

Flashback 4

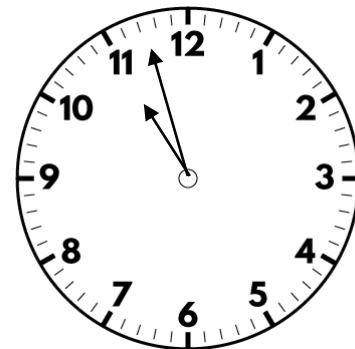
Year 6 | Week 2 | Day 3

1) Solve the equation $3x = 24$ $x = 8$

2) If $y = 9$, what is the value of $19 - y$? 10

3) Convert $\frac{16}{100}$ to a decimal. 0.16

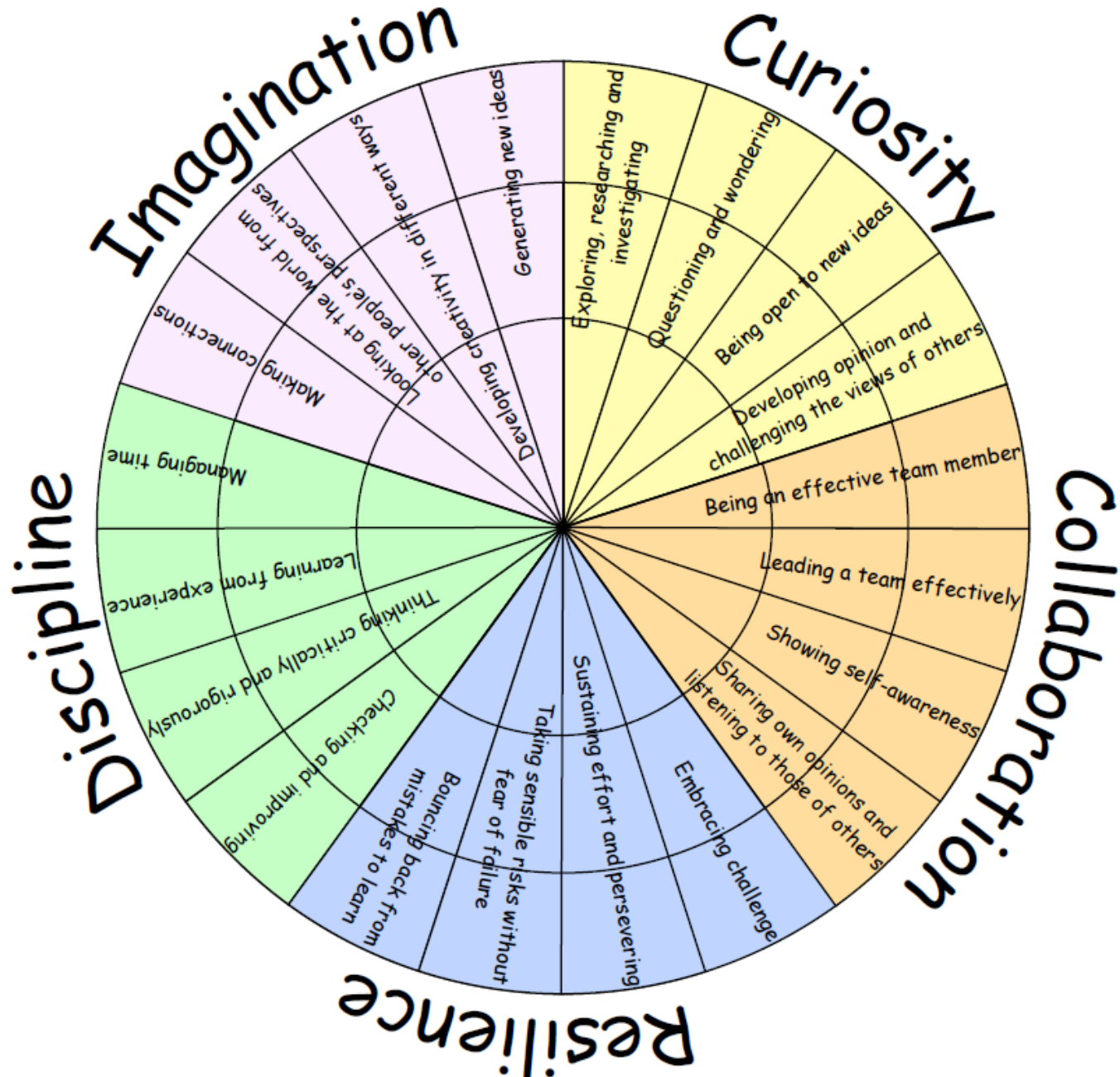
4) Round 736, 128 to the nearest ten thousand. 740,000



I CAN SOLVE SIMPLE
EQUATIONS WHERE
THERE IS ONE UNKNOWN

PROPERTIES OF NUMBER (21 IV)

LEARNING HABITS?



GUIDED PRACTICE

$$\text{duck} = 6$$

$$\text{giraffe} = 7$$

$$\text{duck} + \text{giraffe} + \text{giraffe} + \text{giraffe} = \boxed{}$$

$$\text{duck} + 3 \text{ giraffe} = \boxed{}$$

$$\frac{\text{duck}}{2} = \boxed{}$$

IP



$$\star = 5$$

$$\text{puzzle piece} = 4$$

$$\star + \star + \text{puzzle piece} = \boxed{}$$

$$2 \star + \text{puzzle piece} = \boxed{}$$

$$2 \star + 2 \text{ puzzle piece} = \boxed{}$$



$$a = 7$$

$$b = 3$$

$$a + a + a + b = \boxed{}$$

$$3 \times a + b = \boxed{}$$

$$3a + b = \boxed{}$$

$$b + b + b + b = \boxed{}$$

$$4 \times b = \boxed{}$$

$$4b = \boxed{}$$

$$3a + 4b = \boxed{}$$



$$\blacktriangleright = 12$$

$$\blacksquare = 5$$

$$\blacktriangleright - \blacksquare = \boxed{}$$

$$\blacktriangleright \times \blacksquare = \boxed{}$$

$$\frac{\blacktriangleright}{2} = \boxed{}$$



$$c = 7$$

$$d = 3$$

$$c^2 = \boxed{}$$

$$2d^2 = \boxed{}$$

DIVE DEEPER 1

1) ☺ = 3 ★ = 5

Work out the following:

☺ + ★ =

★ + ☺ =



Mo

What do you notice?

Mo says, it doesn't matter what the value of the symbols are, ☺ + ★ will give the same answer as ★ + ☺.

Find some more examples of numbers this works for. Do you agree with Mo?

2) If ↑ = 6, complete the blank table with the correct values:

2↑	↑ + 2	$\frac{\uparrow}{2}$
4↑ + 2	7↑	↑ - 2
$\frac{\uparrow}{3}$	3↑ - 1	3↑ - 5

DIVE DEEPER 2

3) If $a = 10$ and $b = 6$, work out the values of the following:

a) $a + b =$

b) $a - b =$

c) $2a =$

d) $2a + b =$

e) $3a - 7 =$

f) $2(a - b) =$

4) Write $>$, $<$ or $=$ to compare the following:

$m = 7$ $n = 5$

a) m n

b) $2m$ 10

c) $n - 1$ 5

d) $2m$ $2n$

e) $7n$ $5m$

5) Write these in order, starting with the smallest:

$a = 10$

$5a$

$a + 5$

$\frac{a}{5}$

a^2

DIVE DEEPER 3

6) Work out the value of the following:

a) If $t = 3$ and $y = 7$
what is $3t + y$?

b) If $r = 5$ and $j = 1.5$
what is $r^2 - 2j$?

c) If $l = 0.5$ and $p = \frac{3}{4}$,
what is $l + p$?

d) If $m = \frac{4}{5}$ and $k = 0.1$,
what is $m + 2k$?

9) Complete the table:

w	5w	5w - 1
2	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>
12	<input type="text"/>	<input type="text"/>
<input type="text"/>	25	<input type="text"/>
<input type="text"/>	<input type="text"/>	34
<input type="text"/>	<input type="text"/>	99

7) Write two different algebraic expressions that give a value of 40:
If $a = 10$,

40 =

40 =

8) Write two different algebraic expressions that give a value of 40:

If $b = 15$,











40 =

40 =

SELF-ASSESSMENT

- Some will even re-arrange equations if necessary
- Some will use BIDMAS to find the correct answers
- Most will be able to substitute letters and symbols
- All will understand how to substitute symbols.

IP


 = 5
  = 4
 +  +  = 14
 2  +  = 14
 2  + 2  = 18



$$a = 7$$

$$b = 3$$

$$a + a + a + b = 24$$

$$3 \times a + b = 24$$









$$3a + b = 24$$

$$b + b + b + b = 12$$

$$4 \times b = 12$$

$$4b = 12$$

$$3a + 4b = 33$$


 = 12
  = 5
 -  = 7
 x  = 60
 = 6
 $\frac{\quad}{2}$



$$c = 7$$

$$d = 3$$

$$c^2 = 49$$

$$2d^2 = 18$$

DIVE DEEPER 1 - ANSWERS

1) ☹️ = 3 ★ = 5

Work out the following:

$$\text{☹️} + \star = 8$$

$$\star + \text{☹️} = 8$$



Mo

What do you notice? **The answers are the same.**

Mo says, it doesn't matter what the value of the symbols are, ☹️ + ★ will give the same answer as ★ + ☹️ .

$$2 + 7 = 9$$

$$7 + 2 = 9$$

Mo is correct: addition is commutative

2) If ↑ = 6, complete the blank table with the correct values:

$2\uparrow$	$\uparrow + 2$	$\frac{\uparrow}{2}$
$4\uparrow + 2$	$7\uparrow$	$\uparrow - 2$
$\frac{\uparrow}{3}$	$3\uparrow - 1$	$3\uparrow - 5$

12	8	3
26	42	4
2	17	13

DIVE DEEPER 2 - ANSWERS

3) If $a = 10$ and $b = 6$, work out the values of the following:

a) $a + b = 16$

b) $a - b = 4$

c) $2a = 20$

d) $2a + b = 26$

e) $3a - 7 = 23$

f) $2(a - b) = 8$

4) Write $>$, $<$ or $=$ to compare the following:

$$m = 7 \quad n = 5$$

a) $m > n$

b) $2m > 10$

c) $n - 1 < 5$

d) $2m > 2n$

e) $7n = 5m$

5) Write these in order, starting with the smallest:

$$a = 10$$

$$5a$$

$$a + 5$$

$$\frac{a}{5}$$

$$a^2$$

$$\frac{a}{5}$$

$$a + 5$$

$$5a$$

$$a^2$$

DIVE DEEPER 3 - ANSWERS

6) Work out the value of the following:

a) If $t = 3$ and $y = 7$

i. what is $3t + y$? **16**

b) If $r = 5$ and $j = 1.5$

ii. what is $r^2 - 2j$? **22**

c) If $l = 0.5$ and $p = \frac{3}{4}$,

iii. what is $l + p$? **1.25**

d) If $m = \frac{4}{5}$ and $k = 0.1$,

iv. what is $m + 2k$? **1**

7) Write three different algebraic expressions that give a value of 40:

If $a = 10$,

$$4a = 40 \quad 5a - 10 = 40 \quad 3a + 10 = 40$$

8) Write three different algebraic expressions that give a value of 40:

If $b = 15$,

$$2b + 10 = 40 \quad 3b - 5 = 40 \quad 2\frac{2}{3}b = 40$$

9) Complete the table:

w	5w	5w - 1
2	10	9
10	50	49
12	60	59
5	25	24
7	35	34
20	100	99