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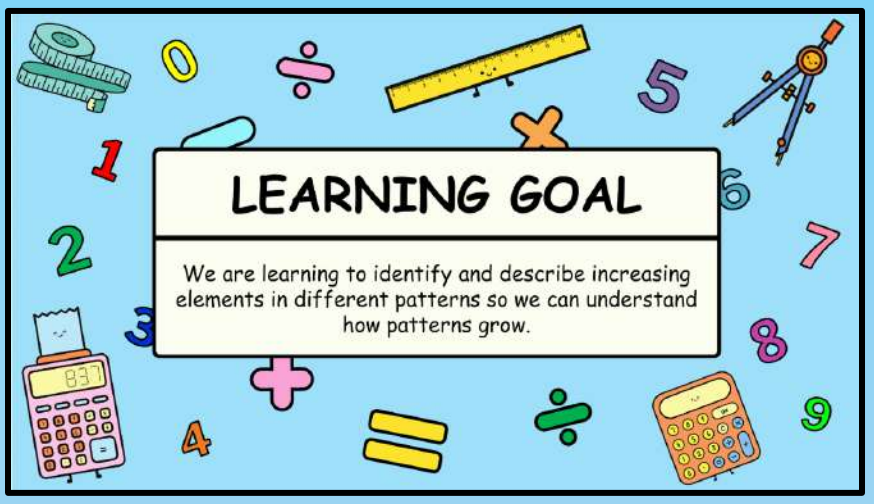
Google Slides Lessons Preview

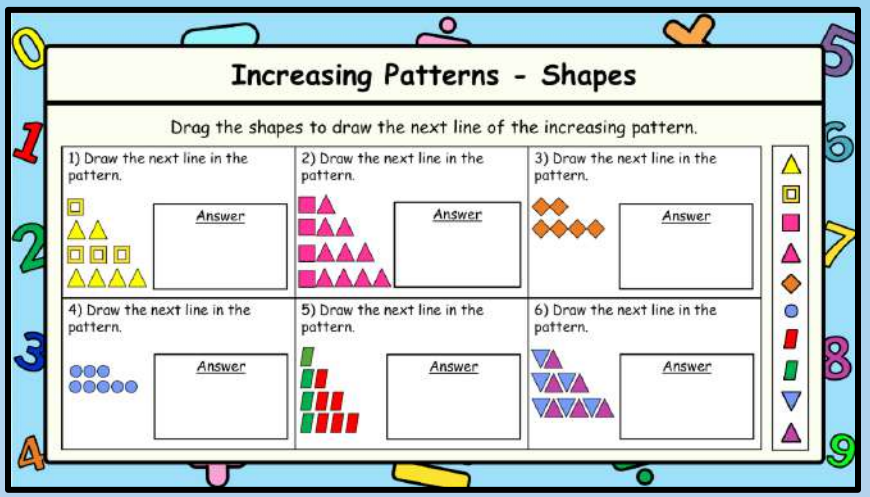
Saskatchewan Math Curriculum
Patterns & Relations – Grade 3

3-Part Lesson Format

Part 1 – Minds On!

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



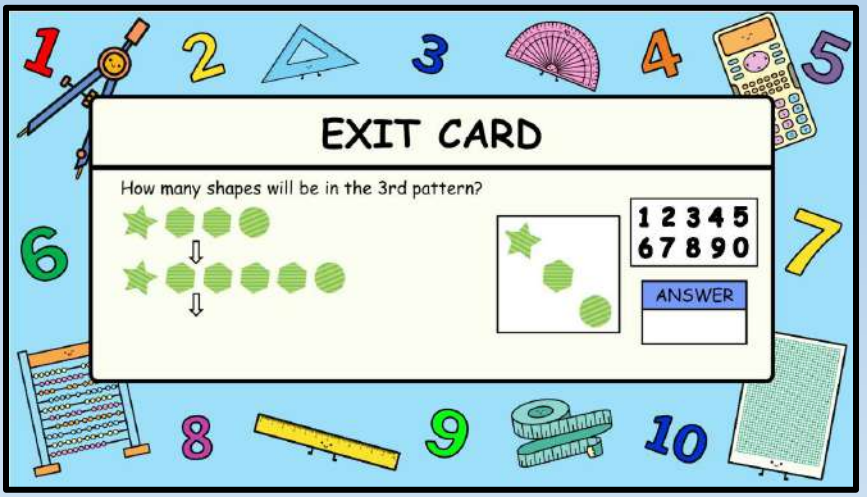


Part 2 – Action!

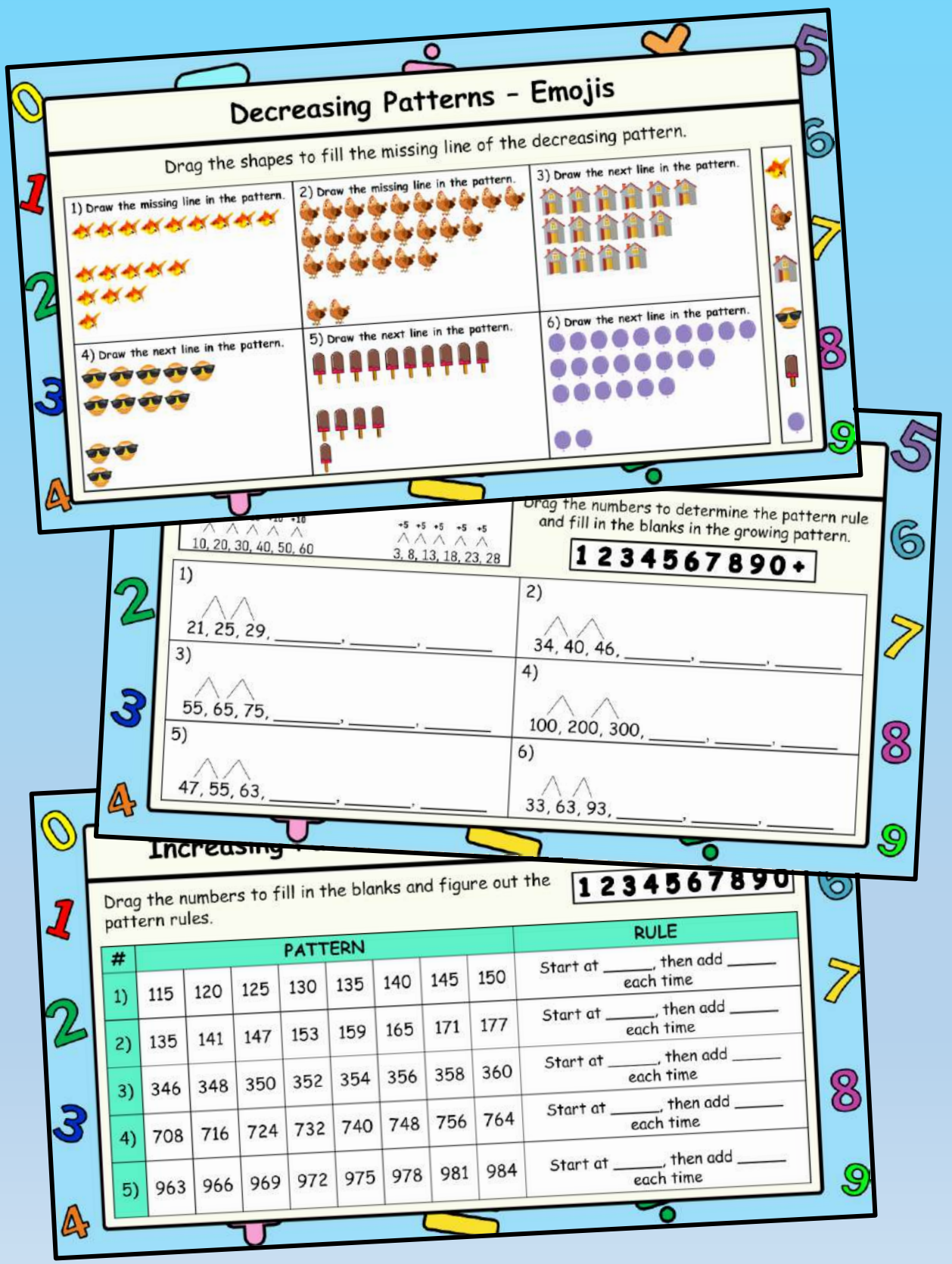
- Writing
- Matching
- Drag and Drop
- Drawing
- And More!

Part 3 – Consolidation!

- Exit Cards
- Quizzes
- Reflection
- And More!

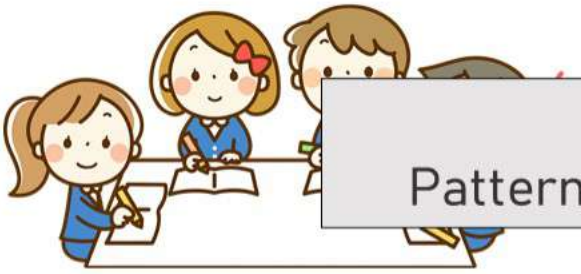


Saskatchewan Math Curriculum
Patterns & Relations – Grade 3



Saskatchewan Math Curriculum
Patterns & Relations – Grade 3

Workbook Preview



Grade 3
Patterns and Relationships

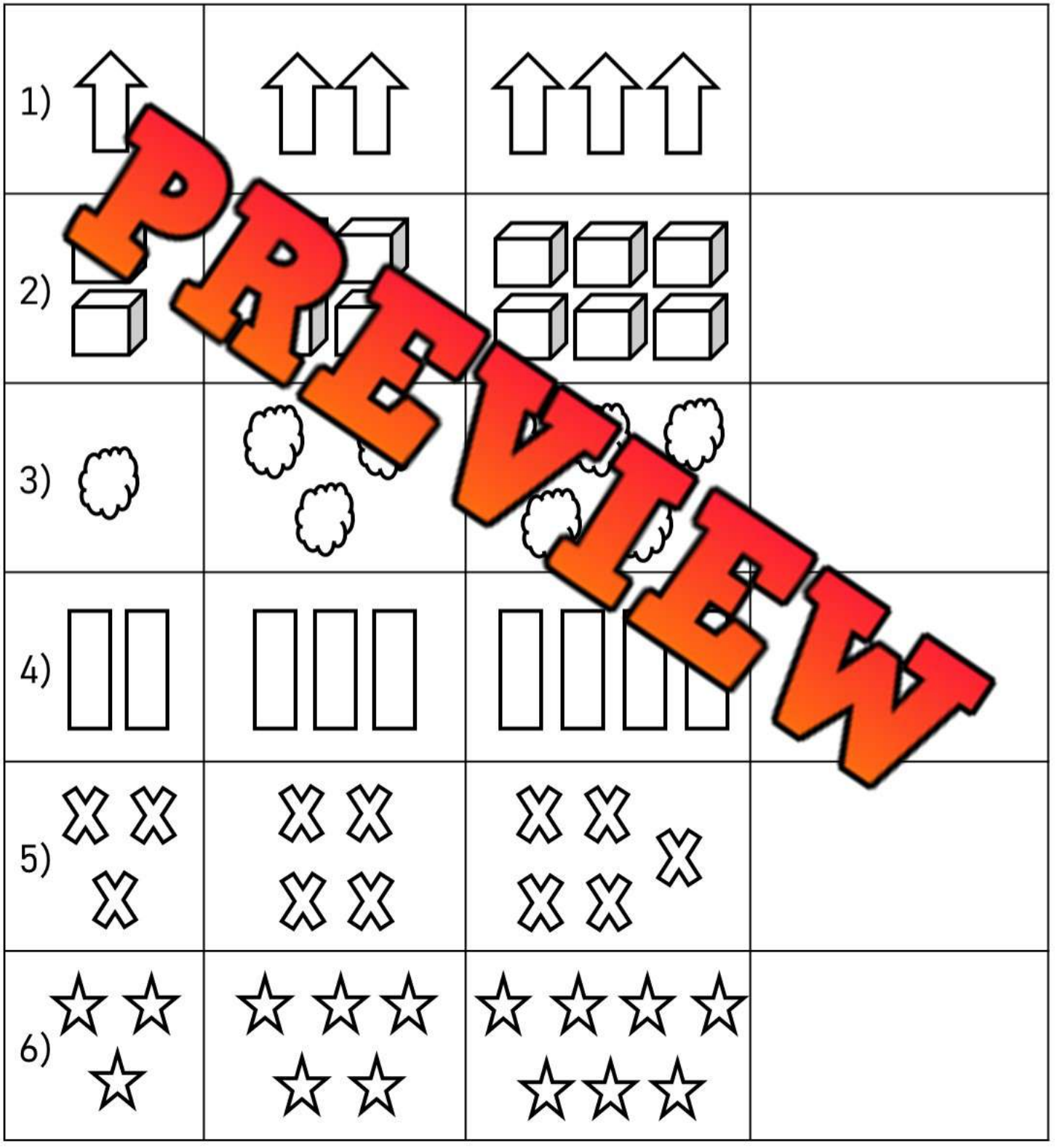
	Curriculum Expectations	Pages
P3.1	Demonstrate understanding of increasing and decreasing patterns including: · observing and describing · extending · comparing	5-77
P3.2	one-step addition and subtraction equations involving symbols representing an unknown quantity.	80-130

Name: _____ 5

Curriculum Connection
P3.1

Increasing Patterns

Questions	Draw the shapes in the last column



Name: _____ 7

Curriculum Connection
P3.1

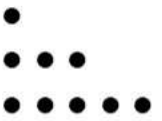
Increasing Patterns – Shapes

Questions | Draw the next line of the increasing pattern

1) Draw the next line in the pattern.

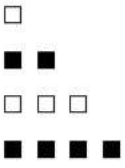
Answer

2) Draw the next line in the pattern.



Answer

3) Draw the next line in the pattern.

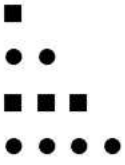


Answer

4) Draw the next line in the pattern.

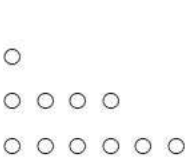
Answer

5) Draw the next line in the pattern.



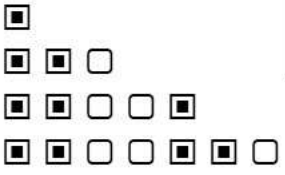
Answer

6) Draw the next line in the pattern.



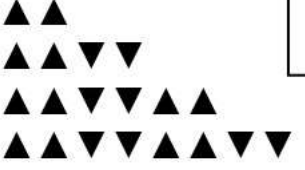
Answer

7) Draw the next line in the pattern.



Answer

8) Draw the next line in the pattern.



Answer

Exit Cards

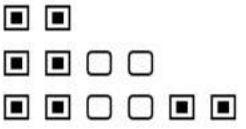
Cut Out Cut out the exit cards below and have students complete them at the end of class

Name: _____

Draw the next 2 lines in the pattern.

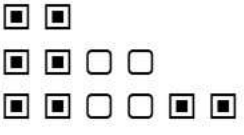
Name: _____

Draw the next 2 lines in the pattern.



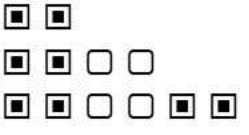
Name: _____

Draw the next 2 lines in the pattern.



Name: _____

Draw the next 2 lines in the pattern.



Name: _____ 10

Curriculum Connection
P3.1

Increasing Patterns – Shapes

Part 1 Draw the next figure in the pattern by adding one block

1) Figure 1 Figure 2 Figure 3 Figure 4

2) Figure 1 Figure 2 Figure 3 Figure 4

3) Figure 1 Figure 3 Figure 4

4) Figure 1 Figure 2 Figure 4

Part 2 Draw the next figure by adding two [illegible]. Hi[illegible] the added blocks

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

Name: _____ 11

Curriculum Connection
P3.1

Growing Patterns Found in Real Life

Directions Describe how the pattern is growing. Is there an increase in the number of elements or the size of the elements from one term to the next?

Visual	1) Are the number of elements growing in size?
	2) Are the elements increasing in number?

Visual	1) Are the number of elements growing in size?
	2) Are the elements increasing in number?

Visual	1) Are the number of elements growing in size?
	2) Are the elements increasing in number?

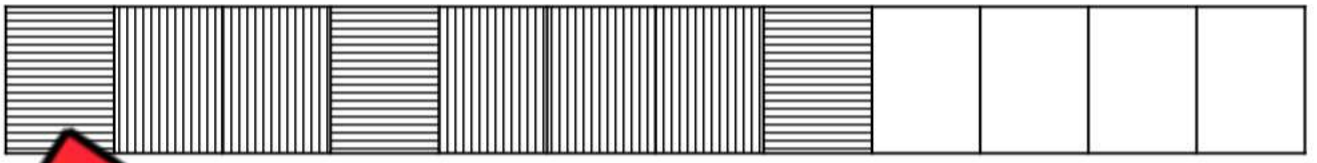
Name: _____ 13

Curriculum Connection
P3.1

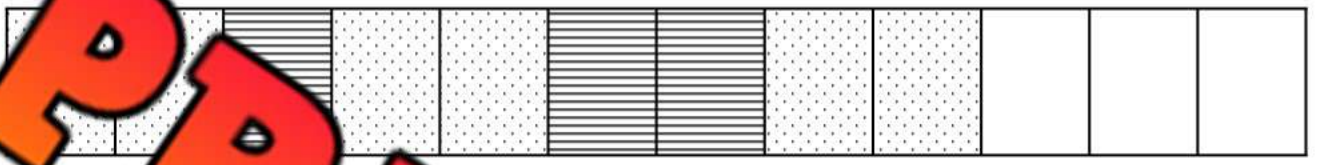
Increasing Patterns – Beading

Questions Draw the remaining patterns on the bracelets

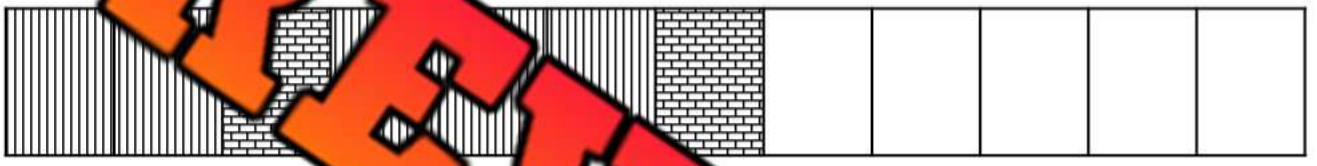
1)



2)



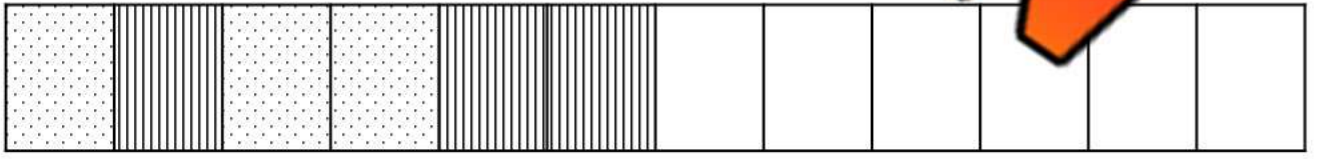
3)



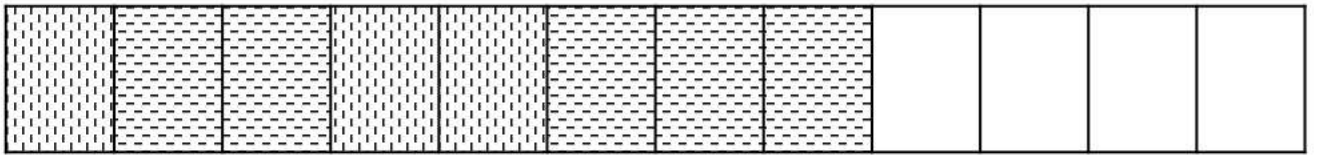
4)

5)

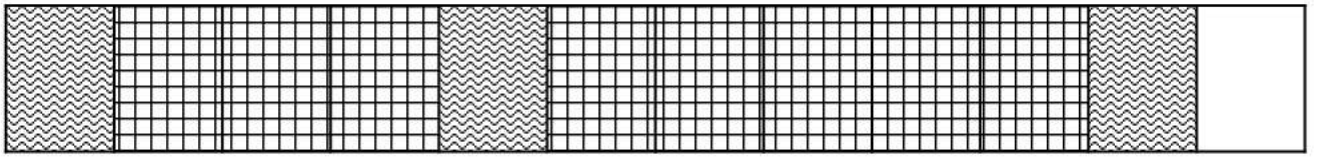
6)



7)



8)



Name: _____

Curriculum Connection
P3.1

Increasing Patterns – B...ing

Questions Draw your own bracelets using increasing patte...

Name: _____ 15

Curriculum Connection
P3.1

Increasing Patterns – Beading

Questions	Draw your own necklace using an increasing pattern

Name: _____ 17

Curriculum Connection
P3.1

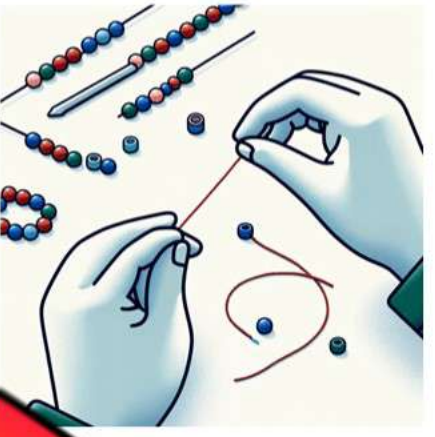
Activity Title: Pattern Palooza Necklace

Objective — What are we learning about?

To help students understand and create growing patterns by making their own patterned necklaces. This activity will enhance their ability to recognize, predict, and extend patterns, while allowing them to engage in a hands-on craft.

Materials — What you will need for the activity.

- Coloured [illegible] beads (multiple colours)
- String or yarn
- Scissors
- Paper and pencil (for planning the pattern)



Instructions — How you will complete the activity

1. Distribute a length of string or yarn to each student, ensuring it is long enough to make a necklace.
2. Provide each student with a variety of coloured beads.
3. Instruct students to sketch out a pattern on paper before starting their necklace. Encourage them to think of patterns that grow, such as adding one more bead of the same colour before switching to a new colour, or creating a sequence that grows in number and then repeats.
4. Once they have planned their pattern, students should start threading the beads onto the string according to their design.
5. When they have finished adding beads, help them tie off the necklace securely.
6. Have each student present their necklace and explain the pattern they chose.

Name: _____ 19

Curriculum Connection
P3.1

Reflection | Answer the questions below.

1) Describe the pattern you made.

2) How d decide on the colours for your pattern?

3) What was the mo reating your necklace?

4) If you were to create another necklace, how pattern?

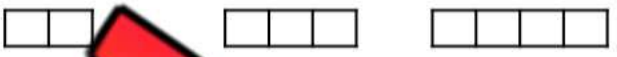
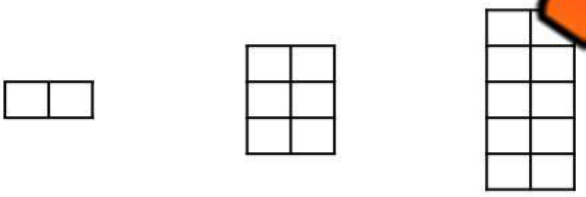
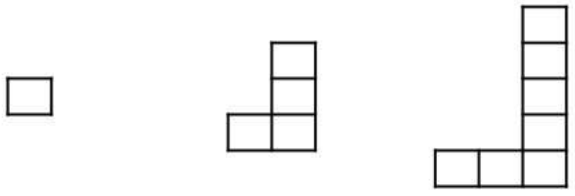
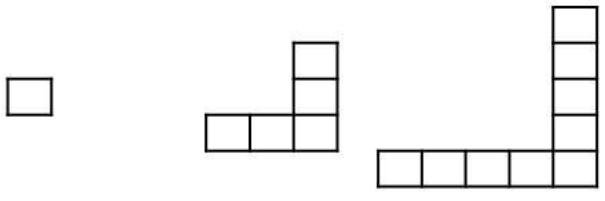
5) Draw your pattern below.

Name: _____ 20

Curriculum Connection
P3.1

Representing Picture Sequence With Numbers

Questions Write the numerical sequence that represents the picture sequence

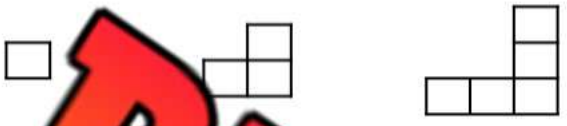
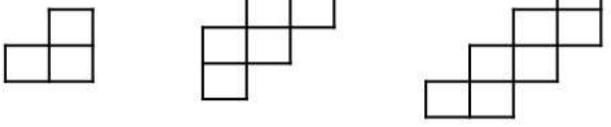
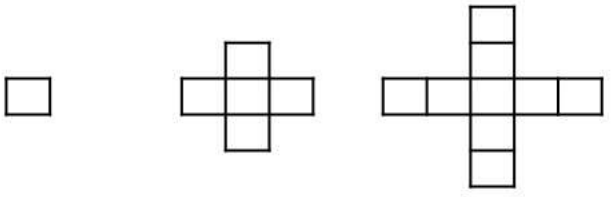
	Numerical Sequence
1) F… F… Figure 3 	_____, _____, _____
2) Figure 1 Figure 2 Figu… 	_____, _____, _____
3) Figure 1 Figure 2 Figure 3 	_____, _____, _____
4) Figure 1 Figure 2 Figure 3 	_____, _____, _____
5) Figure 1 Figure 2 Figure 3 	_____, _____, _____

Name: _____ 21

Curriculum Connection
P3.1

Representing Picture Sequence With Numbers

Questions Write the numerical sequence that represents the picture sequence

	Numerical Sequence
1) Figure 1  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	_____, _____, _____, _____

Name: _____ 22

Curriculum Connection
P3.1

Activity Title: Pattern Pass Along

Objective

What are we learning about?

To engage students in understanding and creating growing patterns using blocks, enhancing their pattern recognition skills and encouraging cooperative learning. Students will start a pattern and then adapt and extend patterns started by their peers.

Materials

will need for the activity.

- A variety of blocks or stacking cubes
- Timers or stopwatches
- Paper and pencils for each student to record their original pattern and observations

Instructions

How you will complete the activity

1. Each student receives an equal number of blocks in different colours.
2. Allow three minutes for every student to start their growing pattern on their desk or designated workspace.
3. After three minutes, instruct every student to move to the desk to their right.
4. Give students two minutes to analyze the pattern in front of them and then add on to it, continuing the growing sequence. They should only add 1 more figure.
5. Repeat step 4 until each student has returned to their original starting position or until students begin running out of blocks.
6. Once back at their starting position, each student should observe how their initial pattern has evolved.
7. Have students write down any changes they notice and what additions were made by others. Does the pattern still work?

Name: _____ 23

Curriculum Connection
P3.1

Reflection | Answer the questions below.

1) Describe the pattern you made.

2) Did an[illegible]hange the pattern so that it didn't work any more? Explain.

3) Did you find it ch[illegible]eone else's pattern? Why or why not?

4) What was the coolest pattern you saw while [illegible]lass?

5) Draw your favourite pattern below.

Exit Cards

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

Name: _____

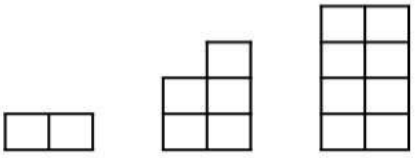
a) Draw the next figure.

b) Write the numerical sequence that represents the picture sequence.

_____, _____, _____, _____

Name: _____

a) Draw the next figure.

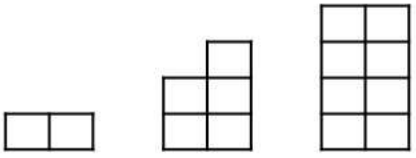


b) Write the numerical sequence that represents the picture sequence.

_____, _____, _____, _____

Name: _____

a) Draw the next figure.

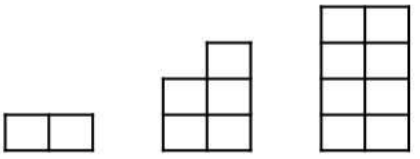


b) Write the numerical sequence that represents the picture sequence.

_____, _____, _____, _____

Name: _____

a) Draw the next figure.



b) Write the numerical sequence that represents the picture sequence.

_____, _____, _____, _____

Name: _____ 26

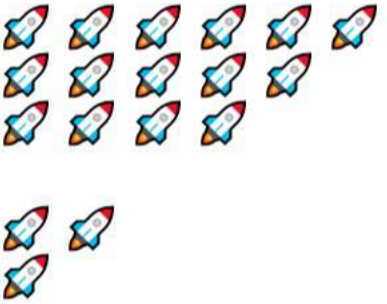
Curriculum Connection
P3.1

Decreasing Patterns – Emojis

Questions | Draw the missing line of the decreasing pattern

1) Draw the missing line in the pattern.

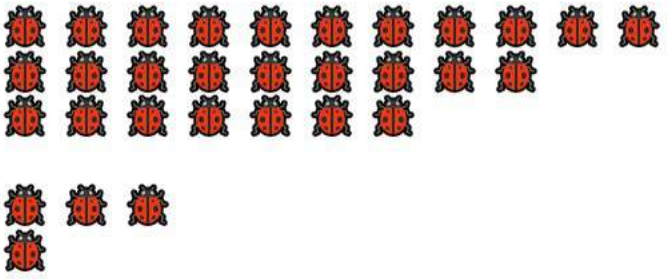
2) Draw the missing line in the pattern.



3) Draw the missing line in the pattern.

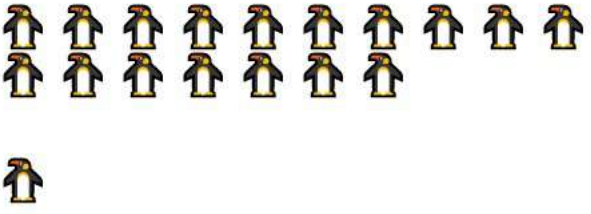
4) Draw the missing line in the pattern.

5) Draw the missing line in the pattern.



6) Draw the missing line in the pattern.

7) Draw the missing line in the pattern.



8) Draw the missing line in the pattern.

Name: _____ 27

Curriculum Connection
P3.1

Decreasing Patterns

Questions | Fill in the numerical sequences for the patterns below

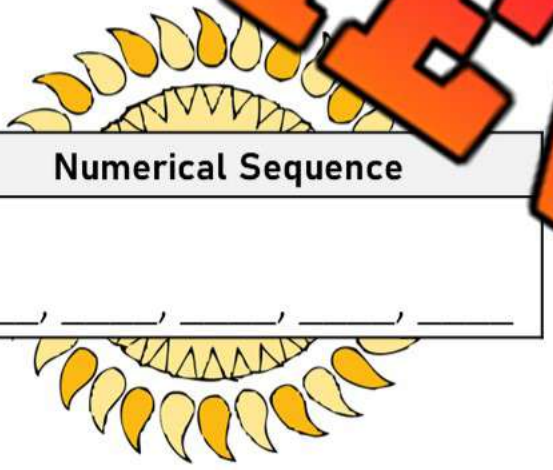
1) Kerry kept track of how many cookies she ate each day using addition signs.

Day 1 Da... Day ...y 5

Numerical Sequence

_____, _____, _____, _____, _____

2) Ally writes down how many days it was ...ny each month from June – November.

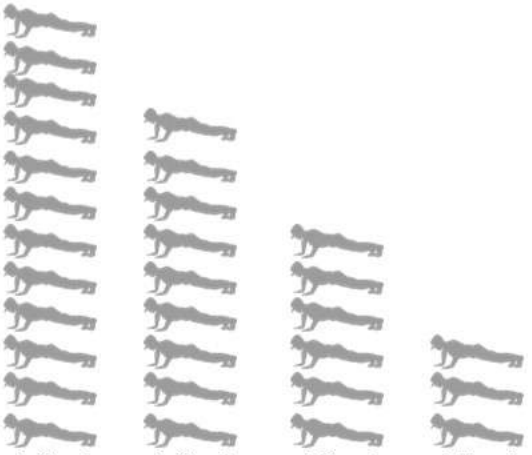


Numerical Sequence

_____, _____, _____, _____, _____

June July Au...

3) Sam counted how many push-ups he could do every minute for 5 minutes.



Min 1 Min 2 Min 3 Min 4 Min 5

Numerical Sequence

_____, _____, _____, _____, _____

Name: _____ 29

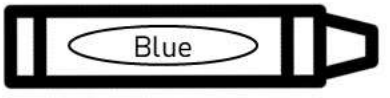
Curriculum Connection
P3.1

Hundreds Chart Patterns

Questions Fill in the missing numbers

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

Directions Follow the instructions below

1) Colour the odd numbers 

2) Colour the even numbers 

Name: _____ 30

Curriculum Connection
P3.1

Hundreds Chart Patterns

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

Directions Follow the instructions below

A number pattern needs to have a rule that the pattern follows. Colour the numbers in the hundreds chart that show the pattern rule

Rule: start at 5, add 5 each time

Name: _____ 31

Curriculum Connection
P3.1

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			24	25	26	27	28	29	30
31			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				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

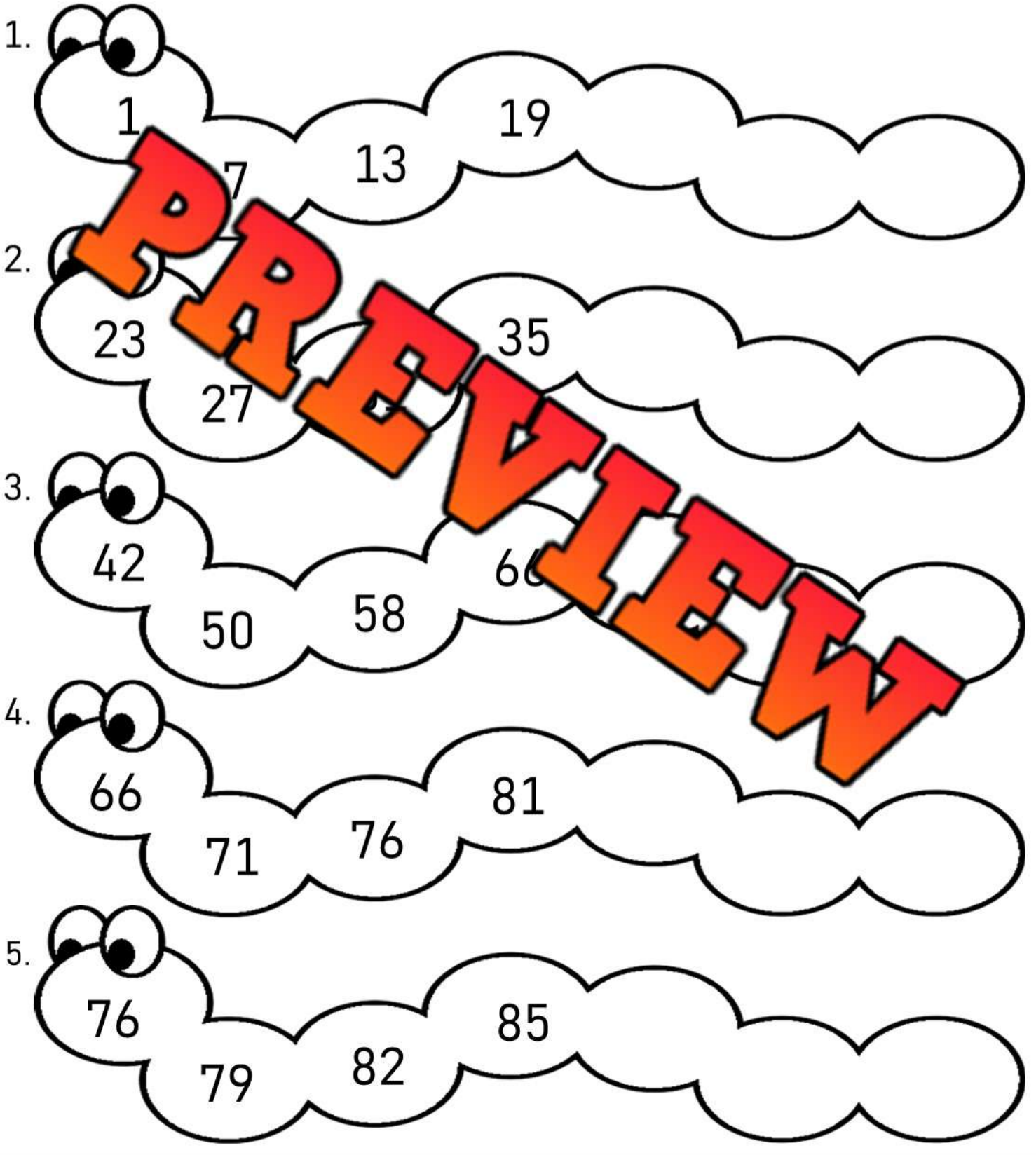
Colour the pattern rule: start at 1,									
1	2	3	4	5	6	7	8		10
11	12	13	14	15	16	17			20
21	22	23	24	25	26	27	28		30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91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

Name: _____ 33

Curriculum Connection
P3.1

Increasing Pattern – Numbers to 100

Questions	Fill in the blanks below



Name: _____ 36

Curriculum Connection
P3.1

Increasing Pattern – Numbers to 1000

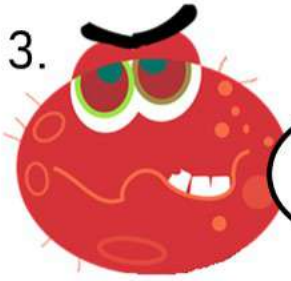
Questions	Fill in the blanks below

1. 

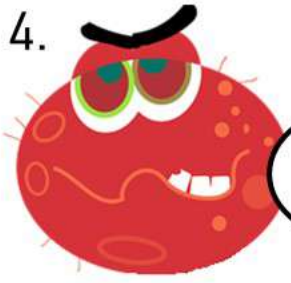
	104		112		120		128	

2. 

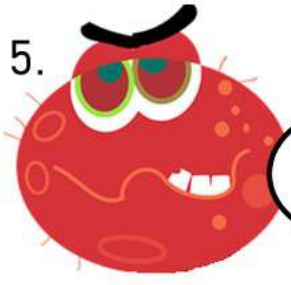
	24		255	261				

3. 

406		420				448		

4. 

	686		706		726		746	

5. 

815		831		847		863		

Name: _____ 37

Curriculum Connection
P3.1

Growing Patterns - Addition

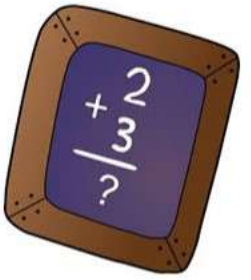
Growing/Increasing Patterns

+10 +10 +10 +10 +10

10, 20, 30, 40, 50, 60

+5 +5 +5 +5 +5

3, 8, 13, 18, 23, 28



Part 1 owing Patterns - Addition

1) 2, 4, 6, _____	2) 6, 10, 14, _____, _____, _____
3) 10, 15, 20, _____, _____, _____	258, _____, _____, _____
5) 702, 708, 714, _____, _____, _____	6) 0, _____, _____

Part 2 Follow the rule by adding the next number in the

1) (Add 2) 7, 9, 11, _____, _____, _____	2) (Add 3) 22, 25, 28, _____, _____, _____
3) (Add 6) 32, 38, 44, _____, _____, _____	4) (Add 5) 115, 120, 125, _____, _____, _____
5) (Add 10) 604, 614, 624, _____, _____, _____	6) (Add 4) 942, 946, 950, _____, _____, _____

Name: _____ 38

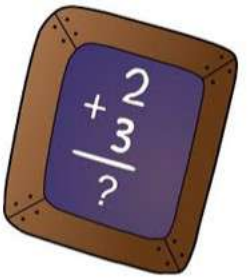
Curriculum Connection
P3.1

Growing Addition Patterns

+4 +4

2, 6, 10, 14, 18, 22

Pattern Rule: Start at 2, add 4 each time.



Questions | Growing Patterns – Addition

1) 5, 10, 15, _____, _____, _____

Pattern Rule: _____

5) 100, 200, 300, _____, _____, _____

Pattern Rule: _____

2) 34, 38, 42, _____, _____, _____

Pattern Rule: _____

6) 12[illegible], _____, _____, _____

[illegible]n Rule: _____

3) 83, 90, 97, _____, _____, _____

Pattern Rule: _____

7) 159, 165, 171, _____, _____, _____

Pattern Rule: _____

4) 100, 125, 150, _____, _____, _____

Pattern Rule: _____

8) 341, 348, 355, _____, _____, _____

Pattern Rule: _____

Exit Cards

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

Name: _____

Fill in the blanks by figuring out the pattern rule.

104, 110, 116, _____, _____, _____

Pattern Rule:

_____

_____

Name: _____

Fill in the blanks by figuring out the pattern rule.

104, 110, 116, _____, _____, _____

Pattern Rule:

_____

_____

Name: _____

Fill in the blanks by figuring out the pattern rule.

104, 110, 116, _____, _____, _____

Pattern Rule:

_____

_____

Name: _____

Fill in the blanks by figuring out the pattern rule.

104, 110, 116, _____, _____, _____

Pattern Rule:

_____

_____

Name: _____ 40

Curriculum Connection
P3.1

Increasing Patterns Rules – Adding To 100

Questions Fill in the blanks by figuring out the pattern rules

12, 15, 18, 21, 24, 27, 30

t at _____, then add _____ each time

8, 53, 58, 63, 68, 73

Sta add _____ each time

21, 31, 41 71, 81

Start at _____, then ad time

37, 43, 49, 55, 61, 73

Start at _____, then add _____ eac

54, 61, 68, 75, 82, 89, 96

Start at _____, then add _____ each time

40, 49, 58, 67, 76, 85, 94

Start at _____, then add _____ each time

Name: _____ 43

Curriculum Connection
P3.1

Using Pattern Rules – Adding To 1000

Questions	Write your own patterns using the pattern rule

1) _____, _____, _____, _____, _____, _____

Rule: Start at 215, add 10 each time

2) _____, _____, _____, _____, _____, _____

Pattern R ar dd 6 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 521, add h t

4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 675, add 7 each time

5) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 808, add 3 each time

Name: _____ 44

Curriculum Connection
P3.1

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 _____ add _____ each time

3) 35, 45, 55, _____, _____, _____

Pattern Rule: Start at _____ each time

4) 150, 160, 170 , _____, _____, _____

Pattern Rule: Start at _____ time

5) 673, 677, 681, _____, _____, _____

Pattern Rule: Start at _____ add _____ each time

Part 2 Write your own patterns using the pattern rule

1) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 20, add 5 each time

2) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 110, add 7 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 27, add 5 each time

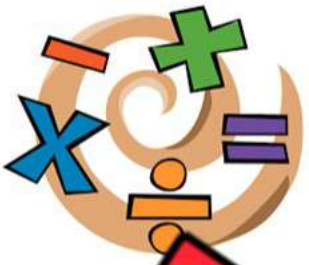
4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 546, add 4 each time

Name: _____ 45

Curriculum Connection
P3.1

Input/Output Table – Pattern Rules



Rule: add 5	
In	Out
3	8
16	21
23	28
42	47

Ques... the input/output tables below

In	Out
15	
20	
27	
32	

Rule: add 2	
In	Out
5	
14	
27	
3	

Rule: add 4	
In	Out
41	
53	
67	
78	

Rule: add 3	
	Out
71	
79	
84	
91	

Rule: add 5	
In	Out
50	
65	
80	
95	

Rule: add 10	
In	Out
29	
41	
58	
72	

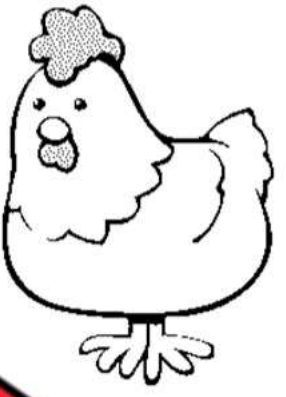
Name: _____ 47

Curriculum Connection
P3.1

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?



How many days would the hen need to lay 5

Name: _____ 48

Curriculum Connection
P3.1

Patterning Word Problem - Earnings

Questions | Follow the problem-solving steps below

- ☐ Read the problem carefully
- ☐ Underline important information
- ☐ Draw pictures
- ☐ Write a number sentence
- ☐ Solve the problem
- ☐ Check your answer

Luna [illegible] week for 6 days. The first day she made $25 and [illegible] day, she had $50. After the third day she had $[illegible].

a) How much [illegible] the 6 days of work?

b) How much did she make each day?

Name: _____ 49

Curriculum Connection
P3.1

Patterning Word Problem – Growing Hair

Questions | Follow the problem-solving steps below

- ☐ Read the problem carefully
- ☐ Underline important information
- ☐ Draw pictures
- ☐ Write a number sentence
- ☐ Solve the problem
- ☐ Check your answer

Avery's hair was 150mm long in January. In February, her hair was 162mm long. In March, her hair was 174mm long.

a) How long will her hair be in April if the pattern continues?

b) How long will her hair be in July?

Name: _____ 50

Curriculum Connection
P3.1

Patterning Word Problem - Snowfall

Questions | Follow the problem-solving steps below

- ☐ Read the problem carefully
- ☐ Underline important information
- ☐ Draw pictures
- ☐ Write a number sentence
- ☐ Solve the problem
- ☐ Check your answer

The sn[illegible] outside Aidan's house. He records the height of the [illegible] After the 1st hour, it was 200mm. After the 2nd hour, it was [illegible] the 3rd hour it was 320mm.

a) What will th[illegible]ow be after the 4th hour?

b) What will the height of the snow be after the 7th hou[illegible]

Exit Cards

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

Name: _____

Solve the word problem below

Kevin practices his piano lessons every day. On the first day, he practices for 15 minutes. Each day, he practices 5 minutes longer than the day before. How many minutes will he practice on the fourth day?

_____

_____

Name: _____

Solve the word problem below

Kevin practices his piano lessons every day. On the first day, he practices for 15 minutes. Each day, he practices 5 minutes longer than the day before. How many minutes will he practice on the fourth day?

_____

_____

Name: _____

Solve the word problem below

Kevin practices his piano lessons every day. On the first day, he practices for 15 minutes. Each day, he practices 5 minutes longer than the day before. How many minutes will he practice on the fourth day?

_____

_____

Name: _____

Solve the word problem below

Kevin practices his piano lessons every day. On the first day, he practices for 15 minutes. Each day, he practices 5 minutes longer than the day before. How many minutes will he practice on the fourth day?

_____

_____

Name: _____ 52

Curriculum Connection
P3.1

Shrinking Patterns - Subtraction

Shrinking/Decreasing Patterns

-10 -10 -10 -10 -10

60, 50, 40, 30, 20, 10

-5 -5 -5 -5 -5

45, 40, 35, 30, 25, 20

Part 1

Fill in the missing numbers in the pattern

1) 12, 10, 8, _____, _____, _____

2) 23, 19, 15, _____, _____, _____

3) 32, 26, 20, _____, _____, _____

4) 175, 165, 155, _____, _____, _____

5) 156, 148, 140, _____, _____, _____

6) _____, _____, _____

Part 2

Follow the rule by adding the next number in the

1) (Subtract 2)

18, 16, 14, _____, _____, _____

2) (Subtract 3)

30, 27, 24, _____, _____, _____

3) (Subtract 5)

38, 33, 28, _____, _____, _____

4) (Subtract 100)

600, 500, 400, _____, _____, _____

5) (Subtract 6)

862, 856, 850, _____, _____, _____

6) (Subtract 4)

378, 374, 370, _____, _____, _____

Name: _____ 53

Curriculum Connection
P3.1

Decreasing Patterns Rules – Subtracting (1)

Questions Fill in the blanks by figuring out the pattern rules

21, 18, 15, 12, 9, 6, 3, 0

Start at _____, then subtract _____ each time

34, 29, 24, 19, 14

Start at _____, then subtract _____ each time

58, 54, 50, 38, 34

Start at _____, then subtract _____ each time

71, 65, 59, 53, 47, 35

Start at _____, then subtract _____ each time

88, 80, 72, 64, 56, 48, 40

Start at _____, then subtract _____ each time

99, 92, 85, 78, 71, 64, 57

Start at _____, then subtract _____ each time

Name: _____ 54

Curriculum Connection
P3.1

Decreasing Patterns Rules – Subtracting (2)

Questions Fill in the blanks by figuring out the pattern rules

152, 148, 144, 140, 136, 132

Start at _____, then subtract _____ each time

358, 348, 338, 328, 318

Start at _____, then subtract _____ each time

482, 47[illegible] 46[illegible] 454, 447

Start at _____, then subtract _____ each time

775, 769, 763, 757, [illegible]7

Start at _____, then subtract _____ each

842, 839, 836, 833, 830, 827

Start at _____, then subtract _____ each time

955, 946, 937, 928, 919, 910

Start at _____, then subtract _____ each time

Name: _____ 56

Curriculum Connection
P3.1

Using Pattern Rules – Subtraction (2)

Questions	Write your own patterns using the pattern rule

1) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 283, subtract 10 each time

2) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at [illegible], subtract 6 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 541, subtract [illegible] each time

4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 758, subtract 7 each time

5) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 935, subtract 3 each time

Name: _____ 57

Curriculum Connection
P3.1

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, 1_____, _____, _____

Patter_____at _____ subtract _____ each time

3) 1_____40, 13_____, _____, _____

Pattern Ru_____ subtract _____ each time

4) 74, 68, 62, _____, _____, _____

Pattern Rule: Start at _____ each time

5) 133, 123, 113, _____, _____, _____

Pattern Rule: Start at _____ subtract _____ each time

Part 2 Write your own patterns using the p_____le

1) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 50, subtract 0 each time

2) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 236, subtract 6 each time

3) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 794, subtract 5 each time

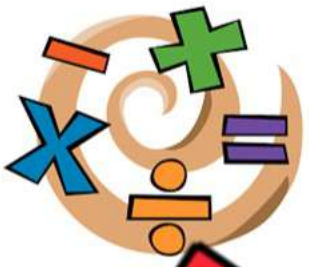
4) _____, _____, _____, _____, _____, _____

Pattern Rule: Start at 142, subtract 4 each time

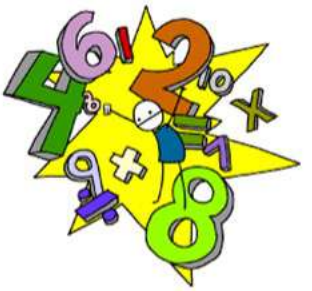
Name: _____ 59

Curriculum Connection
P3.1

Input/Output Table – Subtraction



Rule: subtract 3	
In	Out
48	45
61	58
71	68
85	82



Ques… …e input/output tables below

Rul…	
In	Ou…
35	
45	
53	
66	

Rule: subtract 4	
In	Out
26	
38	
45	

Rule: subtract 3	
In	Out
12	
19	
26	
34	

…ct 5	
	Out
5…	
64	
71	
77	

Rule: subtract 7	
In	Out
61	
70	
79	
88	

Rule: subtract 8	
In	Out
63	
77	
86	
95	

Name: _____ 64

Curriculum Connection
P3.1

Patterning Subtraction Word Problems – Spending

Questions | Follow the problem-solving steps below

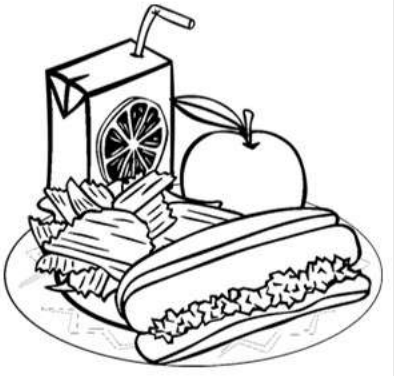
- ☐ Read the problem carefully
- ☐ Underline important information
- ☐ Draw pictures
- ☐ Write a number sentence
- ☐ Solve the problem
- ☐ Check your answer

Henry [illegible]me lunch every day for one week. After his first lun[illegible] has $[illegible]fter his second lunch, he has $172. After his third lunch, h[illegible]51.

a) How much mone[illegible]enry [illegible]left after his fourth lunch?

b) How much money will Henry have after his 7th lunch?

c) How much does each lunch cost?



Name: _____ 65

Curriculum Connection
P3.1

Patterning Subtraction Word Problems – Spending

Questions | Follow the problem-solving steps below

- ☐ Read the problem carefully
- ☐ Underline important information
- ☐ Draw pictures
- ☐ Write a number sentence
- ☐ Solve the problem
- ☐ Check your answer

Riley [illegible] marathon each day for 9 days. After her first day, [illegible] had 1[illegible] that she needed to run. After the second day, she ha[illegible] left. After the third day, she had 147km left.

a) How many k[illegible] di[illegible] [illegible]ft after the fourth day?

b) How many km did she have left after the 7th day?

c) How many km is a half marathon?

Name: _____ 66

Curriculum Connection
P3.1

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.

- Stop[w]atch or [a]nd use a smartphone)
- Index card[s]
- Markers
- Small prizes or [t]reats (fo[r]
- Tape

Instructions

How you will comp[lete] the acti[vity]

1) Cut out the index cards provided. These wil[l] be trea[sure] challenge questions.
2) Hide these cards around the classroom or in a des[ignated] safe ou[t]door area, taping them under chairs, desks, or tucked into non-obvio[us] spots.
3) Divide the class into small teams and give each team a stopwat[ch].
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.

Name: _____ 67

Curriculum Connection
P3.1

Instructions | Cut out the cards below

1) 3, 6, 9, _____, _____, _____	2) 10, 20, 30, _____, _____, _____
3) (Add 6) 12, 18, _____, _____, _____	4) (Add 4) 28, 32, 36, _____, _____, _____
5) 100, 90, 80, _____, _____, _____	6) 120, 110, 100, _____, _____, _____
7) Pattern Rule: Start at 5, add 5 each time. 5, 10, 15, _____, _____, _____, _____	8) Pattern Rule: Start at 200, subtract 10 each time. 200, 190, 180, _____, _____, _____, _____

Name: _____ 68

Curriculum Connection
P3.1

Instructions | Cut out the cards below

9) A printer uses 10 pages of paper less each day due to conservation efforts. If it used 100 pages on Monday, how many p[illegible]s will it use on Thursd[illegible]	10) A bakery makes 200 cupcakes, and each day they make 50 more than the previous day. How many cupcakes do they make on the fourth day?
11) (Add [illegible]0, 1[illegible] _____, _____, _____	12) (Subtract 5) 55, 50, 45, _____, _____, _____
13) Emma saves $2 every day. How much will she have after 10 days if she starts with $5?	14) If [illegible]ecre[illegible]its speed by 10 km/[illegible]er[illegible]f[illegible]m 100 km/h, what[illegible] speed after 3 hours
15) 12, 24, 36, _____, _____, _____	16) 300, 600, 900, _____, _____, _____

Name: _____ 69

Curriculum Connection
P3.1

Instructions | Cut out the cards below

17) Ben reads 2 more pages each day starting with 5 pages. What day will he read 15 pages?	18) Every week, Thomas saves $5 more than the previous week. If he saved $10 in the first week, how much will he have saved by the fourth week?
19) [illegible], 20 _____, _____, _____	20) 420, 440, 460, _____, _____, _____
21) Mike eats 3 more cookies each day, starting with 2 cookies. How many will he eat on the 5th day?	[illegible] time: 27 _____, _____
23) (Add 100) 1000, 1100, 1200, _____, _____, _____	24) (Subtract 20) 200, 180, 160, _____, _____, _____

Name: _____ 70

Curriculum Connection
P3.1

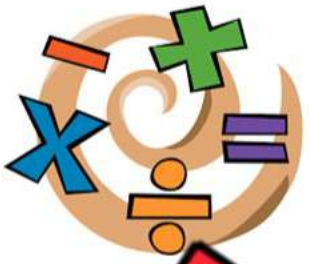
Instructions | Cut out the cards below

25) Leah had $50. She earns $10 more each day. How much money will Leah have after 7 days?	26) Pattern Rule: Subtract 2 starting from 18. _____, _____, _____
27) Sara p[illegible] tre[illegible] Each year, the num[illegible] of t[illegible] doubles. How man[illegible] will there be in 3 years?	28) (Add 15) 30, 45, 60, _____, _____, _____
29) Jake starts with 150 candies and eats 10 each day. How many candies are left after 8 days?	30) A[illegible]s at [illegible] triples her score [illegible] game. What wil[illegible]e 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?

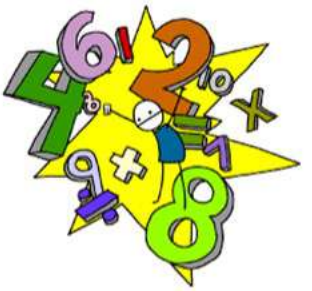
Name: _____ 71

Curriculum Connection
P3.1

Pattern Rule – Input/Output Tables



Rule: add 10	
In	Out
20	30
30	40
50	60
90	100



Que… …e input/output tables below

R… …0	
In	Ou…
10	
30	
50	
70	

Rule: add 3	
In	Out
3	
12	
27	

Rule: subtract 6	
In	Out
148	
132	
115	
109	

Rule: s… …ct 4	
	…t
222	
214	
208	
204	

Rule: subtract 2	
In	Out
878	
862	
	825
	815

Rule: subtract 6	
In	Out
722	
748	
	766
	792

Name: _____ 73

Curriculum Connection
P3.1

T-Tables – Drawing Blocks

Questions | Fill in the T-Tables and draw figure 4

1) Figure 1 Figure 2 Figure 3 Figure 4

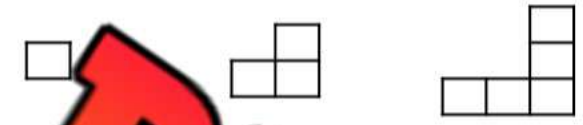


Figure	Term Value
1	
2	
3	
4	

2) Figure 1 Figure 2 Figure 3 Figure 4

Figure	Term Value
1	
2	
3	
4	

3) Figure 1 Figure 2 Figure 3 Figure 4

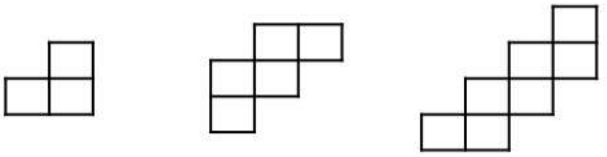


Figure	Term Value
1	
2	
3	
4	

4) Figure 1 Figure 2 Figure 3 Figure 4

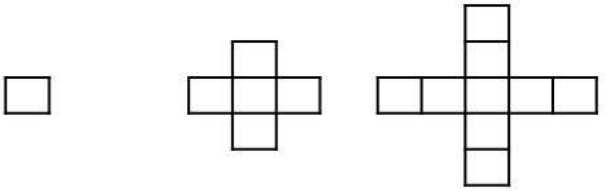


Figure	Term Value
1	
2	
3	
4	

Name: _____ 74

Curriculum Connection
P3.1

Table of Values – Term Numbers/Values

Questions | Fill in the table 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
1	75
2	71
3	67
4	
5	
6	

- - - - -

Term Number	Term Value
	89
	79
3	69
5	
6	

- - - - -

Term Number	Term Value
1	242
2	250
3	
4	266
5	
6	
10	

+ + + + +

Term Number	Term Value
1	545
2	540
3	
4	
5	525
6	
10	

- - - - -

Name: _____ 75

Curriculum Connection
P3.1

Table of Values – Term Numbers/Values

Term Numbers and Term Values

Courtney's height in cm was measured each year on her birthday. Check out how her height increased each year below.

40, 60, 80, 100, 120, 140 - **Term Values** (height)
(1) (2) (3) (4) (5) (6) - **Term Numbers** (year)

The **term** **rs** label each term value starting at the first term st. The **term values** are the numbe et.

Term Number	Term Value
1	40
2	60
3	80
4	100
5	120
6	140

Term Number (Day)	e Made)

1) The school bake sale was 5 days long. They de $30 each day. Check out the data set to see arnings.

30, 60, 90, 120, 150

a) H money did the school make total aft

b) How much ey d ey make after day 5?

c) How mu ney ave made after 10 days?

2) James scored 10 points in each of his games this season. A running total of his total points is listed below.

10, 20, 30, 40, 50

a) How many total points did he score after game two?

b) How many total points did he score after game five?

c) How many games would he have to play to score 100 points?

Te Number (Game)	Value (Total Points)

Name: _____ 77

Curriculum Connection
P3.1

Patterning – Word Problems

Questions | Answer the questions below

1) Jill's pool uses 2 chlorine pucks in May, 5 pucks in June, and 8 pucks in July. If the pattern continued, how many pucks would Jill use in August and November?

Aug

November: _____

2) Henry's pizza store se me pizza each week. He sells 8 pizzas on Monday, 15 pizzas on Tue , 22 nesday, and 29 pizzas on Thursday. If the pattern continues, h y piz l he sell on Friday?

Bonus: How many pizzas will he sell for the week?

3) Sam starts with 150 dollars at the start of the week. He spends 5 dollars on Monday, 10 dollars on Tuesday, 15 dollars on Wednesday, and 20 dollars on Thursday. How much money did he spend on Friday?

Bonus: How much money did he have left on Sunday?

Name: _____ 78

Algebra Quiz - Patterning

Part 1 Fill in the numerical sequences for the patterns below

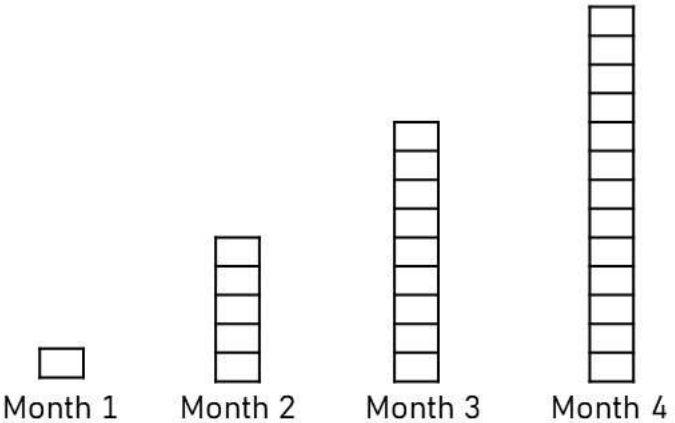
1) Stacy marks an x each day for how many pieces of fruit she eats.

Numerical Sequence
_____, _____, _____, _____, _____

lane kept track of how many times iled in an hour

Numerical Sequence
_____, _____, _____, _____, _____

3) Chris puts a rectangle for every book he reads in the first 5 months of school.



Numerical Sequence
_____, _____, _____, _____, _____

Part 2 — Follow the rule by adding or subtracting to find the next number

1) (Add 5) 3, 8, 13, _____, _____, _____	2) (Add 3) 123, 126, 129, _____, _____, _____
3) (Add 6) 302, 30_____, _____, _____	4) (subtract 2) 18, 16, 14, _____, _____, _____
5) (s_____) 660, 650, 6_____	6) (subtract 4) 546, 542, 538, _____, _____, _____
 7) Figure 1 Figure 2 Figu_____ Fi_____ Figure 5 Figure 6	

Part 3 — Solve the word problem be_____ how_____

Luca buys a coffee each day before work. On day one, _____s h_____ has $220. On day two, he had $214. On day 3, he had $208.

a) How much money will he have on day 4?

b) How much money will he have on day 7?

c) What is the pattern rule?

Name: _____ 80

Curriculum Connection
P3.2

Balance Pan Equations

Questions How many ways can you balance the equation to equal 8

1)

_____ + _____ = 8

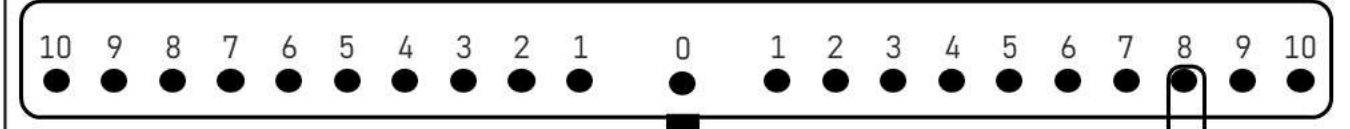
2)

_____ + _____ =

3)

_____ + _____ = 8

4)



_____ + _____ = 8

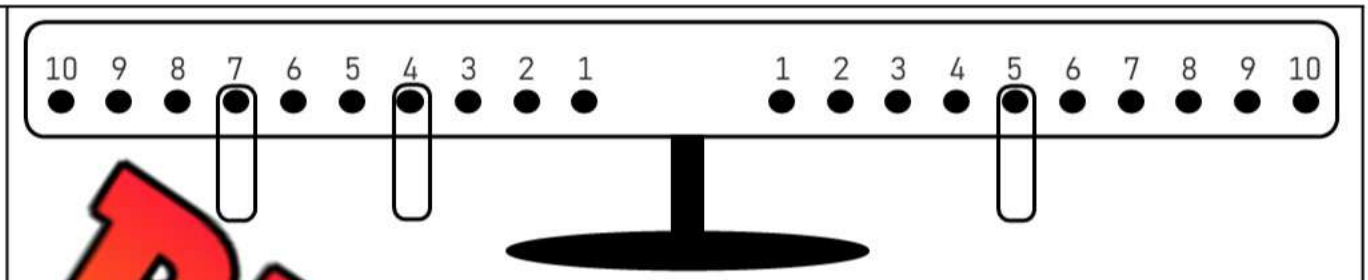
Name: _____ 82

Curriculum Connection
P3.2

Balance Pan Equations

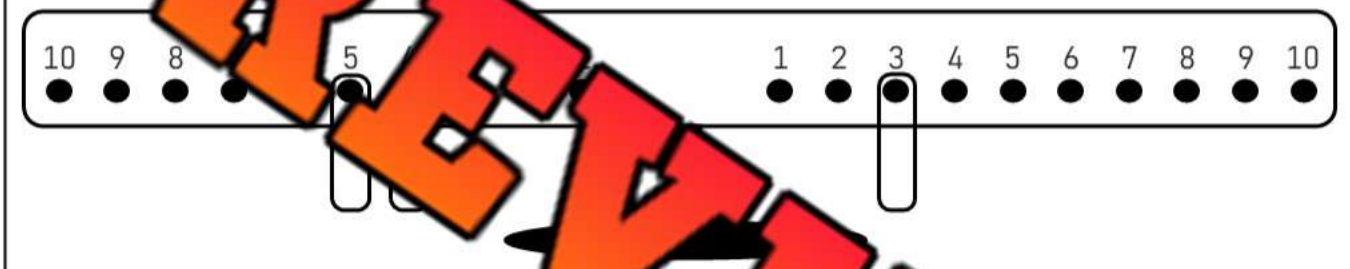
Questions	Balance the equations below

1)



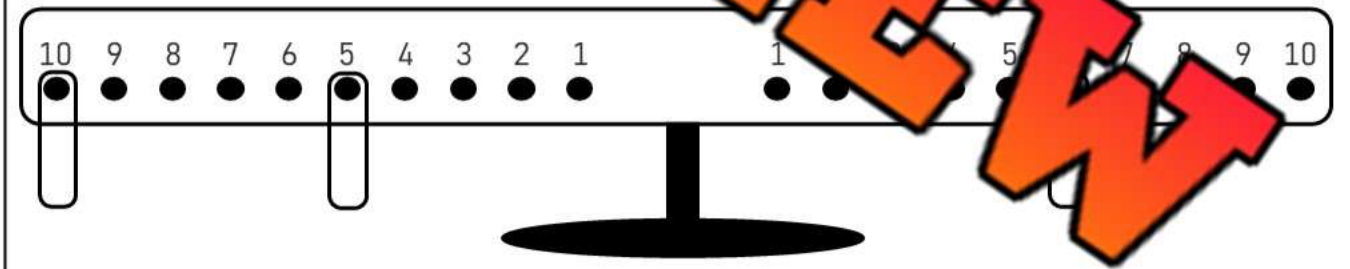
7 + 4 = _____ + 5

2)



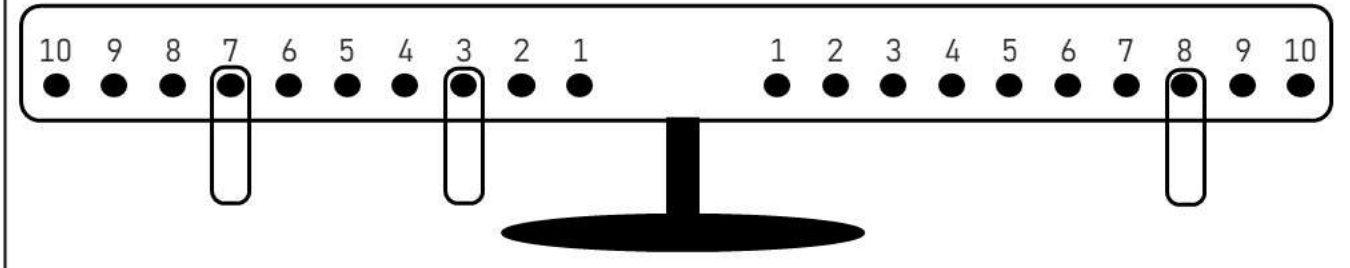
5 + 4 = 3 + _____

3)



10 + 5 = _____ + 6

4)



7 + 3 = 8 + _____

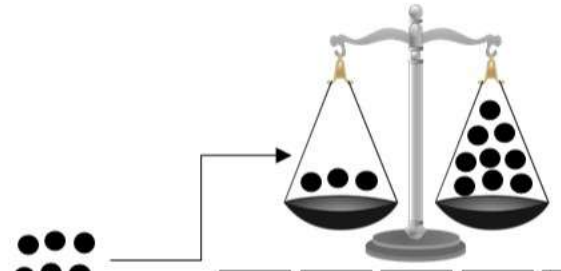
Name: _____ 83

Curriculum Connection
P3.2

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.



3	+	6	=	9

Question: How many balls do you need to add to balance the scales?

7	+		=	11

5			=	

6	+		=	14

6	+		=	8

6	+		=	13

2	+		=	12

4	+		=	10

3	+		=	14

1	+		=	12

Name: _____ 84

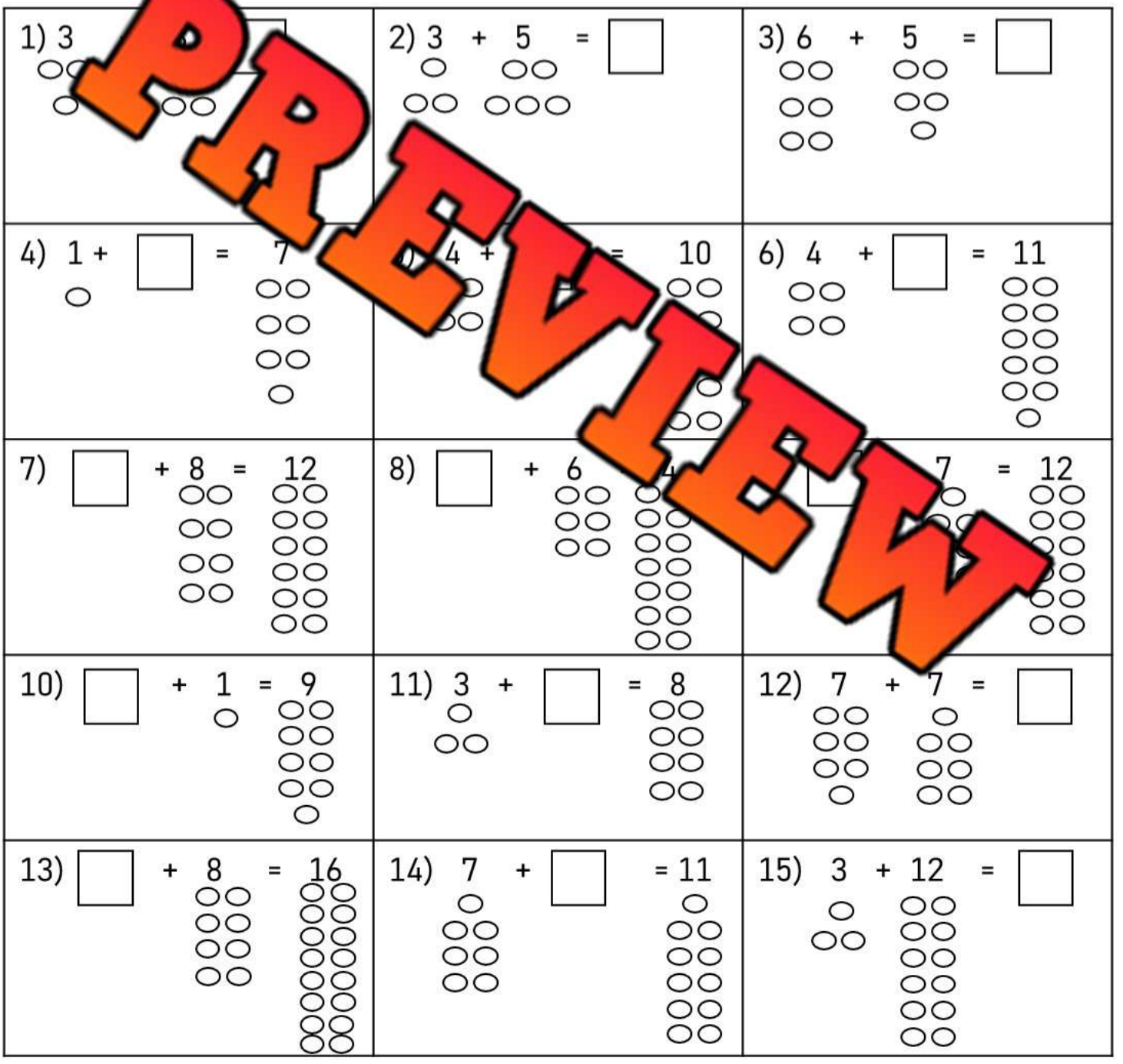
Curriculum Connection
P3.2

Pre-Algebra – Balancing Addition Equations

Balancing equations means both sides of the equal sign must be the same.

Examples: $3 + 7 = \boxed{10}$ (10) $\quad 24 + 6 = \boxed{30}$ (30)

Questions | Fill in the missing number to balance the equation



Name: _____ 85

Curriculum Connection
P3.2

Addition to 100 – Are They Equal?

Are the equations equal? Put a slash through the equal sign for any equations that are not equal

15 + 7 = 22 28 + 4 ≠ 33 44 + 6 = 50

Questions Put a slash (≠) through the equal sign if it is not balanced

1) 15 + 5	2) 17 + 4 = 21	3) 23 + 7 = 29
4) 21 + 6 = 27	5)	6) 23 + 10 = 33
7) 19 + 6 = 26	8) 26 + 5 =	9) + 7 = 46
10) 58 + 6 = 66	11) 61 + 5 = 66	12) 7 = 90
13) 60 + 10 = 70	14) 81 + 0 = 81	15) 84 + 3 = 88
16) 90 + 7 = 96	17) 94 + 5 = 99	18) 87 + 10 = 97

Name: _____ 88

Curriculum Connection
P3.2

Pre-Algebra – Change Unknown

Balancing equations means both sides of the equal sign must be the same.

Examples:

$3 + \underline{7} = 10$ (10 ∧ 7)

$22 + \underline{8} = 30$ (30 ∧ 8)

Questions Fill in the missing number to balance the equation

1) 5 + _____ =	2) 3 + _____ = 7
3) 7 + _____ =	_____ = 14
5) 12 + _____ = 17	6) + _____ = 22
7) 18 + _____ = 25	8) 15 + _____
9) 13 + _____ = 18	10) 17 + _____ = 24
11) 25 + _____ = 32	12) 31 + _____ = 38
13) 44 + _____ = 51	14) 53 + _____ = 62

Name: _____ 89

Curriculum Connection
P3.2

Pre-Algebra – Start Unknown

Balancing equations means both sides of the equal sign must be the same.

Examples:

17
10 + 7 = 17

30
7 + 23 = 30

Questions Fill in the missing number to balance the equation

1) _____ =	2) _____ + 2 = 8
3) _____ + 6 =	_____ + 5 = 7
5) _____ + 9 = 13	6) _____ = 13
7) _____ + 7 = 15	8) _____ +
9) _____ + 6 = 24	10) _____ + 5 = 28
11) _____ + 5 = 25	12) _____ + 7 = 32
13) _____ + 11 = 43	14) _____ + 13 = 48

Exit Cards

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

Name: _____

Fill in the missing number to balance the equation

a) _____

b) 38 + 21 = _____ + 11

c) 45 + _____ = 67

d) _____ + 4 = 35 + 20

Name: _____

Fill in the missing number to balance the equation

a) 14 + 26 = _____

b) 38 + 21 = _____ + 11

c) 45 + _____ = 67

d) _____ + 4 = 35 + 20

Name: _____

Fill in the missing number to balance the equation

a) 14 + 26 = _____

b) 38 + 21 = _____ + 11

c) 45 + _____ = 67

d) _____ + 4 = 35 + 20

Name: _____

Fill in the missing number to balance the equation

a) 14 + 26 = _____

b) 38 + 21 = _____ + 11

c) 45 + _____ = 67

d) _____ + 4 = 35 + 20

Name: _____ 91

Curriculum Connection
P3.2

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 b the n
- Buzzer or bell

Instructions How you will comp activ

1. Print the Jeopardy board on the next pa
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.

Name: _____ 92

Curriculum Connection
P3.2

Jeopardy Questions | Ask students the questions below

$100	$200	$300	$400	$500
__ + 3 = 5	__ + 7 = 20	10 + __ = 45	20 + __ + 15 = 68	3 + __ = 7 + 5
__ + 15 =	__ + 12 = 29	18 + __ = 53	25 + 18 + __ = 100	__ + 18 = 50 + 13
7 + __ = 10	16	+ __ = 65	32 + 25 + __ = 95	4 + __ = 11 + 9
__ + 6 = 9	__ + 20 = 4	+	+ 22 + __ = 58	29 + __ = 12 + 47
Sam has 6 marbles and finds 11 more. How many does he have now?	Lisa had $21 and earned $10 more. Total money?	Max had 30 pencils, he bought 26 more. How many total pencils does he have now?	bir ore joine ny now sit he tree?	A farmer had 62 and bought mo How ws e?
If Alex has 12 apples and buys 12 more, how many does he have?	Jane had 24 candies and found 13 more. How many does she now have in total?	Tom read 33 pages, then read 22 more. How many total pages did he read?	Lily collected 41 seashells, then 23 more. How many total does she have now?	If a baker baked 68 pies and then baked 24 more, how many pies are there?

Name: _____ 93

Curriculum Connection
P3.2

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 ≠ 7 + 1

Questions Put a slash (≠) through the equal sign if it is not balanced

1) 1 11 +	8) 16 + 7 = 11 + 11
2) 27 + 3 = 15 +	9) 26 + 5 = 24 + 7
3) 38 + 10 = 42 + 7	10) 62 + 8
4) 67 + 7 = 65 + 9	11) 40 + 3
5) 51 + 5 = 11 + 45	12) 66 + 13 = 4 + 75
6) 83 + 4 = 70 + 16	13) 60 + 23 = 53 + 30
7) 13 + 15 = 11 + 17	14) 16 + 7 = 11 + 11

Name: _____ 94

Curriculum Connection
P3.2

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)	25 +	16 + 12	24 + 5
2)	46 + 6	40	44 + 3
3)	52 + 14	57 + 18	61 + 5
4)	63 + 12	45 + 35	
5)	82 + 12	70 + 24	55 + 40
6)	68 + 13	75 + 7	61 + 20
7)	53 + 22	40 + 35	55 + 21

Name: _____ 95

Curriculum Connection
P3.2

Addition – Using Symbols

When we do not know the value of an addend in a question, we can use any symbol to replace the unknown.

Part 1 Find out the value of the symbol

1) 35 + ◆ = 70 ◆ =	2) 17 + ● = 24 ● =	3) ● + 42 = 55 ● =
4) 27 + ◆ = [illegible] ◆ =	[illegible] = 16 ● =	6) 65 + ● = 75 ● =
7) ◆ + 88 = 98 ◆ =	8) 51 + ◆ = 62 ◆ =	[illegible] + 72 = 81 ● =

Part 2 Write your own questions using any symbol you want [illegible] to answer.

1)	2)

Name: _____ 96

Curriculum Connection
P3.2

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.

Quest... Find the value of the variable

7 + n = 7 n =	+ 5 = 12 n =	22 + n = 30 n =
12 + 12 = p p =	4 = 25 p =	p + 13 = 25 p =
15 + y = 30 y =	y + 14 = 25 y =	1 = y y =
78 + t = 92 t =	14 + t = 28 t =	60 = 75 t =
114 + a = 117 a =	135 + a = 150 a =	150 + a = 172 a =
22 + 165 = s s =	121 + s = 143 s =	133 + s = 141 s =

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 = 12 n = _____

b) 7 + y = 19 y = _____

c) 61 + t = 75 t = _____

d) s + 140 = 172 s = _____

Name: _____

Find out the value of the variables

a) n + 4 = 12 n = _____

b) 7 + y = 19 y = _____

c) 61 + t = 75 t = _____

d) s + 140 = 172 s = _____

Name: _____

Find out the value of the variables

a) n + 4 = 12 n = _____

b) 7 + y = 19 y = _____

c) 61 + t = 75 t = _____

d) s + 140 = 172 s = _____

Name: _____ 98

Curriculum Connection
P3.2

Using Variables to Solve Addition Equations

There are some instances where we know the values of variables and need to plug them into an equation. For example:

a + b + c = ? a = 5 b = 3 c = 7

5 + 3 + 7 = 15

Questions: Find out the value of the variable

a + b + c = a = 5 b = 8 c = 2 _____ + _____ + _____ = _____	n + y + t = n = 5 y = 10 t = 5 _____ + _____ + _____ = _____
c + r + p = c = 4 r = 8 p = 12 _____ + _____ + _____ = _____	g + h + k = g = 8 h = 4 k = 8 _____ + _____ + _____ = _____
e + c + g = e = 13 c = 7 g = 10 _____ + _____ + _____ = _____	a + b + c = a = 5 b = 8 c = 3 _____ + _____ + _____ = _____
a + b + c = a = 5 b = 12 c = 12 _____ + _____ + _____ = _____	n + y + t = n = 5 y = 5 t = 5 _____ + _____ + _____ = _____
c + r + p = c = 4 r = 8 p = 21 _____ + _____ + _____ = _____	g + h + k = g = 8 h = 10 k = 10 _____ + _____ + _____ = _____
e + c + g = e = 13 c = 15 g = 10 _____ + _____ + _____ = _____	a + b + c = a = 5 b = 15 c = 20 _____ + _____ + _____ = _____

Name: _____ 99

Curriculum Connection
P3.2

Word Problems – Writing Addition Equations

Questions | Answer the questions below

1) Steve and James love video games. Steve has 8 games. Steve and James have 18 games in total. Which equation will tell us how many games James has?

j + 8 = 18	8 + 18 = j
8 + j = 18	8 – j = 18

2) Je[illegible] Rebec[illegible]aking cookies. Rebecca made 20 cookies. They made 50 total co[illegible]ies. W[illegible]on[illegible]ill tell us how many cookies Jen made?

[illegible]	50 + c = 20
20 [illegible]	c – 20 = 50

3) Scott and Luke love hockey cards. Scott has 25 cards and Luke has 50 cards. Which equation will tell us how many total cards they have?

c + 25 = 50	[illegible]
25 + c = 50	25 [illegible]0

4) Adam and Henry went Trick or Treating. Henry got 62 candies. They got 121 candies in total? Which equation will tell us how many candies Adam got?

62 + c = 121	62 + 121 = c
c + 62 = 121	62 – c = 121

5) Sam scored 15 points in his basketball game. He had 5 points in the first half. Which equation will tell us how many points he had in the second half?

p + 5 = 15	5 + 15 = p
5 – p = 15	5 + p = 15

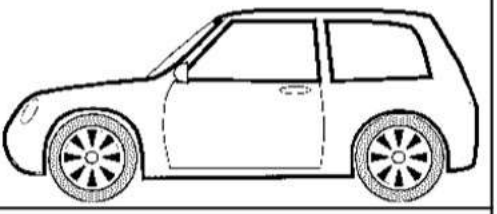
Name: _____ 100

Curriculum Connection
P3.2

Word Problems – Solving Addition Equations

Questions	Answer the questions below

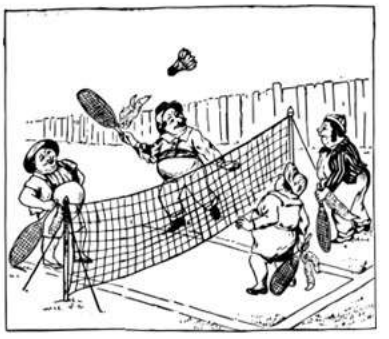
1) Tim drove 31km to get to work. Then he drove to the store. When he got to the store, he had driven 58 km in total. How many km did he drive to the store?



2) Steve got 25 points fo[illegible] leve[illegible] ideo game. He got 33 more points for beating level 2. How ma[illegible] p[illegible] ave after level 2?

Bonus – He had 78 total points after beating level [illegible] any p[illegible] 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?



Name: _____ 101

Curriculum Connection
P3.2

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

Question: How many balls do you need to take away to balance the scales?

11	-		=	8

8	-		=	

10	-		=	4

9	-		=	1

11	-		=	4

13	-		=	3

11	-		=	4

14	-		=	2

6	-		=	0

Name: _____ 105

Curriculum Connection
P3.2

Subtraction – Are They Equal?

Are the equations equal? Put a slash through the equal sign for any equations that are not equal

7 - 2 = 5 25 - 6 ≠ 18 15 - 11 = 4

Questions Put an x through the equal sign if it is not balanced

1) [illegible] - 5	2) 10 - 4 = 6	3) 16 - 5 = 12
4) 23 - 6 = 16	5) 2[illegible]16	6) 19 - 3 = 16
7) 32 - 4 = 28	8) 23 - 3[illegible]	[illegible]) 28 - 4 = 24
10) 43 - 10 = 33	11) 45 - 4 = 42	12[illegible]
13) 53 - 4 = 49	14) 68 - 4 = 65	15) 56 - 6 = 51
16) 75 - 0 = 75	17) 100 - 1 = 99	18) 116 - 5 = 111
19) 109 - 4 = 104	20) 127 - 6 = 121	21) 175 - 6 = 159

Exit Cards

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

Name: _____

Put a slash through the equal sign if the equation is not balanced

a) 76 - 5 = 78

b) 92 - 4 = 88

c) 90 - 4 = 100 - 14

d) 35 - 1 = 80 - 36

Name: _____

Put a slash through the equal sign if the equation is not balanced

a) 76 - 5 = 78

b) 92 - 4 = 88

c) 90 - 4 = 100 - 14

d) 35 - 1 = 80 - 36

Name: _____

Put a slash through the equal sign if the equation is not balanced

a) 76 - 5 = 78

b) 92 - 4 = 88

c) 90 - 4 = 100 - 14

d) 35 - 1 = 80 - 36

Name: _____

Put a slash through the equal sign if the equation is not balanced

a) 76 - 5 = 78

b) 92 - 4 = 88

c) 90 - 4 = 100 - 14

d) 35 - 1 = 80 - 36

Name: _____ 107

Curriculum Connection
P3.2

Pre-Algebra – Balancing Addition Equations

Balancing equations means both sides of the equal sign must be the same.

Examples:

$7 - 4 = \underline{\mathbf{3}}$ (3)

$14 - 6 = \underline{\mathbf{8}}$ (8)

Questions: Fill in the missing number to balance the equation

1) 4 - 2 =	2) 3 - 3 = _____	3) 5 - 2 = _____
4) 7 - _____ = 3	5) 8 - _____ = 1	6) 10 - _____ = 6
7) _____ - 6 = 3	8) _____ - 9 = 2	9) _____ = 10
10) _____ - 4 = 7	11) 9 - _____ = 4	12) 10 - 2 = _____

Name: _____ 109

Curriculum Connection
P3.2

Pre-Algebra – Change Unknown

Balancing equations means both sides of the equal sign must be the same.

Examples:

6
13 – **7** = 6

14
22 – **8** = 14

Question: Find the missing number to balance the equation

1) 9 – _____ = 5	2) 8 – _____ = 4
3) 10 – _____ = 3	4) 1 _____ = 7
5) 13 – _____ = 6	6) 18 _____ 11
7) 21 – _____ = 15	8) 24 – _____ 9
9) 26 – _____ = 19	10) 32 – _____ = 28
11) 36 – _____ = 29	12) 48 – _____ = 38
13) 59 – _____ = 51	14) 75 – _____ = 62

Name: _____ 110

Curriculum Connection
P3.2

Pre-Algebra – Start Unknown

Balancing equations means both sides of the equal sign must be the same.

Examples:

10
17 – 7 = 10

30
30 – 23 = 7

Question: Find the missing number to balance the equation

1) _____ – =	2) _____ – 4 = 7
3) _____ – 5 = 10	4) _____ – 3 = 8
5) _____ – 7 = 13	6) _____ – 6 = 2
7) _____ – 4 = 15	8) _____ – =
9) _____ – 6 = 24	10) _____ – 5 = 25
11) _____ – 8 = 25	12) _____ – 9 = 40
13) _____ – 12 = 43	14) _____ – 13 = 62

Name: _____ 111

Curriculum Connection
P3.2

Activity Title: Card Sort Challenge

Objective

What are we learning about?

The objective of this activity is to help students practice their addition and subtraction skills by forming correct equations that match a given result. This activity encourages teamwork, critical thinking, and quick problem-solving.

Material

What you will need for the activity.

- Inde cards
- Markers
- Timer (optio
- Whiteboard or ing results)

Instructions

How you will mpl

1. Prepare index cards in advance by writi erent rs on some cards and operation signs (plus and minus) o rs.
2. Divide the class into small groups, each group g of r er cards and operation cards. Optional: hand out more than 1 se ach
3. Write a target number on the board that each group needs re ng the cards provided.
4. Set a timer for 5 minutes. Each group must try to arrange their cards into as many correct equations as possible that equal the target number.
5. At the end of the timer, ask each group to share their equations with the class. Verify the correctness of each equation.
6. Groups earn points for each correct equation they create. Bonus points if they use all their cards.
7. The group with the most points at the end wins.

Name: _____ 112

Curriculum Connection
P3.2

Index Cards | Cut out the index cards below

0	1	2	3
4	5	6	7
8	9	+	
+	−	+	−

Name: _____ 114

Curriculum Connection
P3.2

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 ≠ 7 - 1

Questions Put a slash (≠) through the equal sign if it is not balanced

1) 15 – 17	7) 25 - 3 = 26 – 3
2) 37 - 5 = 38 – 6	8) 27 - 5 = 28 – 6
3) 58 - 11 = 55 – 7	9) 13
4) 70 - 7 = 80 – 17	10) 39 - 14 = 40 – 15
5) 78 - 5 = 82 – 8	11) 86 - 5 = 94 – 13
6) 95 - 15 = 100 - 18	12) 100 - 12 = 95 - 7

Exit Cards

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

Name: _____

Put a slash (≠) through the equal sign if it is not balanced

a) 34 - 7 = 30 - 4

b) 44 - 15 = 36 - 11

c) 75 - 26 = 56 - 9

d) 96 - 14 = 90 - 7

Name: _____

Put a slash (≠) through the equal sign if it is not balanced

a) 34 - 7 = 30 - 4

b) 44 - 15 = 36 - 11

c) 75 - 26 = 56 - 9

d) 96 - 14 = 90 - 7

Name: _____

Put a slash (≠) through the equal sign if it is not balanced

a) 34 - 7 = 30 - 4

b) 44 - 15 = 36 - 11

c) 75 - 26 = 56 - 9

d) 96 - 14 = 90 - 7

Name: _____ 116

Curriculum Connection
P3.2

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

Question: Circle the equation that matches the shaded in equation

1)		24 - 13	27 – 15
2)	28 - 14		27 – 13
3)	30 - 12	39	39 - 21
4)	47 - 12	46 - 11	
5)	62 – 13	61 - 12	63 - 15
6)	85 - 15	90 - 15	90 – 20
7)	99 - 15	98 - 13	90 - 6

Name: _____ 117

Curriculum Connection
P3.2

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, fos ing critical thinking and problem-solving skills in a collaborative group set

Mate will need for the activity.

- Pre-prepared re- cards.
- Small bags or envel ld t ts for each group

Instructions How you will complete the ac

1. Before the class, the teacher will cut out the p red m ng game cards.
2. Divide the students into small groups and give each group ba elope 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.

Name: _____ 118

Curriculum Connection
P3.2

Cards | Matching Game Cards

10 + 15	20 + 5
30 - 10	25 - 5
18 + 22	5 + 5
50 - 25	45 - 20
11 + 13	19 + 5

Name: _____ 119

Curriculum Connection
P3.2

Cards | Matching Game Cards

45 - 15	35 - 5
2[illegible]1	20 + 19
60 - 20	[illegible] - 10
14 + 25	27 + 1[illegible]
100 – 30	85 - 15

Name: _____ 120

Curriculum Connection
P3.2

Cards | Matching Game Cards

19 + 18	30 + 7
9[illegible]5	68 - 3
42 + 18	[illegible] + 5
90 - 45	75 - 3[illegible]
64 + 18	73 + 9

Name: _____ 121

Curriculum Connection
P3.2

Subtraction – Using Symbols

Part 1 Find out the value of the symbol

1) ● – 10 = 18 ● =	2) 42 – ▲ = 30 ▲ =	3) 80 – ● = 65 ● =
4) ▲ – 12 = 18 ▲ =	5) ◆ – 11 = 29 ◆ =	6) 90 – 70 = ◆ ◆ =
7) 54 – ▲ = 50 ▲ =	8) ● – ■ = 20 ● = ■ =	9) 78 – ● = 64 ● =

Part 2 Write your own questions using any symbols you want. Then get a friend to answer.

1)	2)
3)	4)

Name: _____ 122

Curriculum Connection
P3.2

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

27 – n = 13 n =	n – 5 = 5	22 – n = 10 n =
25 – 10 = p p =	1[illegible] p =	p – 8 = 15 p =
31 – y = 30 y =	y – 14 = [illegible] y =	[illegible]35 = y
65 – t = 51 t =	88 – t = 58 t =	[illegible]74 [illegible]56 t =
124 – a = 117 a =	150 – a = 135 a =	163 – a = 151 a =
176 – 165 = s s =	185 – s = 171 s =	124 – s = 99 s =

Name: _____ 123

Curriculum Connection
P3.2

Using Variables to Solve Subtraction Equations

There are some instances where we know the values of variables and need to plug them into an equation. For example:

a – b = c a = 7 b = 4

7 – 4 = c

c = 3

Question: Find out the value of the variable

a – b = c a = 9 ___ – ___ = c c =	e – n = f e = 10 n = 5 ___ – ___ = f f =
r – y = k r = 16 y = 7 ___ – ___ = k k =	t – g = h t = 18 g = 6 ___ – ___ = h h =
a – b = c a = 15 b = 8 ___ – ___ = c c =	e – n = f e = 12 n = 6 ___ – ___ = f f =
r – y = k r = 35 y = 4 ___ – ___ = k k =	t – g = h t = 2[illegible] ___ – ___ = h h =
a – b = c a = 46 b = 5 ___ – ___ = c c =	e – n = f e = 57 n = 7 ___ – ___ = f f =
r – y = k r = 76 y = 5 ___ – ___ = k k =	t – g = h t = 68 g = 4 ___ – ___ = h h =

Name: _____ 124

Curriculum Connection
P3.2

Word Problems – Writing Subtraction Equations

Questions | Answer the questions below

1) Harry bought 15 donuts. Him and a friend ate 5 of them. Which equation will tell us how many donuts there are left?

d – 5 = 15	15 – 5 = d
5 + d = 15	5 – d = 15

2) Ke y and h were having a fire. They had 18 logs for the fire. After the fire, they ft. h equation tells us how many logs they burned?

b	18 – 4 = b
1	4 – b = 18

3) Tom collected 73 shells on the be gave to his sister. Now he has 60 shells left. Which equation tells us h many sh To e to his sister.

73 – s = 60	6
s – 60 = 73	60

4) Courtney saved 75 dollars. She rs. Which equation tells us how much the sweater cost?

75 – s = 45	75 – 45 = s
45 + s = 75	s – 45 = 75

5) The movie is 93 minutes long. They have watched 31 minutes. Which equation tells us how many minutes are left?

m – 31 = 93	93 – 31 = m
31 + m = 93	31 – m = 93

Name: _____ 125

Curriculum Connection
P3.2

Word Problems – Solving Subtraction Equations

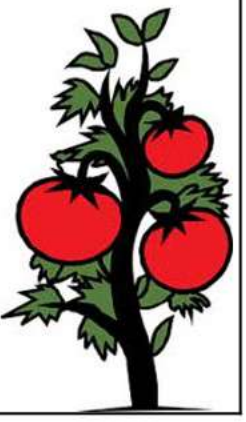
Questions	Answer the questions below

1) Mrs. Wilson had 48 pencils at the start of the school year. She gave all the kids in her class 1 pencil. She now has 28 pencils. How many students are in Mrs. Wilson's class?

2) Hudson saved 86 dollars and bought a toy for 35 dollars. How many dollars does he have left?

Bonus: He saved 15 more dollars. Can he buy a new game for 70 dollars?

3) The grade 3 class planted 79 tomato seeds but only 57 tomato plants grew. How many plants did not grow?



Name: _____ 126

Curriculum Connection
P3.2

Task Cards: Mystery Number Detectives

Objective

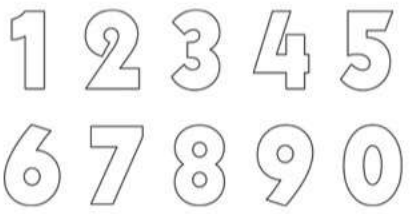
What are we learning about?

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.

- 2
- Se e shee for answers
- Pencils



Instructions

How o activity

1. Introduce the concepts cove d in
2. Organize the students into pairs and ovide e air heir sets of task cards.
3. Give each pair an answer recording sheet t do ses.
4. Encourage teamwork by having students collabora ir p on finding solutions.
5. Allow students to select any task card to begin with, emphasizi tha an 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.

Name: _____ 127

Curriculum Connection
P3.2

Task Cards | Cut out the task cards below

Card 1:
14 – p = 10

solve for p
a) [illegible] b) 4 c) 5

Card 2:
80 – ● = 65

solve for ●
a) 15 b) 25 c) 35

Card 3:
11 – [illegible]

a) 4 b) 2 [illegible]

Card 4:
x + 45 = 76

solve for x
[illegible] b) 31 c) 41

Card 5:
31 + y = 58

solve for y
a) 17 b) 27 c) 37

Card 6:
[illegible] z [illegible]

solve for [illegible]
a) 33 b) 23 c) 43

Card 7:
18 – a = 9

solve for a
a) 9 b) 7 c) 11

Card 8:
b + 16 = 24

solve for b.
a) 8 b) 18 c) 28

Task Cards | Cut out the task cards below

Card 9:
7 + c = 14

solve for c
a) [illegible] b) 9 c) 5

Card 10:
34 – d = 25

solve for d
a) 9 b) 19 c) 29

Card 11:
Tom has [illegible] gets x more and now has [illegible] How many did he get?

a) 13 b) 15 c) 12

Card 12:
Leah had 21 pencils. She lost y pencils and now has 7. How many did she lose?

a) [illegible] b) 12 c) 14

Card 13:
A tree was 9m tall. It grew e meters and is now 43m tall. How much did it grow?

a) 33m b) 31m c) 34m

Card 14:
[illegible] = 32

solve for [illegible]
a) 18 b) 28 c) 8

Card 15:
50 – g = 15

solve for g
a) 35 b) 45 c) 25

Card 16:
27 + h = 35

solve for h
a) 8 b) 18 c) 28

Name: _____ 129

Curriculum Connection
P3.2

Task Cards | Cut out the task cards below

Card 17:
j - 9 = 10

solve for j
a) [illegible] b) 1 c) 9

Card 18:
42 + k = 59

solve for k
a) 17 b) 7 c) 27

Card 19:
[illegible] = 30

solve for [illegible]
a) 53 b) 13 c) 43

Card 20:
64 + n = 88

solve for n
a) [illegible] b) 14 c) 34

Card 21:
Paula baked 56 cookies. She ate o cookies and now has 42. How many did she eat?

a) 17 b) 12 c) 14

Card 22:
There [illegible]4 bi[illegible]n a tree. p birds [illegible] a [illegible]ing 43. How ma[illegible]y?

a) 17 b) 19 c) 21

Card 23:
q + 12 = 29

solve for q
a) 17 b) 27 c) 7

Card 24:
36 - r = 15

solve for r
a) 21 b) 31 c) 11

Name: _____ 130

Curriculum Connection
P3.2

Task Cards: Mystery Number Detectives

Answers | Record your answers below

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

13	
14	
15	
16	
17	
19	
20	
21	
22	
23	
24	

Name: _____ 131

Algebra Quiz - Equations

Part 1 Put a slash through the equal sign if it is not balanced

1) 25 + 15 = 45	2) 42 + 6 = 48	3) 87 + 15 = 103
4) 1	5) 274 - 24 = 249	6) 326 - 14 = 318

Part 2 Fill in the missing number to balance the equation

1) 13 + 8 = _____	2) _____ 6	3) 9 + _____ = 65
4) 137 + 8 = _____	5) _____ + 18 = 32	25 60
7) 9 - 6 = _____	8) _____ - 12 = 8	9) 47 - 8 = _____
10) 109 - 5 = _____	11) _____ - 7 = 132	12) 170 - 6 = _____

Part 3 Circle the equation that matches the shaded in equation

1)	16 + 5	11 + 11	18 + 3
2)	17 – 5	23 - 10	21 – 9
3)	22	40 + 35	55 + 21
4)	3 – 1	60 – 10	64 - 15

Part 4 Put (≠) e equal sign if it is not balanced

1)	20 - 15 = 22 2		12 + 11 = 13 + 10
3)	27 + 3 = 15 + 14	4)	13 = 4 + 75
5)	20 + 15 = 50 - 20	6)	8 – 14 - 15

Part 5 Solve the word problem below. Make sure to wri n

Alexa saved 47 dollars from her allowance. She was given some money from her grandmother for her birthday. She now has 80 dollars. How much did her grandmother give her?