



IDENTIFYING &
FOLLOWING
ADDITION &
MULTIPLICATION
NUMBER PATTERNS

AC9M4N09

CONTINUE ADDITION PATTERNS

maths MAZE

In the maze, identify the next number in the addition pattern. Each answer will lead you to the next problem. To keep track of your answers, colour your way from start to finish, recording the letter sequence you followed in the table below.

START	A 2, 4, 6, 8, —	B 5, 10, 15, 20, —
C 300, 350, 400, —	D 9, 18, 27, 36, —	E 13, 16, 19, 22, —
F 42, 48, 54, 60, —	G 140, 160, 180, —	H 33, 43, 53, 63, —

Connections between boxes:
START to A (10), START to C (16), A to B (10), A to D (12), B to E (25), C to D (72), C to F (45), D to E (27), D to G (200), E to H (25), F to G (210), G to H (73).



Keep scrolling to see what's included!

TEACH IDENTIFYING & FOLLOWING ADDITION & MULTIPLICATION NUMBER PATTERNS THE FUN WAY!



All six activities are aligned to the outcome: **(AC9M4N09)**



Tasks range in difficulty from easy to challenging!



Activities are interactive, hands-on, and FUN!



AC9M4N09

IDENTIFY & APPLY
RULES

SUPER sort

On each problem card, identify the rule applied in each input / output table then fill in the missing number. Sort the cards according to whether the rule involved addition or multiplication. Before gluing, arrange the cards in alphabetical order.

ADDITION

MULTIPLICATION

IN	OUT
1	2
2	
3	6
4	8

RULE: _____

A

IN	OUT
3	
6	30
9	33
12	36

RULE: _____

F

TEACH IDENTIFYING & FOLLOWING ADDITION & MULTIPLICATION NUMBER PATTERNS THE FUN WAY!

NO planning required for
outcome **AC9M4N09**

No prep, just print and go!

Aligns perfectly to the **Year 4
Mathematics Test FULL YEAR
Mega Bundle**



AC9M4N09 **MATCHING PATTERNS & RULES** **MATHS match** → PROBLEM CARDS

Study the input/output table then find the card that shows the matching rule

IN	OUT
2	12
4	14
7	17
9	19

Study the input/output table then find the card that shows the matching rule

IN	OUT
11	15
15	19
19	23
23	28

MATCHING PATTERNS & RULES **MATHS match** → PROBLEM CARDS

x2

+4

10

INCLUDES ALL THESE AND MORE!

AC9M4N09

MATCHING PATTERNS & RULES

MATHS match

Study the input/output table then find the card that shows the matching rule

IN	OUT
2	12
4	14
7	17
9	19

G

Study the input/output table then find the card that shows the matching rule

IN	OUT
11	15
15	19
19	23
23	28

I

Study the input/output table then find the card that shows the matching rule

IN	OUT
1	10
3	30
5	50
8	80

K

AC9M4N09

IDENTIFY & APPLY RULES

SUPER sort

PROBLEM CARDS

IN	OUT
1	2
2	
3	6
4	8

RULE: _____

A

IN	OUT
1	8
2	16
3	
4	32

RULE: _____

B

IN	OUT
1	
2	5
3	6
4	7

RULE: _____

C

IN	OUT
2	6
4	12
6	18
8	

RULE: _____

D

IN	OUT
11	23
12	
13	25
14	26

RULE: _____

E

IN	OUT
3	
6	30
9	33
12	36

RULE: _____

F

IN	OUT
1	9
5	45
9	
13	117

RULE: _____

G

IN	OUT
25	33
30	38
35	43
40	

RULE: _____

H

AC9M4N09

CONTINUE ADDITION & SUBTRACTION PATTERNS

TRUE OR FALSE

PROB

The next number in the pattern is 10
Rule: +3
Pattern: 1, 4, 7, ___ A

The next number in the pattern is 7
Rule: -42
Pattern: 92, 50, ___ C

The missing number in the pattern is 22
Rule: +11
Pattern: 11, ___, 33, 44 E

The missing number in the pattern is 268
Rule: -88
Pattern: 356, ___, 180, 92 G

The next number in the pattern is 10
Rule: +3
Pattern: 1, 4, 7, ___ A

The next number in the pattern is 7
Rule: -42
Pattern: 92, 50, ___ C

The missing number in the pattern is 22
Rule: +11
Pattern: 11, ___, 33, 44 E

The missing number in the pattern is 268
Rule: -88
Pattern: 356, ___, 180, 92 G

AC9M4N09

PATTERN PROBLEM SOLVING

WOULD YOU rather...

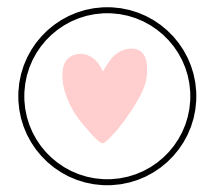
Read the word problems then colour the box to show if you would rather option A or option B. Explain your thinking behind each decision.

	OPTIONS	WHY?
WOULD YOU RATHER...	A Start with \$10, then receive \$5 every week for 4 weeks	
	B Start with \$2, and have this number double every week for 4 weeks	
WOULD YOU RATHER...	A Play a game where every time you roll a number, you multiply it by 3 to calculate your points	
	B Play a game where every time you roll a number, you multiply it by 2 and add 1 to calculate your points	
WOULD YOU RATHER...	A Enter a competition for \$40, where the prize money is ten times the ticket value	
	B Enter a competition for \$40, where the prize money is six times the ticket value, but you also get a one-time bonus of \$230	

THE SYDNEY TEACHER

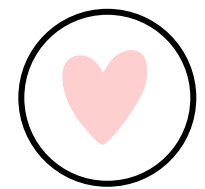
CONTENTS

What's included in this pack?



Six engaging activities for the outcome **AC9M4N09**:

- + True or False
- + Maths Match
- + Super Sort
- + Maths Maze
- + Would You Rather?
- + Thinker's Keys



Answer Key for teachers



AC9M4N09

IDENTIFY & APPLY RULES

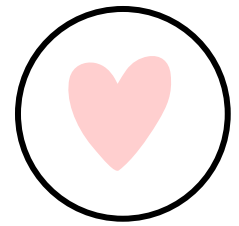
SUPER sort

On each problem card, identify the rule applied in each problem. Write the rule in the missing number. Sort the cards according to whether the rule is addition or multiplication. Before gluing, arrange the cards in alphabetical order.

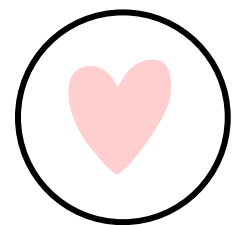
ANSWERS

ADDITION		MULTIPLICATION	
IN	OUT	IN	OUT
1	4	1	2
2	5	2	4
3	6	3	6
4	7	4	8
RULE: $+ 3$		RULE: $\times 2$	
IN	OUT	IN	OUT
11	23	1	8
12	24	2	16
13	25	3	24
14	26	4	32
RULE: $+ 12$		RULE: $\times 8$	
IN	OUT	IN	OUT
3	27	2	6
6	30	4	12
RULE: $+ 24$		RULE: $\times 3$	

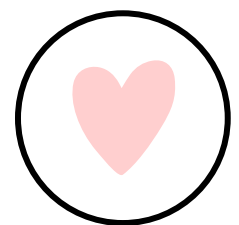
HOW YOU CAN USE THIS RESOURCE



Simply print the activities and distribute them to students—**no prep required**



Assign tasks according to students' abilities, from easy to challenging, to build understanding progressively



Reinforce learning and track student progress



LOOKING FOR MORE?



Unlock stress-free assessment with the **Year 4 Number & Algebra Test Pack!** Save hours of planning with pre and post-tests for every outcome, plus editable spreadsheets to track growth, all fully aligned to the new V9.0 curriculum!

YEAR 4

NUMBER & ALGEBRA TEST PACK

THE SYDNEY TEACHER

NUMBER Name: _____ Date: _____
Outcome AC9M4N03: find equivalent representations of fraction denominators and make connections between fractions and decimals

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6

1. Use the models to find the equivalent fractions and record the missing values.

a) $\frac{1}{2} = \frac{\square}{4}$ b) $\frac{4}{10} = \frac{\square}{5}$ c) $\frac{\square}{6} = \frac{2}{3}$

2. Use the fractions wall to find equivalent fractions for the following.

a) $\frac{1}{2} = \frac{\square}{6}$ b) $\frac{2}{3} = \frac{\square}{6}$

c) $\frac{6}{8} = \frac{\square}{10}$ d) $\frac{8}{10} = \frac{\square}{5}$

3. Colour the bars.

ALGEBRA Name: _____ Date: _____
Outcome AC9M4A01: find unknown values in numerical equations involving addition and subtraction, using the properties of numbers and operations

POST TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

1. Find the missing numbers needed to complete the addition number sentences, showing all working out in the space provided.

a) $10 + \square = 30$ b) $72 + \square = 100$ c) $\square + 143 = 276$

2. Find the missing numbers needed to complete the subtraction number sentences, showing all working out in the space provided.

a) $10 - \square = 3$ b) $109 - \square = 43$ c) $\square - 76 = 563$

3. Find the missing numbers needed to balance the number sentences, showing all working out in the space provided.

a) $412 + 391 = 678 + \square$ b) $799 - 342 = 428 + \square$

22 PRINTABLE TESTS