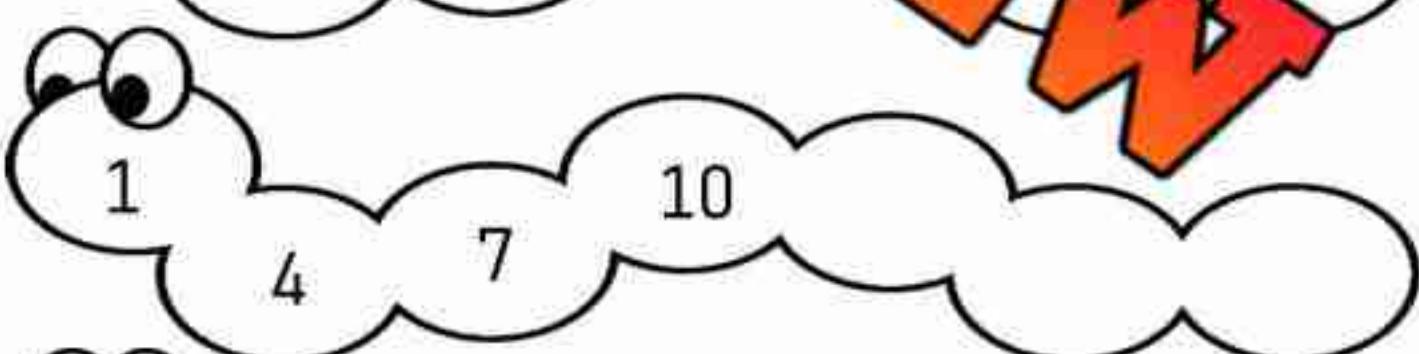
2.



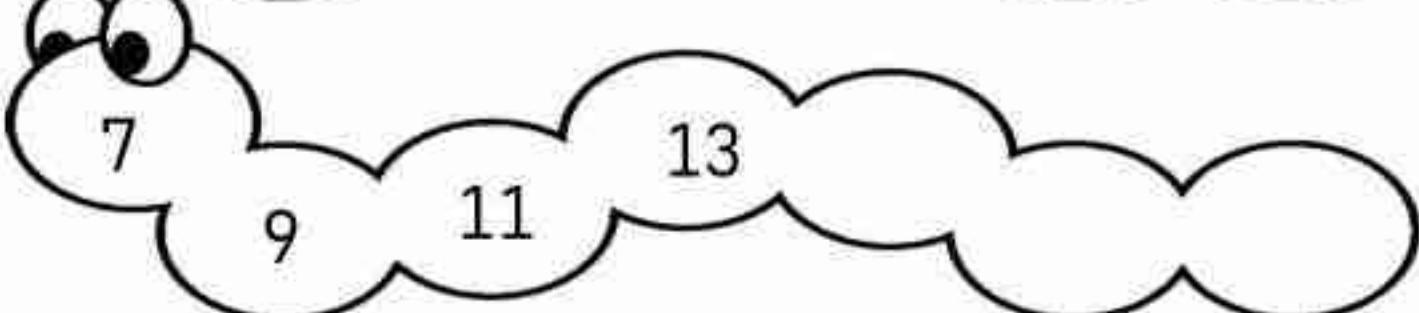
3.



4.



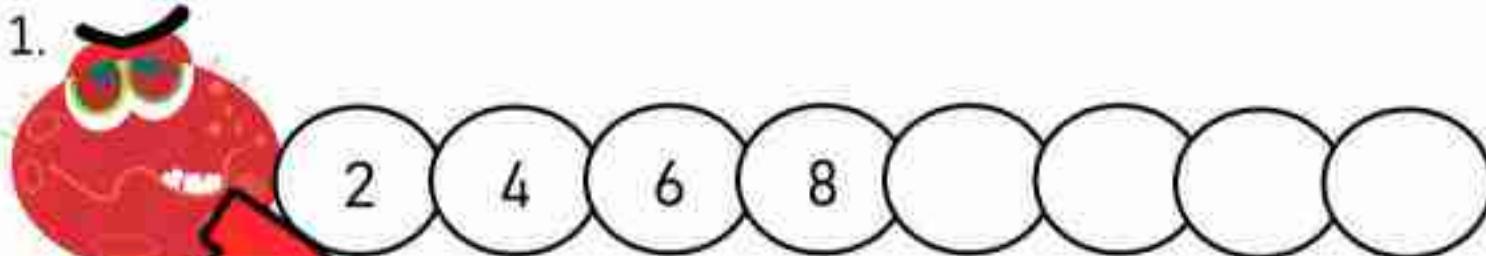
5.



Number Patterns – 2s, 5s, 10s

Questions**Fill in the blanks below**

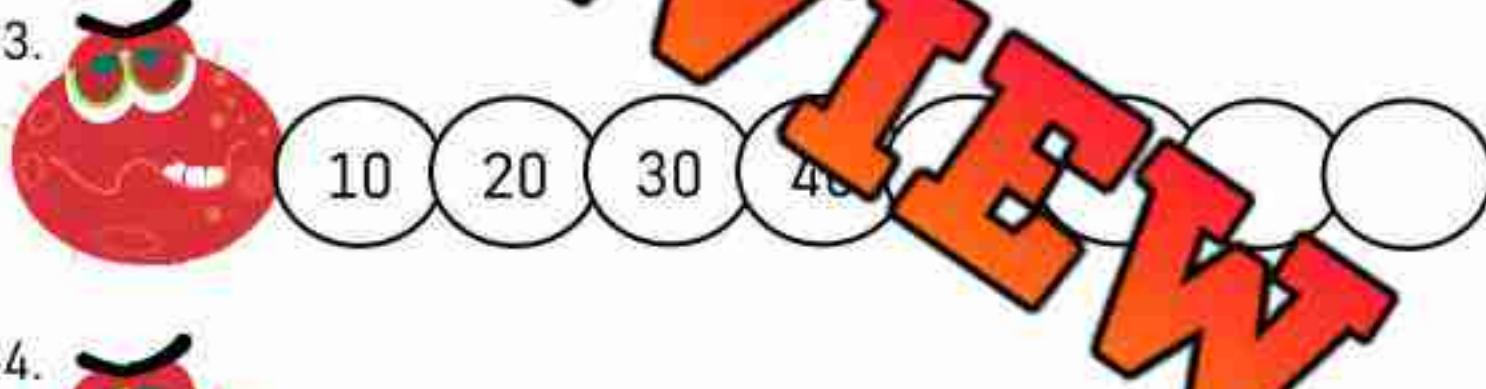
1.



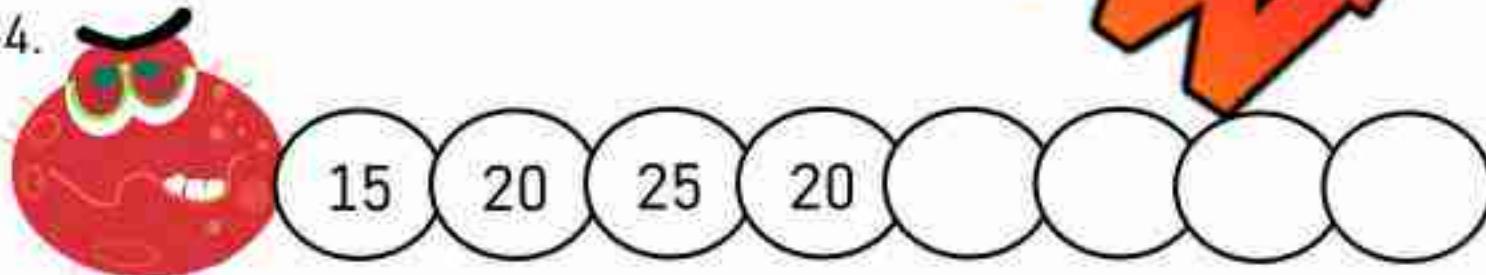
2.



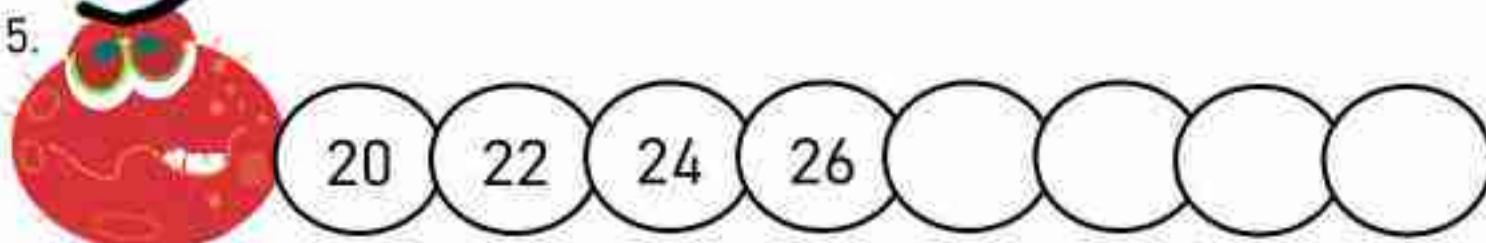
3.



4.



5.



Number Patterns – 2s

Questions**Fill in the blanks below**

1.



2.



3.



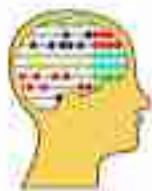
4.



5.



Growing Patterns - Addition



Growing/Increasing Patterns

 $+10 +10 +10 +10 +10$
 $\swarrow \swarrow \swarrow \swarrow \swarrow$
 $10, 20, 30, 40, 50, 60$
 $+5 +5 +5 +5 +5$
 $\swarrow \swarrow \swarrow \swarrow \swarrow$
 $3, 8, 13, 18, 23, 28$


Part 1

Growing Patterns - Addition

 $\swarrow \swarrow$
 $1) 2, 4, 6, \underline{\hspace{2cm}}$
 $\swarrow \swarrow$
 $2) 6, 10, 14, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $\swarrow \swarrow$
 $3) 10, 15, 20, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $\swarrow \swarrow$
 $53, 58, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $\swarrow \swarrow$
 $5) 2, 8, 14, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $\swarrow \swarrow$
 $6)$

Part 2

Follow the rule by adding the next number in the sequence.

 $1) (\text{Add 2})$
 $7, 9, 11, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $2) (\text{Add 3})$
 $22, 25, 28, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $3) (\text{Add 6})$
 $1, 7, 13, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $4) (\text{Add 5})$
 $5, 10, 15, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $5) (\text{Add 10})$
 $4, 14, 24, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$
 $6) (\text{Add 4})$
 $42, 46, 50, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$

Increasing Patterns - Rules

Questions

Fill in the blanks by figuring out the pattern rules

2, 4, 6, 8, 10, 12, 14, 16

Start at _____, then add _____ each time

5, 10, 15, 20, 25, 30, 35, 40

Start at _____, then add _____ each time

10, 20, 30, 40, 50, 60, 70

Start at _____, then add _____ each time

5, 8, 11, 14, 17, 20, 23, 26

Start at _____, then add _____ each time

12, 22, 32, 42, 52, 62, 72

Start at _____, then add _____ each time

4, 8, 12, 16, 20, 24, 28, 32

Start at _____, then add _____ each time

Creating Rules

Questions

Write your own patterns using the pattern rule



1) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 2, add 2 each time

2) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 10, add 10 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 5, add 5 each time

4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 3, add 3 each time

5) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 4, add 4 each time

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Write your own patterns using the pattern rule.

1) _____
Pattern Rule: Start at 0, add 3 each time.

2) _____
Pattern Rule: Start at 0, add 5 each time.

3) _____
Pattern Rule: Start at 6, add 2 each time.

Name: _____

Write your own patterns using the pattern rule.

1) _____
Pattern Rule: Start at 8, add 3 each time.

2) _____
Pattern Rule: Start at 0, add 5 each time.

3) _____
Pattern Rule: Start at 6, add 2 each time.

Name: _____

Write your own patterns using the pattern rule.

1) _____
Pattern Rule: Start at 8, add 3 each time.

2) _____
Pattern Rule: Start at 0, add 5 each time.

3) _____
Pattern Rule: Start at 6, add 2 each time.

Name: _____

Write your own patterns using the pattern rule.

1) _____
Pattern Rule: Start at 8, add 3 each time.

2) _____
Pattern Rule: Start at 0, add 5 each time.

3) _____
Pattern Rule: Start at 6, add 2 each time.

Pattern Rule – Addition

Part 1

Continue the growing/increasing patterns below

1) 10, 20, 30, _____, _____

Pattern Rule: Start at 10, add _____ each time

2) 2, 5, 8, _____, _____

Pattern Rule: Start at 2, add _____ each time

3) 35, 39, 45, _____, _____

Pattern Rule: Start at 35, add _____ each time

4) 50, 60, 70, _____

Pattern Rule: Start at 50, add _____ each time

5) 73, 77, 81, _____

Pattern Rule: Start at 73, add _____ each time



Part 2

Write your own patterns using the following rule

1) _____, _____, _____, _____, _____

Pattern Rule: Start at 20, add 5 each time

2) _____, _____, _____, _____, _____

Pattern Rule: Start at 10, add 0 each time

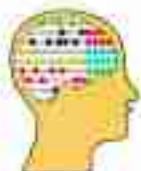
3) _____, _____, _____, _____, _____

Pattern Rule: Start at 27, add 5 each time

4) _____, _____, _____, _____, _____

Pattern Rule: Start at 46, add 4 each time

Shrinking Patterns - Subtraction



Shrinking/Decreasing Patterns

 $-10 \quad -10 \quad -10 \quad -10 \quad -10$ 

60, 50, 40, 30, 20, 10

 $-5 \quad -5 \quad -5 \quad -5 \quad -5$ 

45, 40, 35, 30, 25, 20

**Part 1**

Fill in the missing numbers in the pattern

1) 12, 10, 8, _____



3) 32, 26, 20, _____



5) 56, 48, 40, _____

2) 23, 19, 15, _____



4) 76, 65, 55, _____



6) 8, 3, 5, _____

**Part 2**

Follow the rule by adding the next number in the sequence

1) (Subtract 2)

18, 16, 14, _____, _____, _____

2) (Subtract 3)

30, 27, 24, _____, _____, _____

3) (Subtract 5)

38, 33, 28, _____, _____, _____

4) (Subtract 10)

60, 50, 40, _____, _____, _____

5) (Subtract 6)

62, 56, 50, _____, _____, _____

6) (Subtract 4)

78, 74, 70, _____, _____, _____

Decreasing Patterns - Rules

Questions

Fill in the blanks by figuring out the pattern rules

18, 16, 14, 12, 10, 8, 6, 4

Start at _____, then subtract _____ each time

40, 35, 30, 25, 20, 15

Start at _____, subtract _____ each time

80, 70, 60, 50, 30, 20

Start at _____, then subtract _____ each time

28, 25, 22, 19, 16, 13, 10, 7

Start at _____, then subtract _____ each time

67, 57, 47, 37, 27, 17, 7

Start at _____, then subtract _____ each time

54, 48, 42, 36, 30, 24, 18, 12

Start at _____, then subtract _____ each time

Creating Rules

Questions

Write your own patterns using the pattern rule



1) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 18, subtract 2 each time

2) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 50, subtract 10 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 35, subtract 3 each time

4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 23, subtract 3 each time

5) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 44, subtract 4 each time

Creating Rules

Questions

Write your own patterns using the pattern rule



1) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 25, subtract 2 each time

2) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 12, subtract 4 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 32, subtract 5 each time

4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 67, subtract 10 each time

5) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 48, subtract 3 each time

Pattern Rule - Subtraction

Part 1

Continue the shrinking/decreasing patterns below

1) 12, 10, 8, _____, _____, _____

Pattern Rule: Start at 12, subtract _____ each time

2) 22, 18, _____, _____, _____

Pattern Rule: Start at _____, subtract _____ each time

3) 36, 30, 24, _____, _____, _____

Pattern Rule: Start at _____, subtract _____ each time

4) 36, 30, 24, _____, _____, _____

Pattern Rule: Start at _____, subtract _____ each time

5) 48, 44, 40, _____, _____, _____

Pattern Rule: Start at _____, subtract _____ each time

Part 2

Write your own patterns using the pattern rule below.

1) _____, _____, _____, _____, _____

Pattern Rule: Start at 50, subtract 0 each time

2) _____, _____, _____, _____, _____

Pattern Rule: Start at 28, subtract 4 each time

3) _____, _____, _____, _____, _____

Pattern Rule: Start at 55, subtract 5 each time

4) _____, _____, _____, _____, _____

Pattern Rule: Start at 76, subtract 3 each time

Pattern Rule - Multiplication

Part 1

Continue the growing/increasing patterns below

1) 5, 10, 20, _____, _____

Pattern Rule: Start at 5, multiply by _____ each time

2) 1, 3, 5, _____, _____

Pattern Rule: Start at _____ multiply by _____ each time

3) 1, 3, 9, _____, _____

Pattern Rule: Start at _____ multiply by _____ each time

4) 10, 20, 40, _____, _____

Pattern Rule: Start at _____ multiply by _____ each time

5) 2, 6, 18, _____, _____

Pattern Rule: Start at _____ multiply by _____ each time

Part 2

Write your own patterns using the pattern rule

1) _____, _____, _____, _____

Pattern Rule: Start at 1, multiply by 2 each time

2) _____, _____, _____, _____

Pattern Rule: Start at 3, multiply by 1 each time

3) _____, _____, _____, _____

Pattern Rule: Start at 5, multiply by 2 each time

4) _____, _____, _____, _____

Pattern Rule: Start at 10, multiply by 2 each time

Multiplication Word Problems**Questions****Answer the questions below**

	Word Problems	Answers
1	<p>Lily is stacking toy blocks. On the first day, she stacks 2 blocks. Each day, she doubles the number of blocks she stacks. How many blocks will she have stacked by the 4th day?</p>	
2	<p>A farmer plants 3 seeds on the first day. Each day, he plants 3 times more than the previous day. How many seeds does he plant on day 4?</p>	
3	<p>A squirrel gathers 2 acorns on the first day. Each day, it gathers 5 times the number of acorns from the previous day. How many acorns will he have on day 3?</p>	
4	<p>A scientist is studying bacteria. On the first day, there are 2 bacteria. Each day, the bacteria multiply by 5. How many bacteria will there be on day 4?</p>	

Pattern Rule - Division

Part 1

Continue the growing/increasing patterns below

1) 120, 60, 30, _____

Pattern Rule: Start at 120, divide by 2 each time

2) 10, _____, _____

Pattern Rule: Start at 10, divide by _____, each time

3) 80, 40, 20, _____

Pattern Rule: Start at 80, divide by _____, each time

4) 128, 64, 32, _____

Pattern Rule: Start at _____, divide by _____ each time

Part 2

Write your own patterns using the following rule:

1) _____, _____, _____, _____

Pattern Rule: Start at 64, divide by 2 each time

2) _____, _____, _____, _____

Pattern Rule: Start at 150, divide by 1 each time

3) _____, _____, _____, _____

Pattern Rule: Start at 250, divide by 5 each time

4) _____, _____, _____, _____

Pattern Rule: Start at 160, divide by 2 each time

Division Word Problems**Questions**

Answer the questions below



	Word Problems	Answers
1	<p>A farmer has 128 bananas. Each day, he divides them by 2 to store in smaller baskets. How many bananas will be left after 4 days?</p> <p>PREVIEW</p>	
2	<p>A bakery starts with 80 cookies. Each day, it sells 1/4 of the remaining cookies. How many cookies will be left after 3 days?</p> <p>PREVIEW</p>	

Input/Output Table – Addition

Rule: add 5	
In	Out
25	30
45	50
65	70
85	90



Question: Complete the input/output tables below

In	Out
20	
30	
50	
120	

Rule: add 4	
In	Out
5	
11	
12	
8	
14	
5	
20	

In	Out
2	
18	
44	
92	

Rule: add 2	
In	Out
20	
22	
55	
61	

Rule: add 6	
In	Out
30	
50	
70	
90	

Rule: add 8	
In	Out
2	
12	
22	
32	

Input/Output Table – Subtraction



Rule: subtract 5	
In	Out
35	30
50	45
65	60
80	75



Question: Complete the input/output tables below.

Rule: subtract 5	In	Out
	10	
	35	
	55	
	100	

Rule: subtract 1	In	Out
	5	
	25	
	7	
	8	

Rule: subtract 2	In	Out
	4	
	28	
	45	
	77	

Rule: subtract 5	In	Out
	9	
	18	
	27	
	36	

Rule: subtract 6	In	Out
	6	
	14	
	47	
	66	

Rule: subtract 4	In	Out
	23	
	48	
	67	
	85	

Input/Output Table - Multiplication



Rule: multiply by 2

In	Out
1	2
3	6
5	10
7	14

Question: Complete the input/output tables below.

Rule: multiply by 1

In	Out
1	1
2	2
5	5
10	10
20	20

Rule: multiply by 2

In	Out
2	4
3	6
4	8
5	10
6	12

Rule: multiply by 0

In	Out
2	0
18	0
49	0
92	0

Rule: multiply by 3

In	Out
2	6
3	9
4	12
5	15
6	18

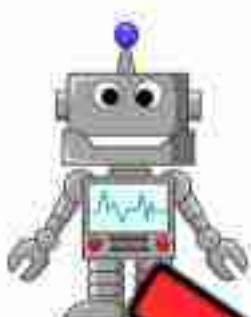
Rule: multiply by 5

In	Out
1	5
3	15
5	25
7	35

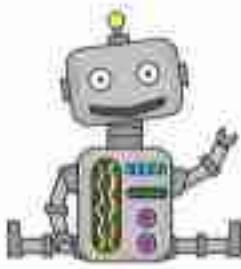
Rule: multiply by 10

In	Out
2	20
5	50
8	80
10	100

Input/Output Table - Division



Rule: divide by 2	
In	Out
10	5
8	4
6	3
4	2



Question: Solve the input/output tables below

Rule: divide by 1	
In	Out
1	
5	
10	
20	

Rule: divide by 2	
In	Out
6	
10	
14	
20	

Rule: divide by 3	
In	Out
6	
9	
12	
15	

Rule: divide by 4	
In	Out
4	
8	
16	
32	

Rule: divide by 5	
In	Out
10	
20	
40	
50	

Rule: divide by 10	
In	Out
10	
20	
50	
100	

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class.

Name: _____

Fill in the input/output tables below

Rule: multiply by 4	Out
1	
2	
4	
10	

Rule: divide by 2	Out
8	
20	
100	

Name: _____

Fill in the input/output tables below

Rule: multiply by 4	In	Out
1		
2		
4		
10		

Rule: divide by 2	In	Out
4		
8		
20		
100		

Name: _____

Fill in the input/output tables below

Rule: multiply by 4	In	Out
1		
2		
4		
10		

Rule: divide by 2	In	Out
4		
8		
20		
100		

Name: _____

Fill in the input/output tables below

Rule: multiply by 4	In	Out
1		
2		
4		
10		

Rule: divide by 2	In	Out
4		
8		
20		
100		

Pattern Rule – Input/Output Tables



Add 10 or Subtract 10	
In	Out
20	30
30	40
50	60
90	100



Instructions: Use the pattern rule to complete the input/output tables below.

In	Out
10	
30	
	55
70	

Rule: add 3	
In	Out
	3
	12
	30

Rule: subtract 6	
In	Out
	20
38	
59	
	62

Rule: subtract 2	
In	Out
12	
72	
	88
	92

Rule: add 6	
In	Out
3	
12	
	20
	38

T-Tables – Finding Patterns**Questions**

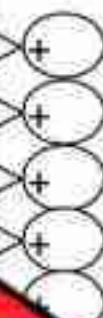
Fill in the T-Tables by counting the blocks

			Figure	Term Value
1) Figure 1 Figure 2 Figure 3			1	
			2	
			3	
			4	
			Figure	Term Value
2) Figure 1 Figure 2 Figure 3			1	
			2	
			3	
			4	
			Figure	Term Value
3) Figure 1 Figure 2 Figure 3			1	
			2	
			3	
			4	
			Figure	Term Value
4) Figure 1 Figure 2 Figure 3			1	
			2	
			3	
			4	
			Figure	Term Value
5) Figure 1 Figure 2 Figure 3			1	
			2	
			3	
			4	

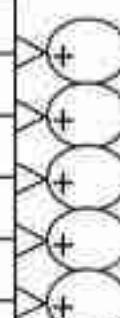
Table of Values – Term Numbers/Values**Questions**

Fill in the tables of values below

Term Number	Term Value
1	1
2	3
3	5
4	
5	
6	



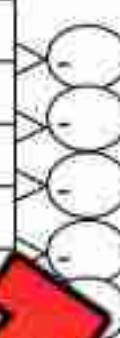
Term Number	Term Value
1	10
2	16
3	22
4	
5	
6	



Term Number	Term Value
1	75
2	71
3	67
4	
5	
6	



Term Number	Term Value
	89
	79
3	69
5	
6	



Term Number	Term Value
1	45
2	50
3	55
4	
5	
6	
10	



Term Number	Term Value
1	100
2	95
3	
4	
5	80
6	
10	

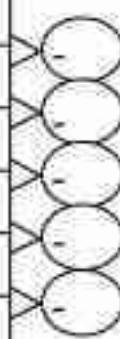


Table of Values

Questions

Answer the questions below by using the table of values

When you work an hour, you get paid 10 dollars. Therefore, the input is the hours you work and the output is how much money you made. Fill in the input/output table.



1) How many dollars will you make if you work 5 hours?

2) How many dollars will you make if you worked 10 hours?

Hours Worked	Money Made
1	
2	
3	
4	
5	
10	

Kids	Slices of Pizza
1	
2	
3	
4	
5	
10	

When you are having a birthday party for your friend, you expect 5 kids coming to the party. Each kid will eat 2 slices of pizza.



1) How many slices of pizza does your family need to order?

2) What if 10 kids show up to the party. How many slices of pizza will you need?

Games	Total Points Scored
1	
2	
3	
4	
5	
8	

You scored 5 points in each basketball game this season. Fill in the table of values showing your game scores.



1) After your third game, how many points had you scored?

2) There were 8 games this season. How many points did you score in the season?

The Egg Challenge

Challenge

Answer the word problem below

If a hen laid 1 egg on Monday, 2 eggs on Tuesday, 3 eggs on Wednesday and the pattern continued, how many eggs would it lay on the Sunday?

PREVIEW



How many days would the hen need to lay 50 eggs?



Patterning Word Problems - Halloween

Questions

Follow the problem-solving steps below

<input type="checkbox"/> Read the problem carefully	<input type="checkbox"/> Underline important information	<input type="checkbox"/> Draw pictures
<input type="checkbox"/> Write a number sentence	<input type="checkbox"/> Solve the problem	<input type="checkbox"/> Check your answer

Bill is trick-or-treating for Halloween. He leaves his house with 5 candies to start. He gets 2 more candies for each house he visits. He visits 10 houses.

a) Draw the pattern below.



b) How many total candies does he get?



Patterning Word Problems – Growing Hair

Questions**Follow the problem-solving steps below**

<input type="checkbox"/> Read the problem carefully	<input type="checkbox"/> Underline important information	<input type="checkbox"/> Draw pictures
<input type="checkbox"/> Write a number sentence	<input type="checkbox"/> Solve the problem	<input type="checkbox"/> Check your answer

Tyler's hair was 45mm long in January. In February his hair is 58mm long. In March his hair is 71mm long.

a) How long will his hair be in April if the pattern continues?

b) How long will his hair be in July?

PREDICTION



Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

Sarah is building a tower with blocks. She starts with 3 blocks in the first level. Each next level, she adds 3 more blocks than the previous level. How many blocks are in the fourth level?

Name: _____

Sarah is building a tower with blocks. She starts with 3 blocks in the first level. Each next level, she adds 3 more blocks than the previous level. How many blocks are in the fourth level?

Name: _____

Sarah is building a tower with blocks. She starts with 3 blocks in the first level. Each next level, she adds 3 more blocks than the previous level. How many blocks are in the fourth level?

Name: _____

Sarah is building a tower with blocks. She starts with 3 blocks in the first level. Each next level, she adds 3 more blocks than the previous level. How many blocks are in the fourth level?

Activity Title: Pattern Treasure Hunt

Objective**What are we learning about?**

To reinforce students' understanding of growing addition and shrinking subtraction patterns through a dynamic and engaging treasure-hunt game. This activity aims to improve problem-solving speed and accuracy while promoting teamwork and active learning.

Materials

What you will need for the activity.

- Stopwatch or timer (you can use a smartphone)
- Index cards
- Markers
- Small prizes or treats (for correct answers)
- Tape

**Instructions**

How you will complete the activity.

- 1) Cut out the index cards provided. These will be the treasure cards with challenge questions.
- 2) Hide these cards around the classroom or in a designated safe outdoor area, taping them under chairs, desks, or tucked into non-obvious spots.
- 3) Divide the class into small teams and give each team a stopwatch.
- 4) Explain the game: each team will hunt for a card, solve the problem on it as quickly as they can, and return to you for verification.
- 5) Start the timer when you say "Go!" Each team rushes to find their first card.
- 6) When a team thinks they have the correct answer, they come back to you for verification. If they get it right, the teacher keeps the card. If the answer is wrong, they can try again or hide the card back in its original spot and find a new card.
- 7) The game continues until all cards are found or you call time. The team with the most correct answers wins.
- 8) Discuss the game, focusing on the concepts taught on the cards.

Instructions

Cut out the cards below

1) 3, 6, 9,

2) 10, 20, 30,

3) (Add 5) 5, 10,

4) (Add 4) 28, 32, 36,

5) 100, 90, 80,

7) Pattern Rule: Start at 5, add 5 each time. 5, 10, 15,

8) Pattern Rule: Start at 100, subtract 15 each time.
100, 85, 70,**PREDICTION**

Instructions

Cut out the cards below

25) Leah had \$50. She earns \$10 more each day. How much money will Leah have after 3 days?

26) Pattern Rule: Subtract 2 starting from 18.

_____ , _____ , _____

27) Sara plants a tree each year, the number of trees doubles. How many trees will there be in 3 years?

28) (Add 15) 30, 45, 60,

_____ , _____ , _____

29) Jake starts with 80 candies and eats 10 each day. How many candies are left after 8 days?

30) A player adds at the triples her score in the first round of a game. What will the score be in the 3rd round?

31) Claire collects shells on the beach, doubling her total each day. If she starts with 6 shells on Monday, how many will she have by Wednesday?

32) A garden was planted with 50 flowers. Each day, 5 new flowers bloom. How many flowers will be in the garden after one week?

Name: _____

Algebra Quiz - Patterning

Part 1

Continue the repeating patterns below by drawing 3 more pictures



Part 2

Circle the correct answer and continue the pattern

A B C C A B C _____

A B B C D A B B C D _____

A B C B A B C B _____

Part 3

Follow the rule by adding or subtracting to the numbers

1) (Add 5)

3, 8, 13, _____, _____, _____

2) (Add 3)

23, 26, 29, _____, _____, _____

3) (Add 6)

2, 8, 14, _____, _____, _____

4) (subtract 2)

18, 16, 14, _____, _____, _____

5) (subtract 10)

60, 50, 40, _____, _____, _____

6) (subtract 4)

46, 42, 38, _____, _____, _____

Part 4

T-Tables

Term Number	Term Value
1	4
2	8
3	12
4	

Term Number	Term Value
1	89
2	79
3	69
4	
5	
6	

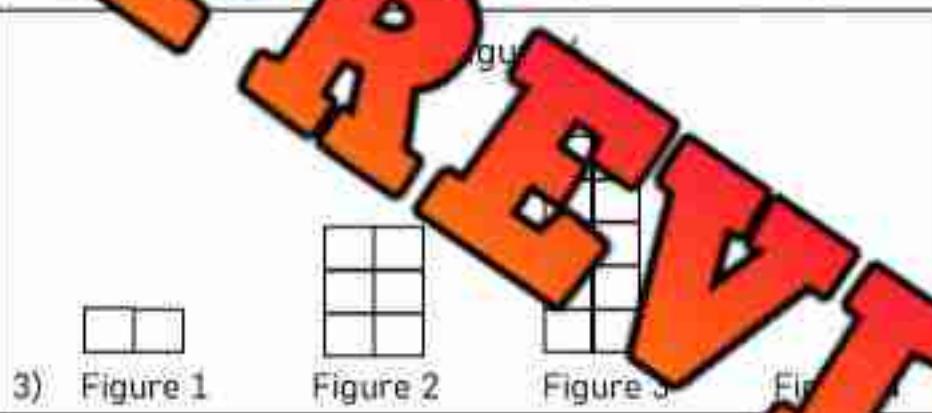


Figure	Term Value
1	
2	
3	
4	

Part 5

Solve the word problem below. Show your work!

If you read 1 book on Monday, 2 books on Tuesday, 3 books on Wednesday, and 4 books on Thursday, how many books would you read on Sunday if the pattern continued?

How many days would it take you to read 45 books?

Grade 2

C2. Equations and Inequalities

	Curriculum Expectations	Pages That Cover the Expectations
C2.1	identify when symbols are being used as variables, and describe how they are being used	137 – 143, 159 – 168
C2.2	determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent	118 – 168
C2.3	identify and use equivalent relationships for whole numbers up to 100, in various contexts	169 – 172

Balance Pan Equations

Questions:

How many ways can you balance the equation to equal 6

1)

$$+ = 6$$

2)

$$+ = 6$$

3)

$$+ = 6$$

4)

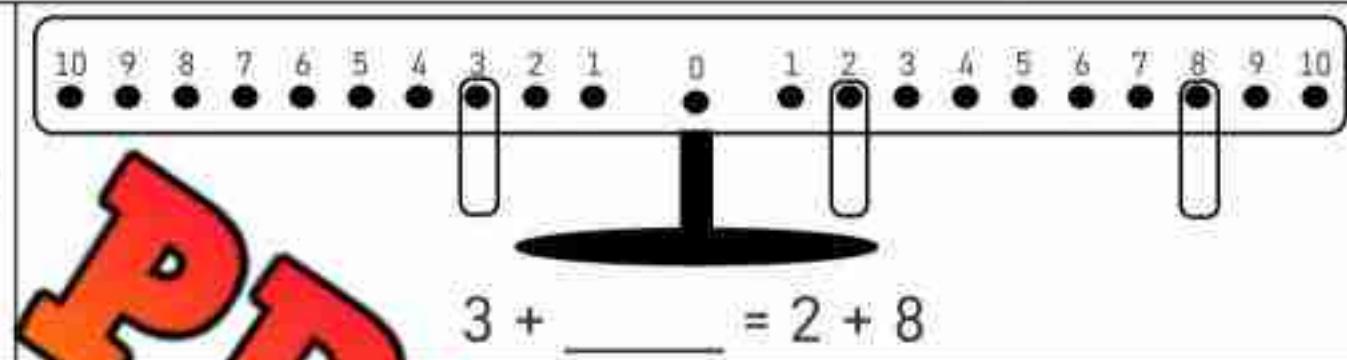
$$+ = 6$$

Balance Pan Equations

Questions

Balance the equations below

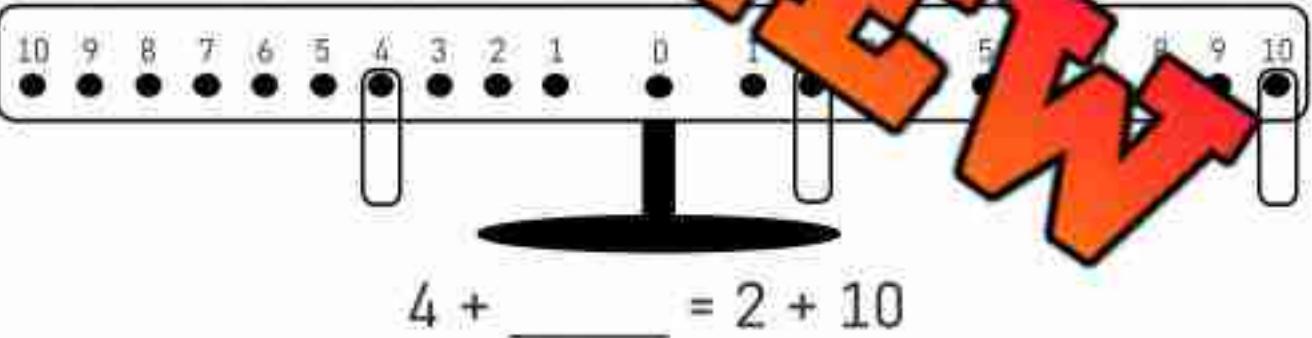
1)



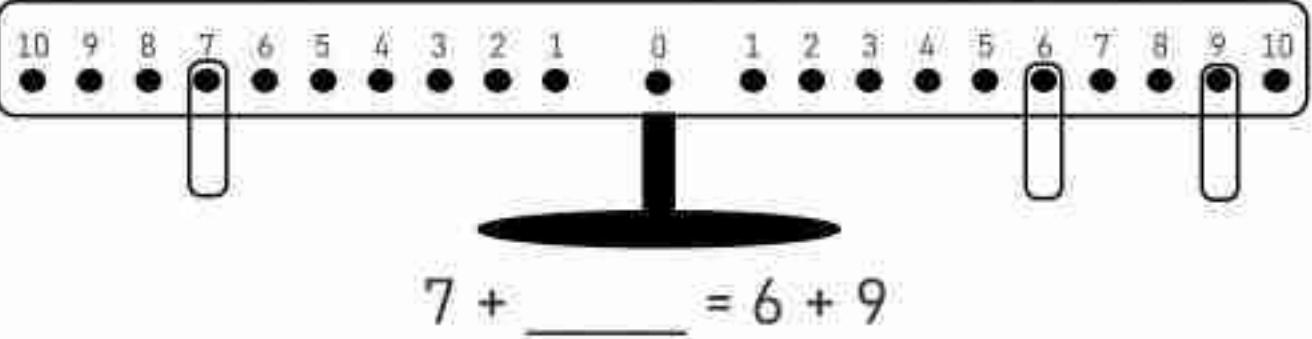
2)



3)



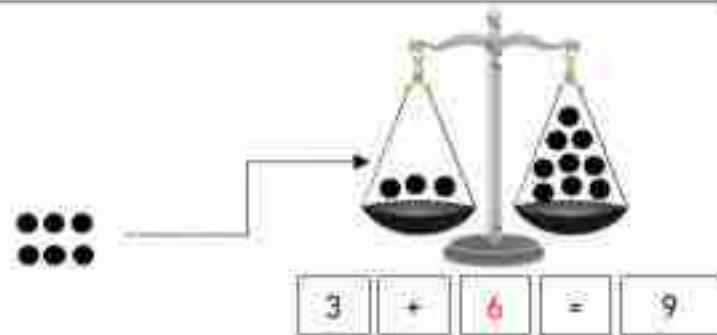
4)



Pre-Algebra – Balancing Addition Equations

Balance the scales by putting the same amount of circles on each scale.

Answer: Add 6 circles to the scale to make them equal.



Question: How many balls do you need to add to balance the scales?

PRE-ALGEBRA

8 + = 11 6 + = 14

5 + = 9 7 + = 12 2 + = 13

6 + = 10 3 + = 14 1 + = 12

Addition – Are They Equal?

Are the equations equal? Put an X through the equal sign for any equations that are not equal.

$5 + 3 = 8$

$21 + 10 \neq 30$

$17 + 11 = 28$

Questions

Put a slash (\neq) through the equal sign if it is not balanced

PREVIEW

$1) 5 + 10$

$2) 4 + 4 = 8$

$3) 6 + 6 = 11$

$4) 8 + 6 = 14$

$5) 7 + 10$

$6) 13 + 10 = 24$

$7) 9 + 3 = 12$

$8) 7 + 5 = 12$

$9) 9 + 7 = 16$

$10) 8 + 4 = 13$

$11) 17 + 3 = 20$

$12)$

$13) 23 + 6 = 30$

$14) 10 + 10 = 20$

$15) 15 + 15 = 30$

$16) 40 + 0 = 400$

$17) 53 + 6 = 59$

$18) 21 + 5 = 25$

$19) 20 + 12 = 32$

$20) 75 + 4 = 80$

$21) 2 + 46 = 47$

Addition Expressions – Equal?

Are the expressions equal? Put a slash through the equal sign for any equations that are not equal.

Examples: $5 + 3 = 2 + 6$ $4 + 5 \neq 7 + 1$



Questions

Put a slash (\neq) through the equal sign if it is not balanced

1)

PREVIEW

 $4 + 7$

7)

 $6 + 3 = 2 + 5$

2)

 $7 + 3 = 5$ $6 + 5 = 4 + 8$

3)

 $8 + 5 = 4 + 7$ $1 + 9$

4)

 $7 + 7 = 5 + 8$

10)

 $9 + 3 = 4$

5)

 $14 + 2 = 11 + 5$

11)

 $16 + 3 = 14 + 5$

6)

 $23 + 4 = 20 + 7$

12)

 $30 + 5 = 33 + 3$

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

Put a slash (\neq) through the equal sign if the equations are not balanced.

- a) $12 + 3 = 25 + 0$
- b) $20 + 6 = 15 + 10$
- c) $25 + 10 = 30 + 5$
- d) $30 + 2 = 29 + 4$

Name: _____

Put a slash (\neq) through the equal sign if the equations are not balanced.

- a) $12 + 3 = 15 + 0$
- b) $20 + 6 = 15 + 10$
- c) $25 + 10 = 30 + 5$
- d) $30 + 2 = 29 + 4$

Name: _____

Put a slash (\neq) through the equal sign if the equations are not balanced.

- a) $12 + 3 = 15 + 0$
- b) $20 + 6 = 25 + 10$
- c) $25 + 10 = 30 + 5$
- d) $30 + 2 = 29 + 4$

Name: _____

Put a slash (\neq) through the equal sign if the equations are not balanced.

- a) $12 + 3 = 15 + 0$
- b) $20 + 6 = 25 + 10$
- c) $25 + 10 = 30 + 5$
- d) $30 + 2 = 29 + 4$

Addition – Which Equation Matches?

Two of the equations equal the same number. Which one matches the shaded in equation?

Example

$4 + 7$

$9 + 2$

$5 + 5$



Questions Circle the equation that matches the shaded in equation

1)

$5 + 2$

$6 + 2$

$4 + 3$

2)

$6 + 3$

5

$2 + 8$

3)

$8 + 4$

$7 + 7$

$6 + 6$

4)

$5 + 8$

$4 + 7$

5)

$8 + 2$

$7 + 3$

$5 + 6$

6)

$10 + 3$

$8 + 5$

$6 + 6$

7)

$3 + 6$

$4 + 7$

$8 + 1$

Pre-Algebra – Balancing Addition Equations

Balancing equations means both sides of the equal sign must be the same.

Examples:

$$3 + 7 = \boxed{10}$$

$$24 + 6 = \boxed{30}$$

Questions

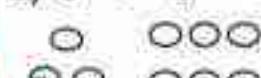
Fill in the missing number to balance the equation

1) 4



+ =

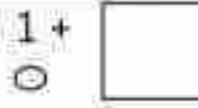
2) 3 + 6 =



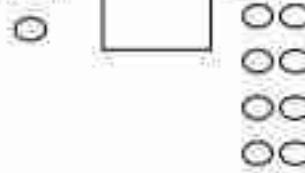
3) 4 + 5 =



4) 1 +



= 8



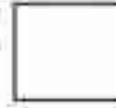
6) 4 +



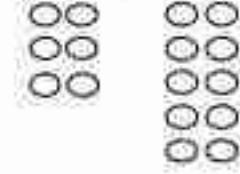
= 12



7)



+ 6 = 10



8) + 7 =



10



5 = 11



10)



+ 2 =



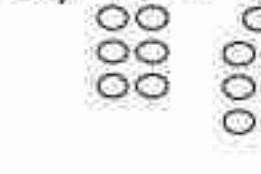
11) 3 +



= 8



12) 6 + 7 =



13)



+ 6 =



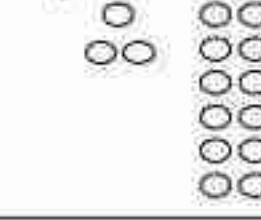
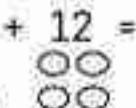
14) 7 +



= 9



15) 3 + 12 =



Pre-Algebra – Balancing Addition Equations

Balancing equations means both sides of the equal sign must be the same.

$$\begin{array}{r} 10 \\ \swarrow \quad \searrow \\ 3 + 7 = \boxed{10} \end{array}$$

Examples:

$$\begin{array}{r} 30 \\ \swarrow \quad \searrow \\ 24 + \boxed{6} = 30 \end{array}$$

Questions

Fill in the missing number to balance the equation

1) $6 + \boxed{4} = 10$

2) $2 + 6 = \boxed{8}$

3) $4 + 6 = \boxed{10}$

4) $3 + \boxed{7} = 10$

$= 10$

6) $12 + \boxed{3} = 15$

7) $\boxed{4} + 6 = 10$

8) $\boxed{2} + 5 = 7$

$\boxed{5} + 15 = 20$

10) $14 + 4 = \boxed{18}$

11) $12 + \boxed{5} = 17$

$\boxed{14} + 6 = 20$

13) $17 + \boxed{8} = 25$

14) $20 + \boxed{7} = \boxed{27}$

15) $23 + \boxed{7} = 30$

16) $16 + \boxed{8} = 24$

17) $21 + \boxed{7} = \boxed{28}$

18) $30 + \boxed{6} = 36$

19) $40 + \boxed{8} = 48$

20) $43 + 10 = \boxed{53}$

21) $47 + \boxed{4} = 51$

Making Tens – Changing Variables

When we make tens, we are using a variable. The ten is the constant and the number we use to add to 10 is the variable.

Questions

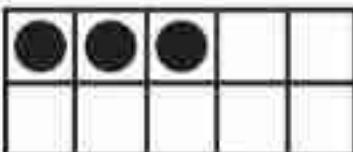
How many more dots do you need to add to make 10?

1)



$$8 + \underline{\quad} = 10$$

2)



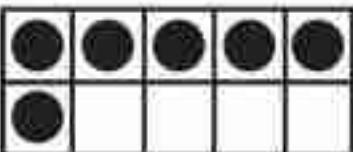
$$3 + \underline{\quad} = 10$$

3)



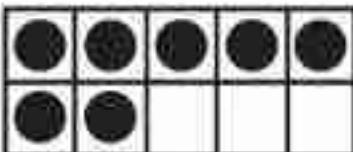
$$2 + \underline{\quad} = 10$$

4)



$$5 + \underline{\quad} = 10$$

5)



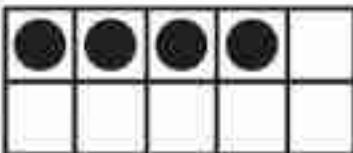
$$7 + \underline{\quad} = 10$$

6)



$$9 + \underline{\quad} = 10$$

7)



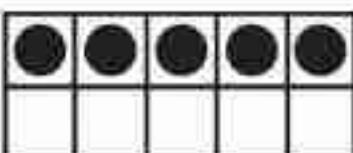
$$4 + \underline{\quad} = 10$$

8)



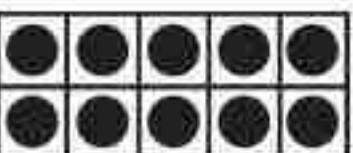
$$1 + \underline{\quad} = 10$$

9)



$$5 + \underline{\quad} = 10$$

10)



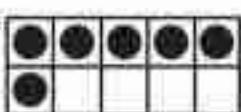
$$10 + \underline{\quad} = 10$$

Making 20 – Changing Variables

Questions

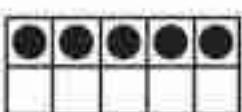
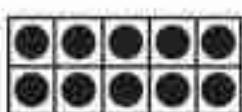
How many more dots do you need to add to make 20?

1)



$$= 20$$

2)



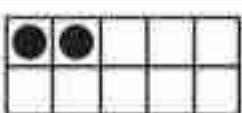
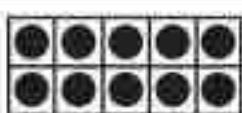
$$15 + \underline{\hspace{1cm}} = 20$$

3)



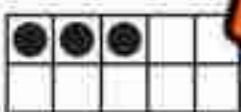
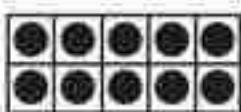
$$10 + \underline{\hspace{1cm}}$$

4)



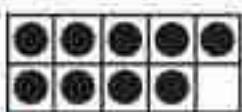
$$12 + \underline{\hspace{1cm}} = 20$$

5)

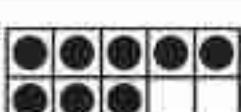
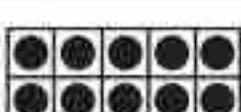


$$13 + \underline{\hspace{1cm}} = 20$$

6)



7)



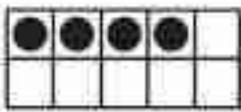
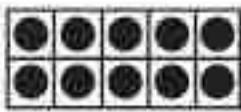
$$18 + \underline{\hspace{1cm}} = 20$$

8)



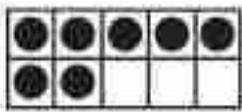
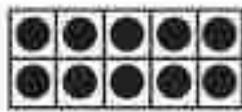
$$11 + \underline{\hspace{1cm}} = 20$$

9)



$$14 + \underline{\hspace{1cm}} = 20$$

10)



$$17 + \underline{\hspace{1cm}} = 20$$

Algebra Jeopardy

Objective**What are we learning about?**

To reinforce students' understanding of basic algebraic concepts and their application to solve simple equations and word problems in a fun and competitive game for

Mat

will need for the activity.

- Jeopardy board (see the next page)
- Buzzer or bell

**Instructions****How you will complete the activity**

1. Print the Jeopardy board on the next page.
2. Divide the class into two teams.
3. Ask one team to go first by selecting a dollar value.
4. Read the question aloud from the dollar value.
5. The first team to ring the bell or buzzer gets to answer.
6. If they answer correctly, award them the points. If not, another team can answer.
7. Continue the game until all questions have been answered.
8. Tally the points to determine the winning team.
9. Conclude by discussing what they learned about the topic in the questions.

Jeopardy Questions

Ask students the questions below

\$100	\$200	\$300	\$400	\$500
$\underline{\quad} + 2 = 7$	$\underline{\quad} + 3 = 6$	$10 + \underline{\quad} = 20$	$3 + \underline{\quad} = 12$	$4 + \underline{\quad} + 3 = 10$
$\underline{\quad} + 15 = 25$	$\underline{\quad} + 12 = 32$	$20 + \underline{\quad} = 53$	$\underline{\quad} + 15 = 40$	$40 + 25 + \underline{\quad} = 100$
Balance the equation:	Balance the equation:	Balance the equation:	Balance the equation:	Balance the equation:
$1 + \underline{\quad} = 1 + 4$	$2 + \underline{\quad} = 4$	$5 + 2 = \underline{\quad} + 4$	$6 + 4 = \underline{\quad} + 7$	$8 + 6 = \underline{\quad} + 10$
Balance the equation:	Balance the equation:	Balance the equation:	Balance the equation:	Balance the equation:
$2 + 2 = 1 + \underline{\quad}$	$3 + 4 = \underline{\quad} + 7 + 3$	$9 + 2 + \underline{\quad} = 8 + 11$	$\underline{\quad} + 10 = 12 + \underline{\quad}$	
Emily had 5 books. She received some more and now has 12 books. How many books did she receive?	David had 10 Legos. He received some more and now has 22 Legos. How many Legos did he receive?	Ethan has 1 rock. He found some more and now has 28 rocks. How many rocks did he find?	Emma has some seeds. She then buys 7 seeds from one store and 14 from another. She now has a total of 25 seeds. How many seeds did she start with?	
John had 3 apples. He bought some more and now has 10 apples. How many apples did he buy?	Emma had 9 pencils. She bought some more and now has 16 pencils. How many pencils did she buy?	Sarah has some apples. She buys 6 more and now has 15 apples. How many apples did she start with?	Kevin has some stickers. He then gets 8 stickers, then 3 more, and now has 18 stickers. How many stickers did he start with?	Sophia has some coins. She then finds 5 coins, then 6 more, and now has 28 coins. How many coins did she start with?

PREVIEW

Addition – Find the Variable

A **variable** is a letter that represents an unknown number. When we don't know a number, we can use a letter to take the place of the unknown number.

Example: $8 + n = 15$

We can figure out the unknown number by balancing the equation. In this equation, $n = 7$.



Question: Find out the value of the variable

1) $7 + n = 14$

$n =$

4) $6 + p = 12$

$p =$

7) $7 + y = 14$

$y =$

10) $5 + t = 15$

$t =$

13) $22 + a = 28$

$a =$

16) $27 + s = 48$

$s =$

2) $3 + 5 = 8$

$p =$

8) $y + 6 = 14$

$y =$

11) $14 + t = 20$

$t =$

14) $30 + a = 40$

$a =$

17) $35 + s = 41$

$s =$

3) $10 + n = 13$

$n =$

6) $p + 4 = 12$

$p =$

12) $20 + t = 25$

$t =$

15) $24 + a = 30$

$a =$

18) $42 + s = 48$

$s =$

PREVIEW

Exit Cards

Cut Out

Cut out the exit cards below and have students complete them at the end of class

Name: _____

Find out the value of the variables

a) $n + 4 = 24$ $n =$ _____

b) $22 + y =$ _____

c) $21 + t = 35$

d) $s + 40 = 48$ $s =$ _____

Name: _____

Find out the value of the variables

a) $n + 4 = 24$ $n =$ _____

b) $22 + y = 29$ $y =$ _____

c) $21 + t = 35$ $t =$ _____

d) $s + 40 = 48$ $s =$ _____

Name: _____

Find out the value of the variables

a) $n + 4 = 24$ $n =$ _____

b) $22 + y = 29$ $y =$ _____

c) $21 + t = 35$ $t =$ _____

d) $s + 40 = 48$ $s =$ _____

Name: _____

Find out the value of the variables

a) $n + 4 = 24$ $n =$ _____

b) $22 + y = 29$ $y =$ _____

c) $21 + t = 35$ $t =$ _____

d) $s + 40 = 48$ $s =$ _____

Finding the Missing Information – To 20

Find out how many coins are in the bag using the information given to you.

Example

There are 9 coins in total and 5 outside of the bag.

Therefore, there are 4 in the bag

$$5 + 4 = 9$$



Instructions

How many coins are in the bags below?

1)



7

2)



10

Answer: _____

3)



12

Ans

15

Answer: _____

5)



17

Answer: _____

Answer: _____

6)



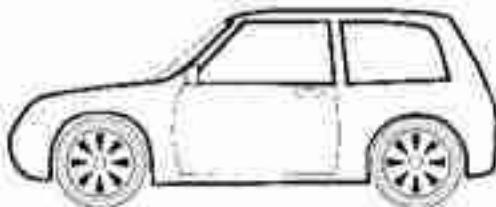
20

Answer: _____

Word Problems – Solving Addition Equations

Questions**Answer the questions below**

1) Tim drove 20km to get to work. Then he drove to the store. When he got to the store, he had driven 28 km in total. How many km did he drive to the store?



2) Steve got 25 points for beating level 1 in a video game. He got 25 more points for beating level 2. How many total points did he have after level 2?



Bonus – He had 75 total points after beating level 2. How many points did he get in level 3?

3) In badminton, Jessica and Erin won their game. They scored 21 points and their opponents only scored 16. Jessica scored 13 of the 21 points. How many points did Erin score?



Pre-Algebra – Balancing Subtraction Equations

Balance the scales by taking away circles from the scale.

Answer: take 4 circles from the scale to make them equal.



7 - 4 = 3

Instruction: How many balls do you need to take away to balance the scales?



$11 - \boxed{\quad} = 8$



$8 - \boxed{\quad} = 5$



$10 - \boxed{\quad} = 4$



$8 - \boxed{\quad} = 1$



$11 - \boxed{\quad} = 3$



$13 - \boxed{\quad} = 2$



$10 - \boxed{\quad} = 4$



$14 - \boxed{\quad} = 1$



$4 - \boxed{\quad} = 0$

Subtraction – Are They Equal?

Are the equations equal? Put an X through the equal sign for any equations that are not equal.

$7 - 2 = 5$

$25 - 6 \neq 18$

$15 - 11 = 4$

Instruction:

Put an x through the equal sign if it is not balanced

PREVIEW

$1) 10 - 5 = 5$	$2) 10 - 4 = 6$	$3) 9 - 5 = 3$
$4) 12 - 6 = 6$	$5) 17 - 8 = 8$	$6) 14 - 3 = 11$
$7) 15 - 2 = 13$	$8) 17 - 7 = 9$	$9) 15 - 4 = 11$
$10) 17 - 10 = 10$	$11) 18 - 9 = 9$	$12) 16 - 8 = 8$
$13) 22 - 4 = 18$	$14) 20 - 10 = 10$	$15) 25 - 5 = 30$
$16) 27 - 0 = 0$	$17) 26 - 1 = 25$	$18) 29 - 5 = 24$
$19) 30 - 7 = 22$	$20) 27 - 6 = 21$	$21) 30 - 30 = 0$

Subtraction to 50 – Are They Equal?

Are the equations equal? Put a slash through the equal sign for any equations that are not equal.

$14 - 3 = 11$

$22 - 3 \neq 18$

$36 - 5 = 31$



Questions Put a slash \neq through the equal sign if it is not balanced

PREVIEW

1) $8 - 2$	2) $24 - 4 = 20$	3) $15 - 4 = 10$
4) $16 - 3 = 12$	5) $19 - 1 = 18$	6) $18 - 3 = 14$
7) $22 - 5 = 17$	8) $26 - 6 = 20$	9) $30 - 3 = 20$
10) $28 - 5 = 23$	11) $31 - 3 = 27$	12) $33 - 3 = 30$
13) $36 - 5 = 31$	14) $39 - 4 = 34$	15) $37 - 4 = 33$
16) $44 - 0 = 44$	17) $46 - 6 = 41$	18) $50 - 5 = 45$

Subtraction Expressions - Equal?

Are the expressions equal? Put a slash through the equal sign for any equations that are not equal

Examples: $8 - 5 = 9 - 6$ $10 - 5 \neq 7 - 1$



Questions Put a slash \neq through the equal sign if it is not balanced

1)

PREVIEW

 $- 7$

7)

 $5 - 3 = 6 - 3$

2)

 $7 - 3 = 8 - 6$ $7 - 5 = 8 - 6$

3)

 $10 - 5 = 5 - 0$ $14 - 2$

4)

 $10 - 7 = 8 - 5$

10)

 $9 - 3 = 4$

5)

 $15 - 7 = 12 - 5$

11)

 $16 - 3 = 14 - 1$

6)

 $23 - 4 = 20 - 2$

12)

 $28 - 5 = 30 - 4$

Pre-Algebra – Balancing Subtraction Equations

Balancing equations means both sides of the equal sign must be the same.

Examples:

$$7 - 4 = \boxed{3}$$

$$14 - 6 = \boxed{8}$$

Questions

Fill in the missing numbers to balance the equations.

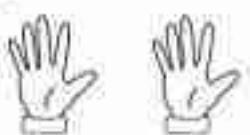
1) 4



2) 3



3) 5



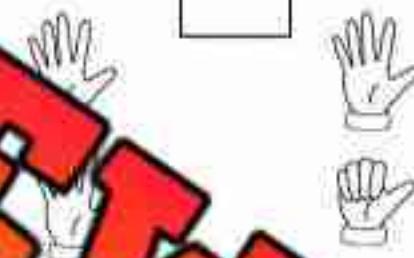
4) 8



-

= 3

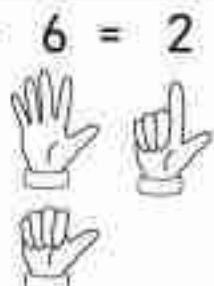
6) 10



-

= 6

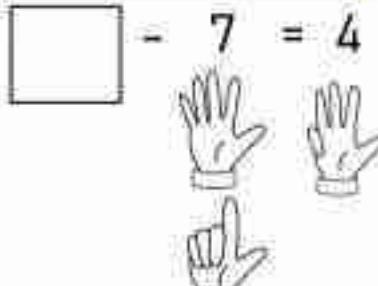
7)



- 6

= 2

8)



- 7

= 4

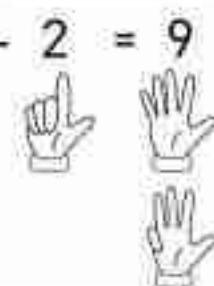
9)



-

= 10

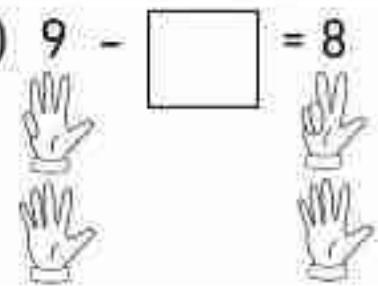
10)



- 2

= 9

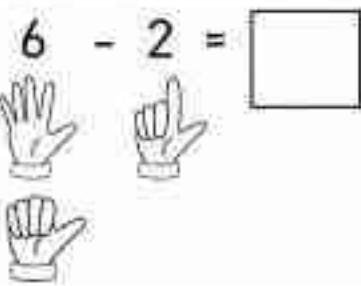
11) 9



-

= 8

12) 6



- 2

=

Pre-Algebra – Balancing Subtraction Equations

Balancing equations means both sides of the equal sign must be the same.

$$\begin{array}{r} 9 \\ \swarrow \quad \searrow \\ 15 - 6 = \boxed{9} \end{array}$$

Examples:

$$\begin{array}{r} 15 \\ \swarrow \quad \searrow \\ 20 - \boxed{5} = 15 \end{array}$$

Questions

Fill in the missing numbers to balance the equations

1) 8

$$2) 6 - 6 = \boxed{}$$

$$3) 9 - 5 = \boxed{}$$

4) 10

$$- \boxed{} = 6$$

$$6) 8 - \boxed{} = 4$$

7)

$$\boxed{} - 6 = 3$$

$$8) \boxed{} - 5 = 1$$

$$\boxed{} - 3 = 7$$

10)

$$10 - \boxed{} = \boxed{}$$

$$11) 12 - \boxed{} = 9$$

13)

$$14 - \boxed{} = 11$$

$$14) 18 - 3 = \boxed{}$$

$$15) 20 - \boxed{} = 15$$

16)

$$22 - \boxed{} = 19$$

$$17) 27 - 10 = \boxed{}$$

$$18) 24 - \boxed{} = 18$$

19)

$$30 - \boxed{} = 20$$

$$20) 28 - 6 = \boxed{}$$

$$21) 30 - \boxed{} = 19$$

Subtraction – Which Equation Matches?

Two of the equations equal the same number. Which one matches the shaded in equation?

Example:

9 - 4	8 - 3	10 - 6
-------	-------	--------



Questions: Circle the equation that matches the shaded in equation

1)

4 - 1

7 - 3

2)

8 - 4

7 - 3

3)

10 - 2

9 - 1

4)

7 - 2

6 - 1

5)

12 - 3

11 - 2

9 - 1

6)

15 - 5

9 - 0

10 - 0

7)

9 - 5

8 - 3

10 - 6

Matching Game: Do The Equations Match?

Objective**What are we learning about?**

To enhance students' understanding of equality within addition and subtraction equations. Students will identify and match pairs of equations that yield the same result, fostering critical thinking and problem-solving skills in a collaborative group setting.

MATERIALS: Materials you will need for the activity.

- Pre-prepared pre-made matching name cards.
- Small bags or envelopes to hold the materials for each group

**Instructions****How you will complete the activity**

1. Before the class, the teacher will cut out the pre-prepared matching name cards.
2. Divide the students into small groups and give each group a small envelope containing a set of the matching cards.
3. In their groups, students will spread out the cards face down on their table.
4. Each person takes a turn to try to match two cards. They will need to solve both equations to see if they match (equal the same).
5. If they find a correct match, they keep the cards out and continue with their next turn. If the cards don't match, they turn them back over in the same place, and the next player takes a turn.
6. The activity continues until all pairs are correctly matched within each group.

Cards

Matching Game Cards

$50 - 25$

$40 - 15$

PREVIEW

$60 - 15$

$10 + 25$

$38 + 12$

$25 + 5$

$70 - 30$

$40 + 10$

Cards

Matching Game Cards

$45 + 15$

$30 + 30$

PREVIEW

$55 + 5$

$60 + 10$

$90 - 40$

$70 + 15$

$65 + 10$

$50 + 25$

Subtraction – Find the Variable

A **variable** is a letter that represents an unknown number. When we don't know a number, we can use a letter to take the place of the unknown number.

Example: $18 - n = 5$

We can figure out the unknown number by balancing the equation. In this equation, $n = 13$.



Question: Find out the value of the variable

1) $9 - n = 5$ n =	5) $9 - p = 5$ p =	3) $3 - n = 0$ n =
4) $6 - 2 = p$ p =	6) $p - 4 = 2$ p =	
7) $10 - y = 3$ y =	8) $y - 7 = 0$ y =	12) $19 - y = 12$ y =
10) $15 - t = 5$ t =	11) $17 - t = 13$ t =	12) $19 - t = 12$ t =
13) $22 - a = 14$ a =	14) $25 - a = 20$ a =	15) $27 - a = 23$ a =
16) $29 - 4 = s$ s =	17) $30 - s = 30$ s =	18) $40 - s = 19$ s =

Word Problems – Solving Subtraction Equations

Questions

Answer the questions below.

1) Mrs. Wilson had 20 pencils at the start of the school year. She gave all the kids in her class 1 pencil. She now has 3 pencils. How many students are in Mrs. Wilson's class?



2) Hudson saved 40 dollars and bought a new toy for 15 dollars. How many dollars does he have left?



Bonus: He saved 15 more dollars. Can he buy a video game for 40 dollars?

3) The grade 2 class planted 42 tomato seeds but only 36 tomato plants grew. How many plants did not grow?



Task Cards: Mystery Number Detectives

Objective**What are we learning about?**

To help students understand and solve one-step algebraic equations by finding the value of a missing number.

Materials**What you will need for the activity.**

- 24 task cards
- Separate sheet for answers
- Pencils

**Instructions****How to use the activity**

1. Introduce the concepts covered in the task cards.
2. Organize the students into pairs and provide each pair with their sets of task cards.
3. Give each pair an answer recording sheet to keep track of their progress.
4. Encourage teamwork by having students collaborate within their pairs on finding solutions.
5. Allow students to select any task card to begin with, emphasizing that they can complete the cards in any order they prefer.
6. Instruct students to record the letter of their chosen answer (A, B, or C) on their answer sheet beside the task card's number.
7. Consider using a timer to create a dynamic challenge, adjusting the duration to fit the lesson's objectives and complexity.
8. After the activity, review the answers collectively, discussing any challenging questions and strategies used to solve them.
9. Have students reflect on the activity, sharing the methods they applied and obstacles they overcame.

Task Cards

Cut out the task cards below

Card 17:

$$25 + e = 55$$

solve for e
a) 30 b) 32 c) 28

Sam has 25 candies. He gets some more and now has 55. How many did he get?

a) 25 b) 30 c) 28

Card 18:**Card 18:**

$$70 - f = 40$$

solve for f
a) 35 b) 28 c) 30

Emma had 50 candies. She lost some candies and now has 30. How many did she lose?

a) 18 b) 12 c) 22

Card 20:

A balloon was 10 inches. It expanded by ___ inches and is now 40 inches. How much did it expand?

a) 30 b) 28 c) 32

Card 21:

$$100 - k = 60$$

solve for k

a) 40 b) 35 c) 50

Emma had 50 cookies. She ate some cookies and now has 22. How many did she eat?

a) 25 b) 30 c) 28

Card 23:

$$19 + l = 40$$

solve for l

a) 21 b) 22 c) 20

Task Cards: Mystery Number Detectives**Answers**

Record your answers below

1

2

4

5

6

7

8

9

10

11

12

13

14

15

16

19

20

21

22

23

24

PREVIEW

Name: _____

Algebra Quiz - Equations

Part 1

Put a slash through the equal sign if it is not balanced

1) $5 + 10 = 15$

2) $10 + 6 = 12$

3) $15 + 10 = 25$

4) $5 + 10$

5) $10 - 4 = 6$

6) $16 - 5 = 11$

Part 2

Find the missing number to balance the equation

1) $3 + 8 = \boxed{\quad}$

3) $9 + \boxed{\quad} = 15$

4) $13 + 5 = \boxed{\quad}$

5) $\boxed{\quad} + 12 = 22$

7) $9 - 6 = \boxed{\quad}$

8) $\boxed{\quad} - 4 = 7$

9) $10 - 5 = \boxed{\quad}$

10) $19 - 5 = \boxed{\quad}$

11) $\boxed{\quad} - 4 = 13$

12) $17 - 2 = \boxed{\quad}$

Part 3

Find out the value of the variable

$7 + n = 10$

$n =$

$n - 5 = 5$

$n =$

$10 + n = 10$

$n =$

$n - 5 = 6$

$n =$

$n + 16 = 22$

$n =$

$n - 3 = 6$

$n =$

$n + 10 = 26$

$n =$

$n - 7 = 10$

$n =$

Part 4

Find out the value of the variable

$a + b + c =$

$b =$

$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$

$n + y + t =$

$n = 3$

$y = 10$

$t = 5$

$a - b = c$

$a = 12$

$b = 8$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$c =$

$e - f =$

$e = 12$

$f = 6$

Part 5

Solve the word problem below. Make sure to write the equation.

Alexa saved 27 dollars from her allowance. She was given some money from her grandmother for her birthday. She now has 40 dollars. How much did her grandmother give her?

Grade 2

C3. Coding

	Curriculum Expectations	Pages That Cover the Expectations
C3.1	solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential and concurrent events	174 – 185, 193 – 199
C3.2	read and alter existing code, including code that involves sequential and concurrent events, and describe how changes to the code affect the outcomes	186 – 192

Activity: Shape Drawer – Coding Shapes

Objective**What are we Learning about?**

Students will use sequential steps to code a path for drawing a square on graph paper, learning how coding can represent math shapes and practicing counting and geometry skills.

Materials

Items you will need for the activity.

- Grid worksheets
- Pencils and erasers
- Rulers (to draw straight lines)
- Chart paper or white board (for teacher demonstration)

**Instructions****How you will complete the activity**

1. Show students a square on the chart paper and ask them to "code" a path to draw it by giving step-by-step directions.
2. Demonstrate: Draw a square on grid paper (4 sides, each 4 squares long) using steps like "forward 4, turn right, forward 4, turn right."
3. Give each student the grid paper worksheets and a pencil and tell them to start at a point on the grid (e.g., mark a dot).
4. Have students write a sequence of steps to draw a square: "right 4, down 4, left 4, up 4"
5. Ask students to draw the path on their graph paper by following their steps, using a ruler to make straight lines.
6. Have the students do the same for other shapes (letters). They should draw the shape and then write the coding sequence.

Coding Shapes

Draw your shapes on the grids and then write the coding instructions

Square	Coding Instructions

T-Shape	Coding Instructions

C-Shape	Coding Instructions

Coding Shapes

Draw your own shape on the grid below. Be creative! Then write the coding instructions.

My Shape

PREDICTION

Coding Instructions

Reading Code – Creating Programs

Question

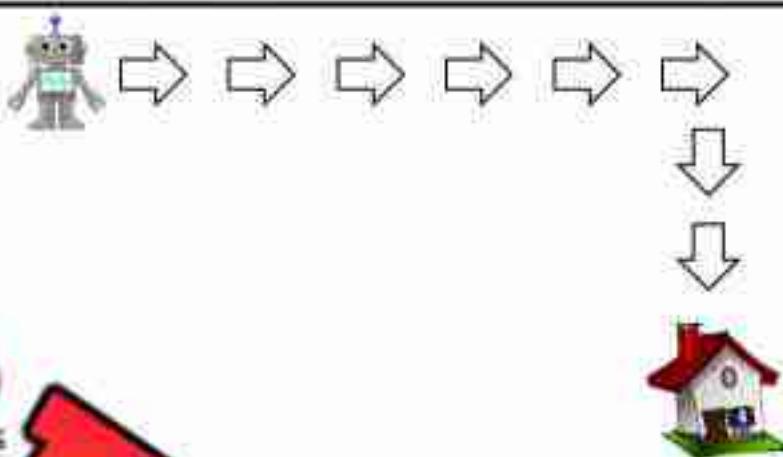
Read the code and create the program

Example

Code

```
go right
go down
open door
```

Robot moved _____ squares



1.

Code

```
go down 2
go right 1
go down 2
go right 5
open door
```

Robot moved _____ squares

2.

Code

```
go right 2
go down 3
go left 2
go down 1
go right 6
open door
```

Robot moved _____ squares



Reading Code – Creating Programs

Question

Read the code and draw the path the robot will take

1.

Code

go left 3

go down 3

go left

open door

Robot moved _____ squares



2.

Code

go down 3

go right 2

enter school

go down 2

go right 4

open door

Robot moved _____ squares



3.

Code

go down 3

go left 5

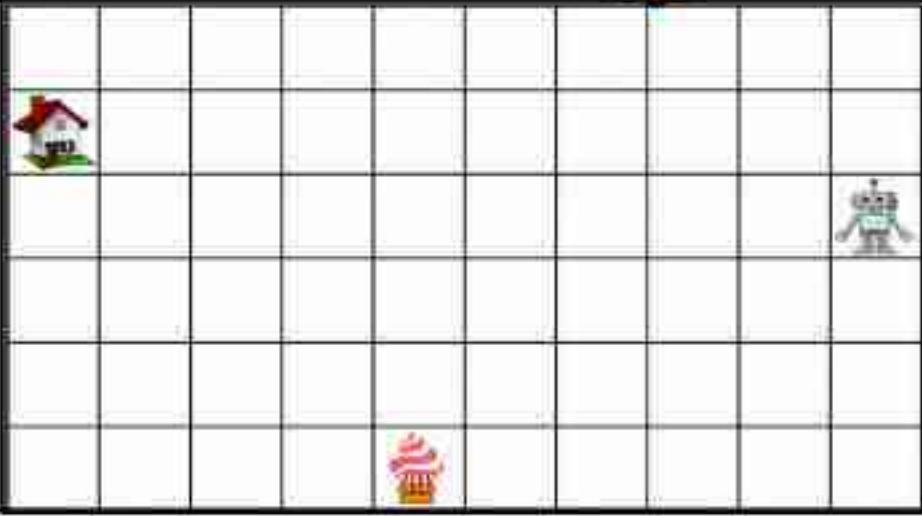
enter ice cream shop

go left 4

go up 4

open door

Robot moved _____ squares



Activity: Dance Party Code

Objective**What are we learning about?**

Students will write a sequence of dance moves to create a short dance routine, practicing sequential events, and then alter the sequence to observe how changes affect the performance.

MATERIALS What you will need for the activity.

- Worksheets for writing dance moves (one per student)
- Pencil or crayon for writing
- Open space in the classroom for dancing
- Optional: Music for a fun atmosphere

**Instructions****How you will complete the activity**

1. Tell students they'll be "coders" creating a dance routine by writing moves.
2. Show them a few simple dance moves (e.g., jump, clap, twirl, stomp, etc.) they can use.
3. Give each student a worksheet (or put them in pairs/small groups) to write a short sequence of 3 or 4 dance moves (e.g., "jump, clap, twirl").
4. Have one student/pair/group read their sequence aloud and perform their dance for the class.
5. Repeat with 1-2 more students/groups, having them share and perform.
6. Wrap up by explaining how the order of moves affect the dance, connecting it to coding sequences.

Example Moves

Choose from the example moves below or make up your own.

Dance Move	Description
Jump	Hop off the ground with both feet.
Clap	Clap hands together once or twice.
Twirl	Spin around in a circle on the spot.
Stamp	Stamp one foot on the ground.
Jump	Jump on one foot.
Wiggle	Shake your whole body side to side.
Wave	Wave one hand in the air.
Step Forward	Take one step forward.
Step Backward	Take one step backward.
Spin	Turn around quickly in a circle.
Sway	Rock side to side slowly.
Tap	Tap one foot lightly on the ground.
Bounce	Bend knees and bounce up and down.
March	Lift knees high and march in place.
Shake	Shake arms or hips side to side.
Point	Point one finger up or to the side.
Kick	Kick one leg forward gently.
Nod	Nod your head up and down.
Twist	Twist your hips side to side.
Reach	Stretch both arms up high.

Dance Party Code – My Code

Instructions

Program your own dance by writing your dance sequence.
(Ex. kick, twirl, step forward, step backward, kick, twirl, step forward, step backward)

My Dance Party Code

PREVIEW

Fixing Code

Question

Put the scrambled code in the correct order by labelling the steps 1-6

1. Go to school and then home

Code

- go up 1

- go down 5

- go right 4

- go left 3

- enter school

- enter home



2. Go to school and then home

Code

- go up 2

- go down 4

- go right 3

- enter school

- go left 1

- enter home



3. Go to school and then home

Code

- go down 2

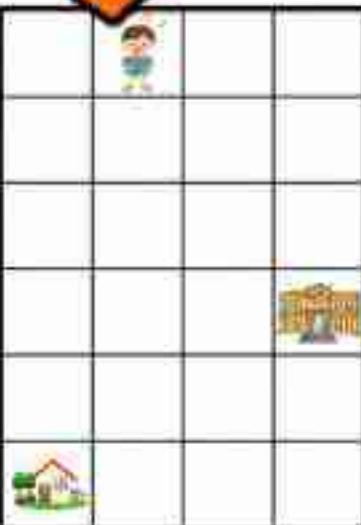
- go down 3

- go right 2

- enter school

- go left 3

- enter home



Interpreting Code

Question

Will the code work? Circle yes or no. Re-write any code that won't work

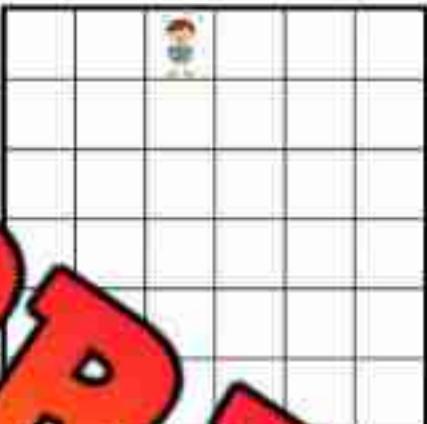
1.

Code

go down 5

go right 2

enter



YES NO

Line 1: _____

Line 2: _____

Line 3: _____

Line 4: _____

2.

Code

go down 4

go right 4

enter library



YES NO

Line 1: _____

Line 2: _____

Line 3: _____

Line 4: _____

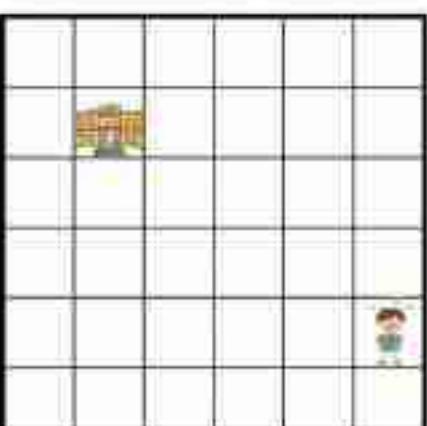
3.

Code

go up 3

go right 4

enter library



YES NO

Line 1: _____

Line 2: _____

Line 3: _____

Line 4: _____

Line 5: _____

Line 6: _____

Activity: Draw a Picture Sequence

Objective**What are we learning about?**

Students will write a sequence of steps to draw a simple picture and identify and fix an error in a given sequence, practicing how to create, follow, and debug sequential events.

Materials**What you will need for the activity**

- What you will need for the activity: a written sequence of drawing steps, a worksheet containing a sequence (one per student), space to write a corrected sequence, and a large area to draw (one per student)

Instructions**What you will do for the activity**

1. Tell students they'll be creating a picture by writing a sequence of drawing steps, and they'll also fix mistakes in a sequence.
2. Show them a correct smiley face on the board and explain the steps (e.g., "draw a circle, add two eyes, draw a smile").
3. Give each student the worksheet with a pre-written sequence that has errors (e.g., "draw a square, add two eyes, draw a smile"—the first step is "draw a square" instead of "draw a circle").
4. Ask students to follow the given sequence and draw the picture on the back of their worksheet.
5. Discuss as a class why the drawing doesn't look like it should (e.g., it has a square head instead of a round one).
6. Have students identify the errors and write a corrected sequence on their worksheet (e.g., "draw a circle, add two eyes, draw a smile").
7. Ask them to draw the picture again using their corrected sequence.
8. Have a few students share their corrected sequence and new drawing, discussing how fixing the errors made the picture correct.
9. Wrap up by explaining how finding and fixing mistakes is part of coding, just like they debugged their drawing sequence.



Instructions

First Drawing – With Errors: Follow the code and draw the picture below.

Step	Instruction
1	print: draw a large triangle on the bottom of the page for the mountain
2	print: draw a small square above the mountain for the cloud
3	print: draw a small circle on the bottom left of the mountain for the sun
4	print: draw a tall rectangle on the right of the mountain for the tree trunk
5	print: draw a small triangle on top of the tree trunk for the tree leaves
6	print: draw a small semi-circle above the tree for the bird
7	print: draw a small semi-circle connected to the other one for the bird
8	print: draw a small circle on the mountain for a path

PREVIEW

Instructions

Place a checkmark if the code is written correctly and an "x" if it is wrong. Then re-draw the picture the correct way.

Step	Instruction	✓ ✗
1	print: draw a large triangle on the bottom of the page for the mountain	
2	print: draw a small square above the mountain for the cloud	
3	print: draw a small circle on the bottom left of the mountain for the sun	
4	print: draw a tall rectangle on the right of the mountain for the tree	
5	print: add a small triangle on top of the tree trunk for the tree leaves	
6	print: draw a small semi-circle above the tree for the bird	
7	print: draw another semi-circle connected to the other one for the bird	
8	print: draw a small circle on the right of the mountain for a path	

PREVIEW

Working with Code

Question

Read the code and write what will happen. The first one is done for you

1.

Code

```

Code1 = "VE"
Code2 = "LO"
Code3 = "ER"
Code4 = "F"
Code5 = "I"
print ("", Code2, Code3, Code4, Code5, Code1)

```

The Computer Program:

I LOVE CODE



2.

Code

```

Code1 = "F"
Code2 = "UN"
Code3 = "TH"
Code4 = "MA"
Code5 = "IS"
print ("I think", Code4, Code3, Code5,
      Code1, Code2)

```

Computer Program:

3.

Code

```

Code1 = "A"
Code2 = "PRO"
Code3 = "MER"
Code4 = "GRAM"
Code5 = "ING"
print ("I am", Code1, Code2, Code4, Code3)

```

The Computer Program:

Working with Code

Code Bank

```
JillPeriod1 = 3
```

```
JillPeriod2 = 7
```

```
JillPeriod3 = 5
```

```
JillTotal = JillPeriod1 + JillPeriod2 +
```

```
JillPeriod3
```

```
points = 15
```

Example - The Computer Program:

```
print ("In the second period of the game, Jill  
scored" JillPeriod2, "points.")
```

In the second period of the game, Jill
scored 7 points.

Question: Use the Code Bank to read the codes. Write what the program will say.

1. Code

Computer Program:

```
print ("In the first period  
of the game, Jill scored"  
JillPeriod1, "points.")
```

Computer Program:
2. Code

Computer Program:

```
print ("Jill had",  
JillShots, "shots on goal  
yesterday.")
```

Computer Program:
3. Code

Computer Program:

```
print ("Jill scored",  
JillTotal, "points in the  
game yesterday.")
```

Computer Program:

Name: _____

Coding Quiz

Part 1

Write the code below



Robot moved _____ squares

1. Write the code that gets the robot to the door

Line 1: _____

Line 2: _____

Line 3: _____

2. Write the code that gets the robot to the store and then home.

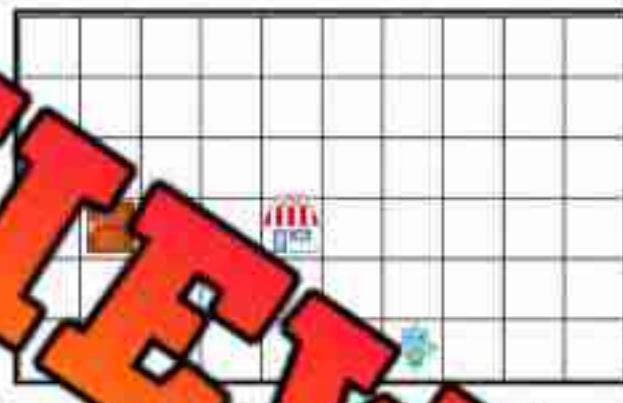
Line 1: _____

Line 2: _____

Line 3: _____

Line 4: _____

Line 5: _____



Part 2

Read the code and create the program

3.

Code

go down 2

go right 1

go down 2

go right 5

open door



Robot moved _____ squares

Part 3 Put the scrambled code in the correct order by labelling the steps 1-6

4. Go to school and then home

Code

- go up 2
- go down 5
- go right 1
- enter school
- go left 3



Part 4 Write 'yes' or 'no' to work. Write yes or no. Re-write any code that won't work

5.

Code

- go down 5
- go right 2
- enter library
- go left 5
- open door



Line 1:	YES NO
Line 2:	
Line 3:	
Line 4:	
Line 5:	

Part 5 Write the message that the code has programmed

6.

Code

Code1 = "DE"

Code2 = "TO"

Code3 = "I"

Code4 = "CO"

print ("I love", Code2, Code4, Code1, Code3)

The Computer Program:
