Maths

1

Primary

Activity Book

Welcome back!

1 Colour.
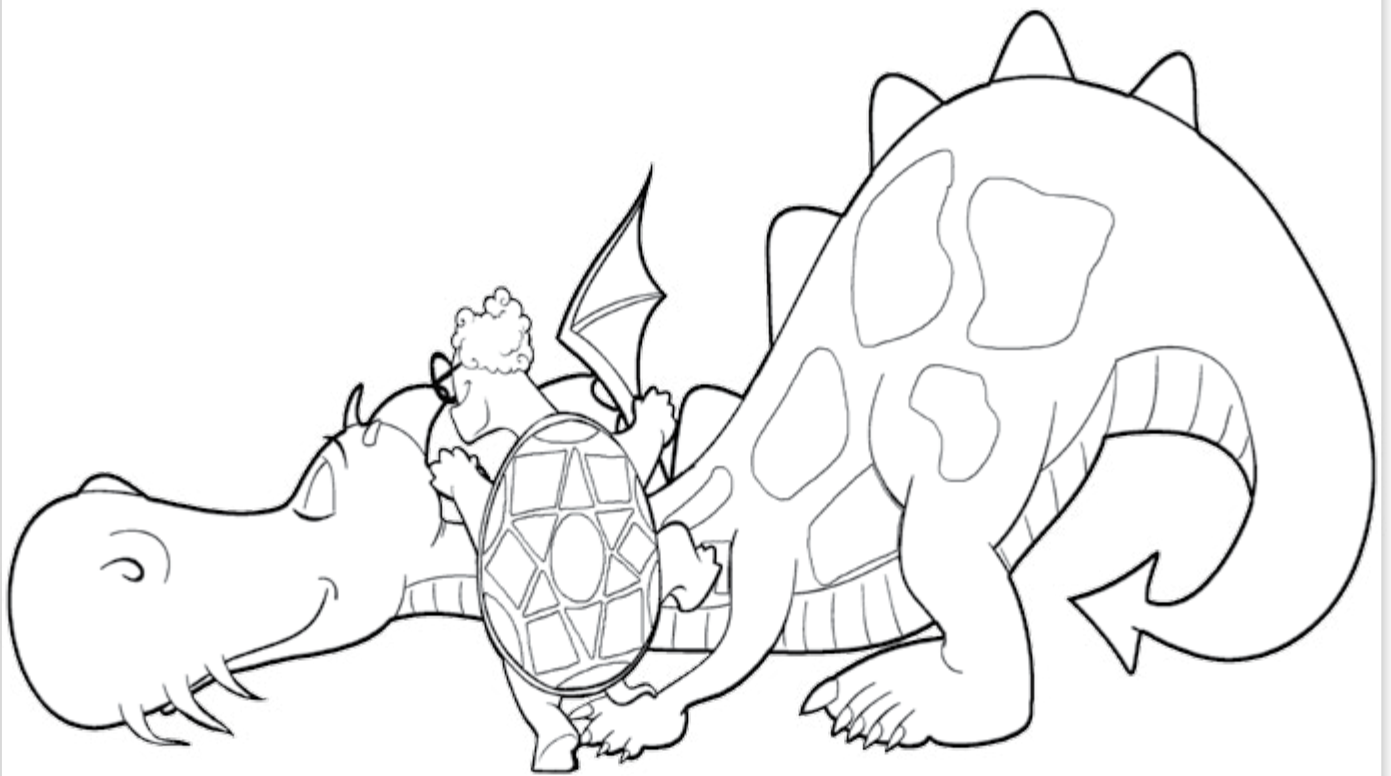
On 3: 1, 2 ,3,
let's fly!

2 Count and write.

The new friends
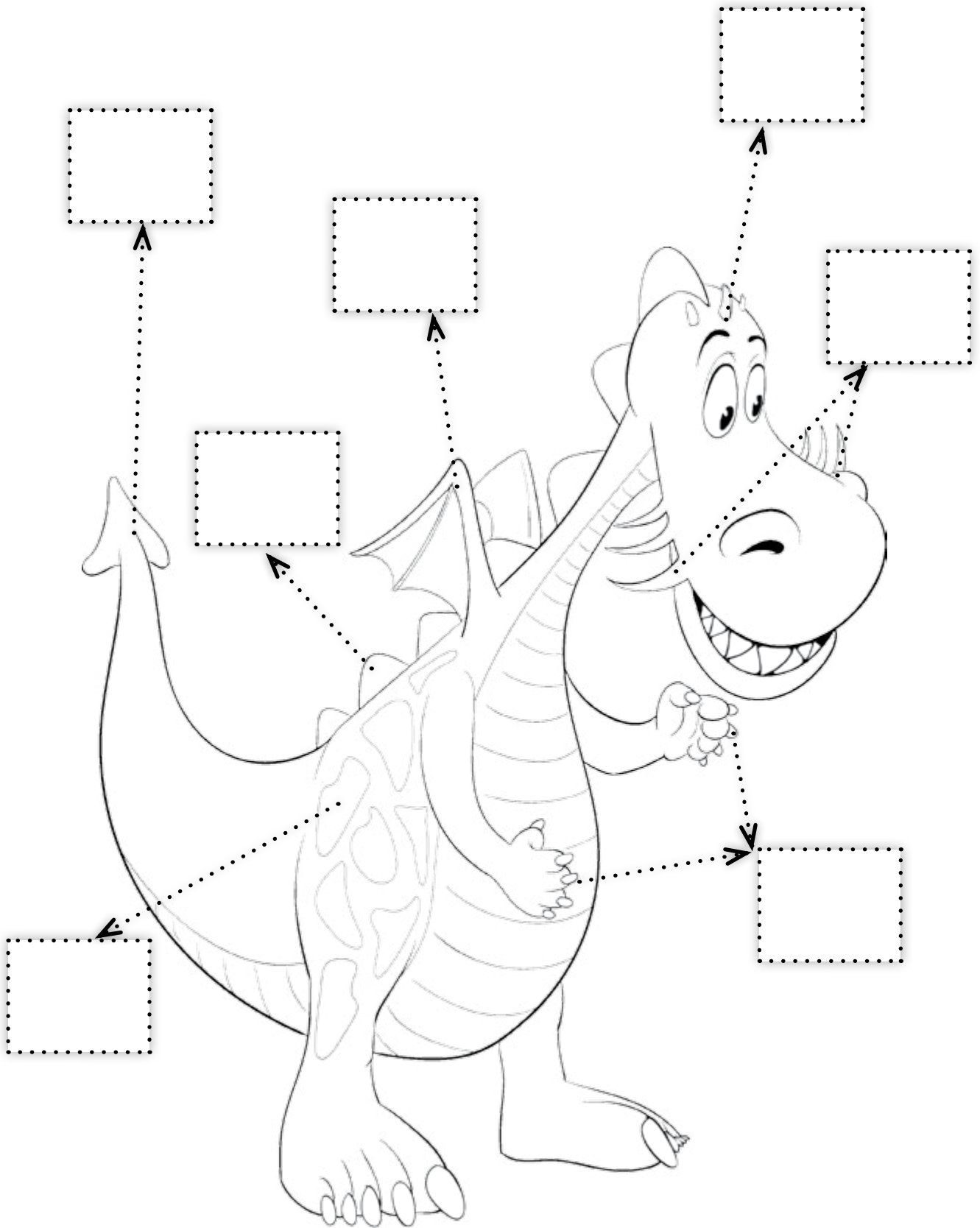
1 How many elements are there in each line? Write the numbers in the boxes. Circle the box with the highest number.
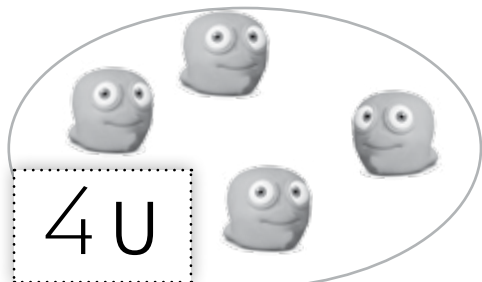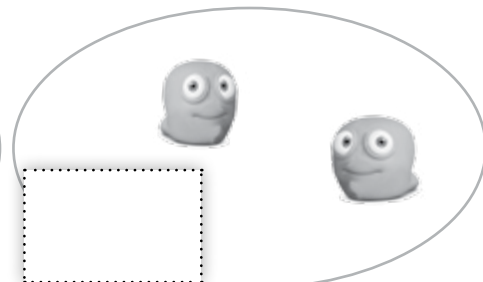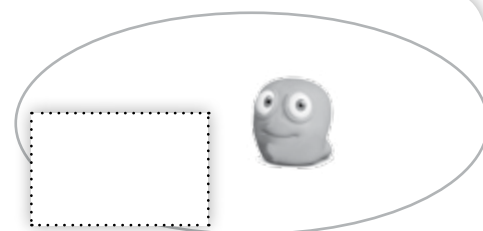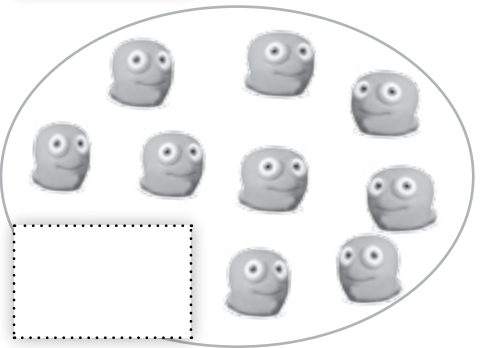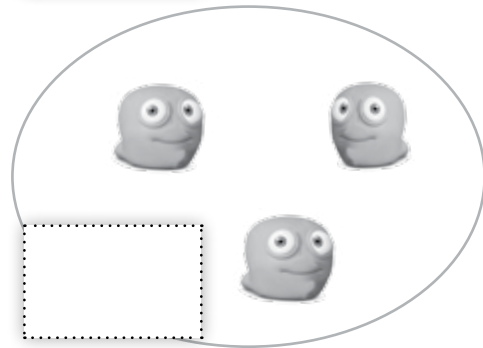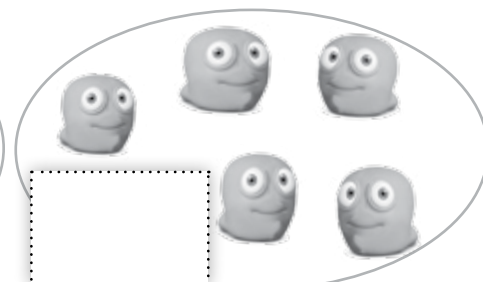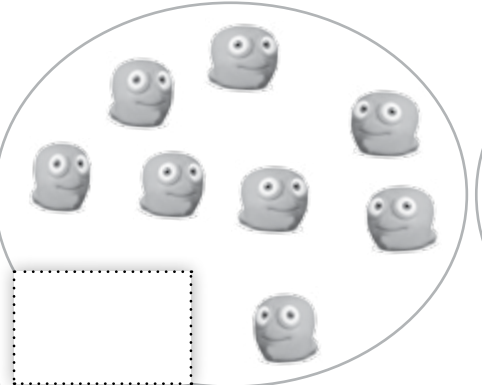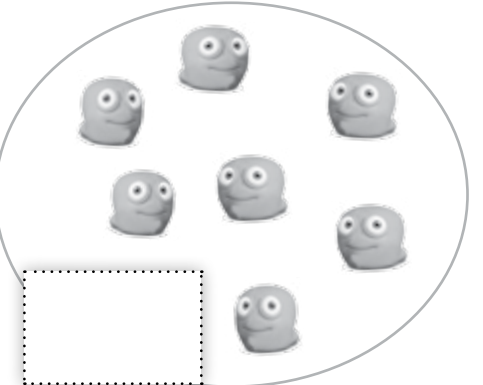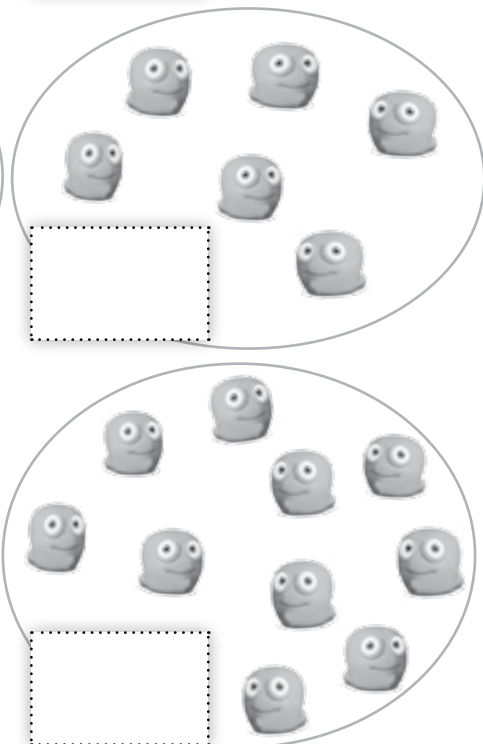
2 Write the correct symbols (<, >, or =) between the pictures.
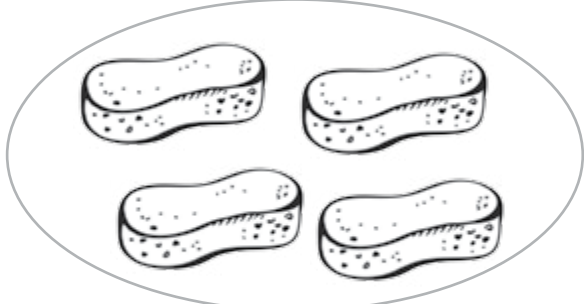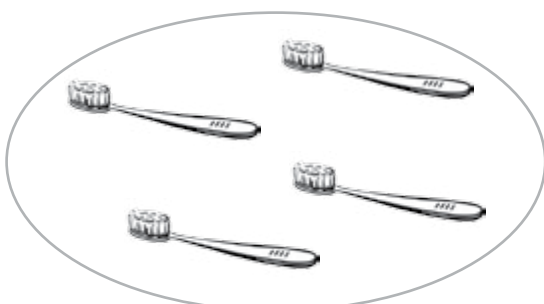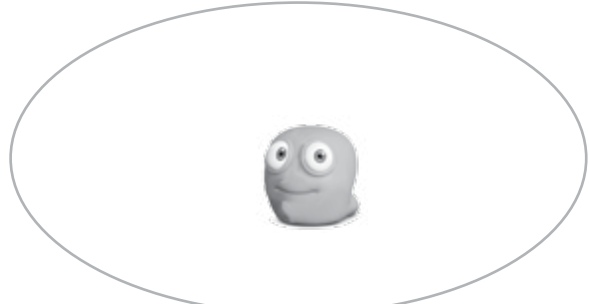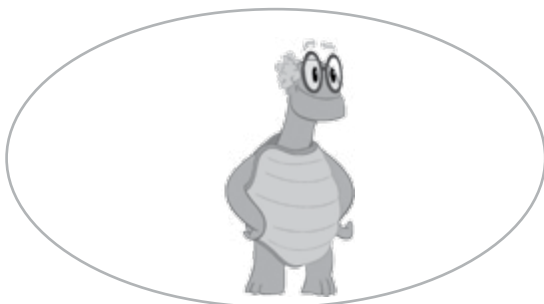
3 Write the numbers up to 10. Colour number 5 and number 10 in red.
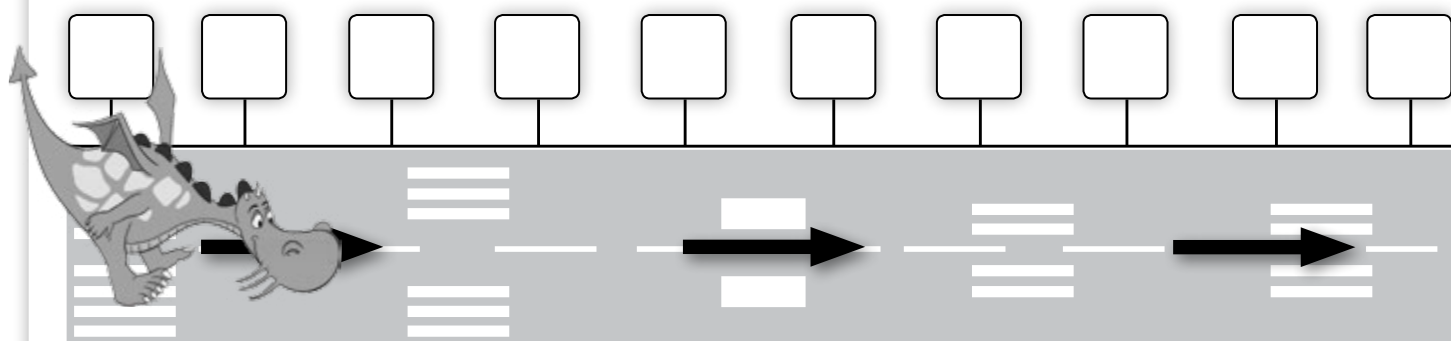
4 Count the units and write the numbers in the boxes.

4 U

5 Complete.


```
        10
           9
      8
                7

   4
                   3
                      2
 1
```

6 Write the names of the numbers.

1		6	
2		7	
3		8	
4		9	
5		10	

7 Write the missing numbers.

Upper teeth circles: 12, 14, 20
Lower teeth circles: 7, 11, 17
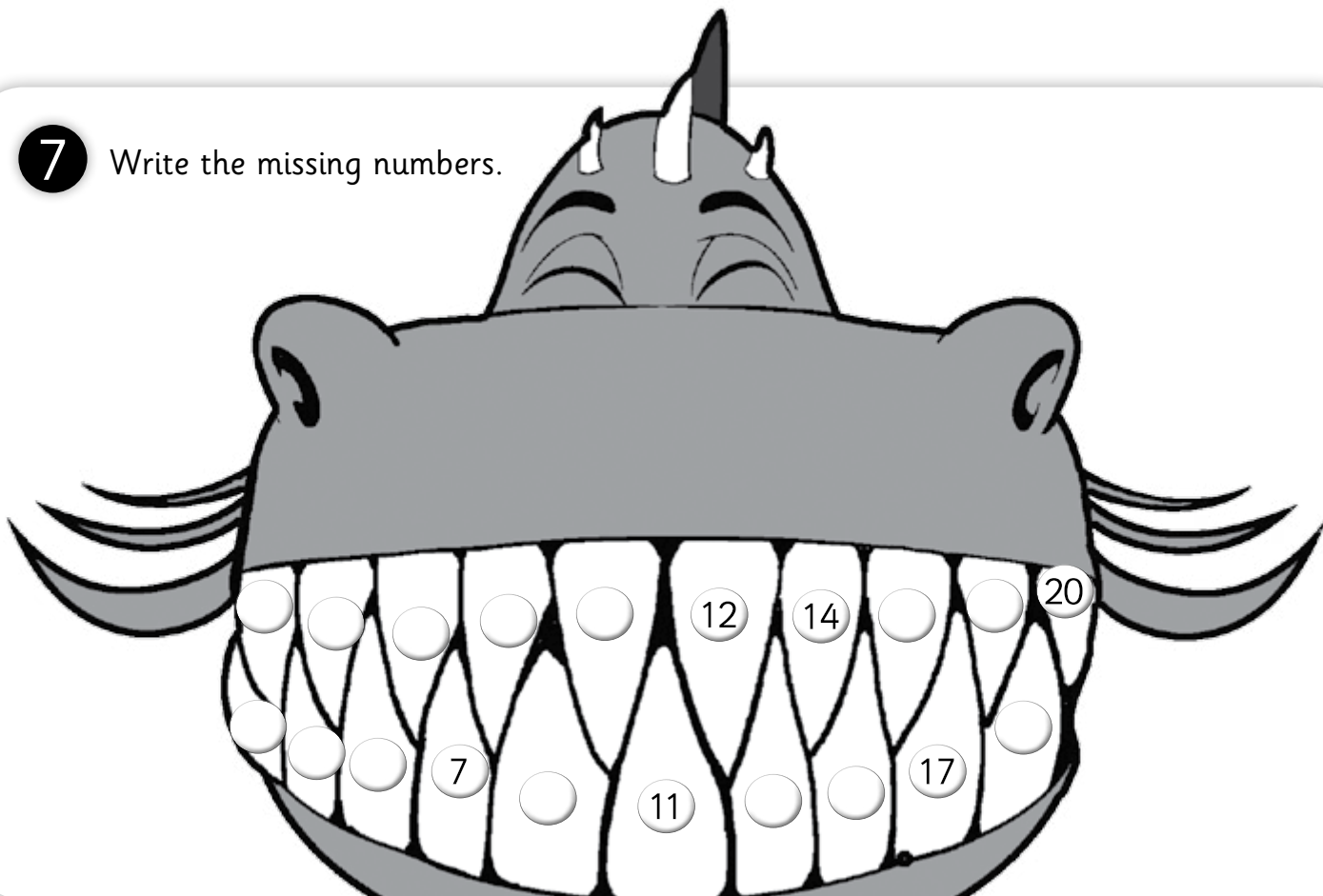
8 Count and complete.

	Upper teeth
	Lower teeth
	Total

9 Write the number before and after.

	2	
	11	
	5	

	7	
	14	
	19	

⑩ Colour.
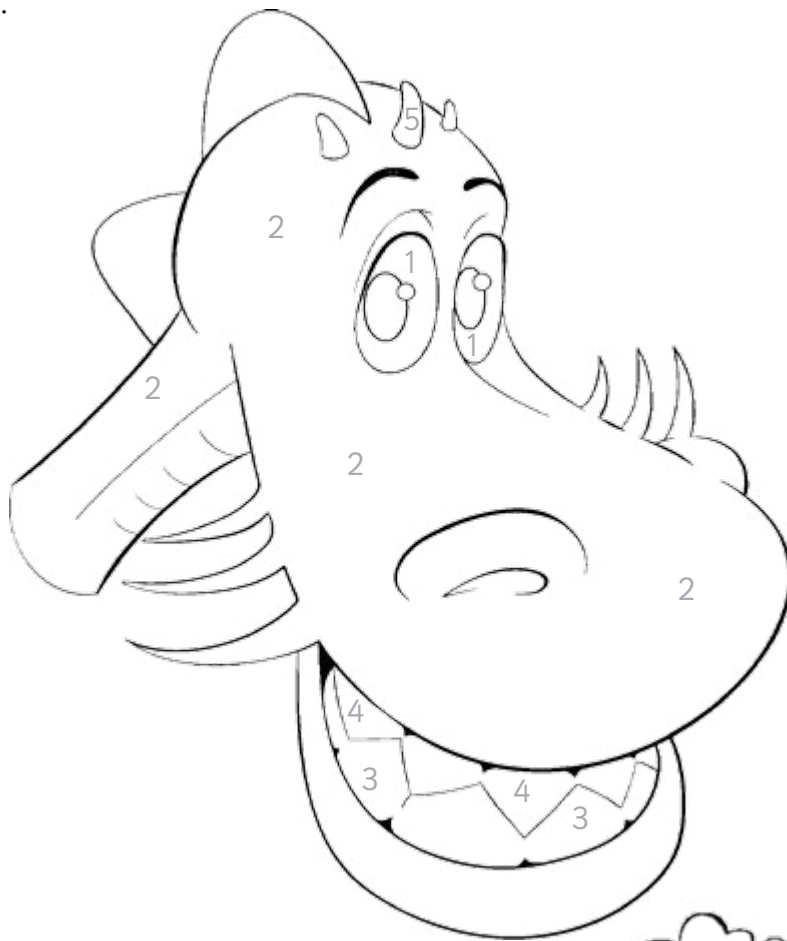
Green Dragon

① Blue
② Green
③ Yellow
④ Orange
⑤ Red

Purple Turtle

⑥ Purple
⑦ Blue
⑧ Violet
⑨ Pink
⑩ Yellow

1 Circle in pairs.

2 Hidden message. Crack the code!

9	3	5	2	6	6	3		8	6

3	7	2	4	6	6	5	2	6	3

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
*	0	#

3 Join the numbers. Start from number 1 and go up to number 20.

7	6	5	3	2
8	9	10	4	1
19	18	11	12	13
20	17	16	15	14

9

Green Dragon jumps tiles one by one.
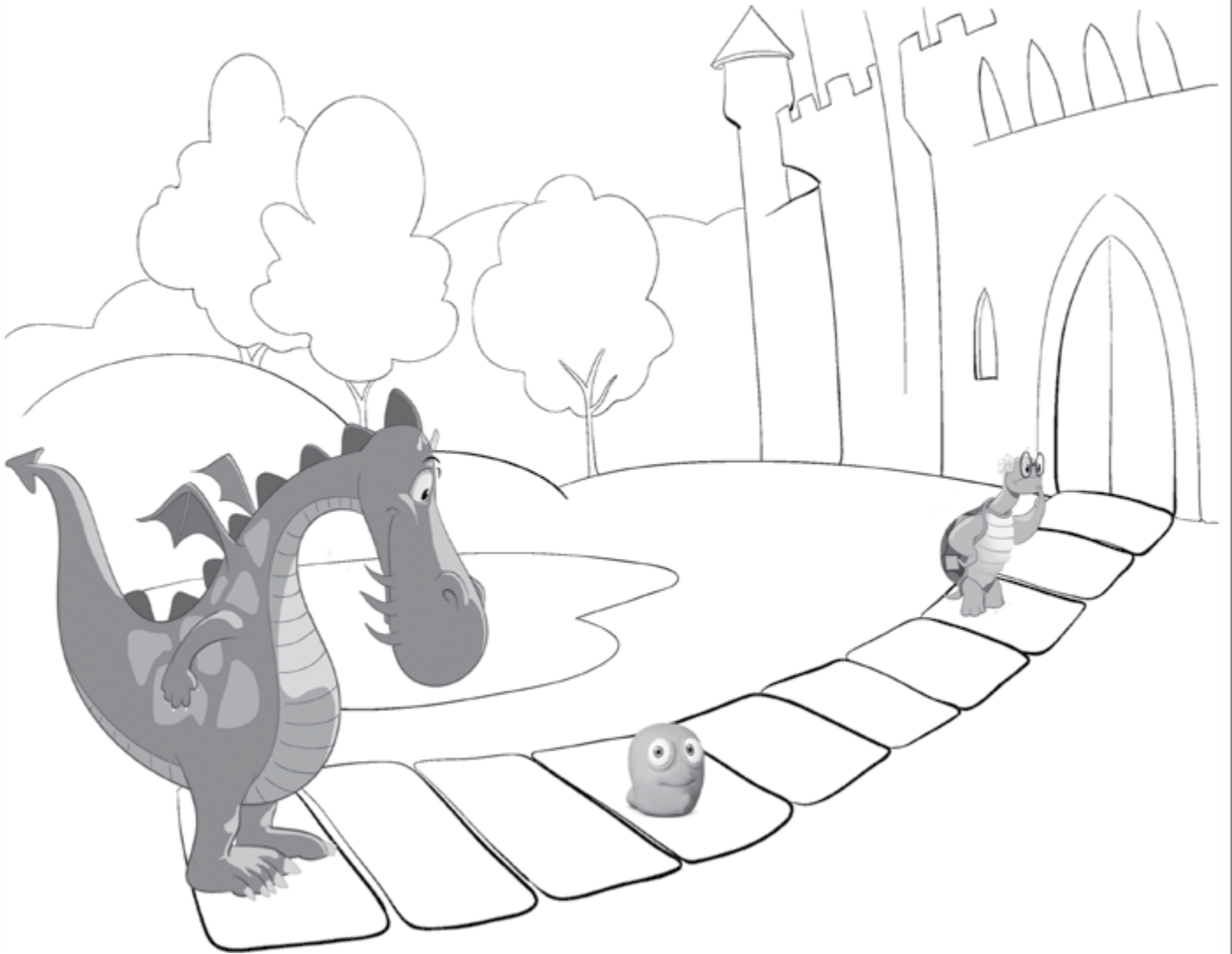
1 Green Dragon must jump ⬚ tiles to reach Purple Turtle.

2 Green Dragon must jump ⬚ tiles to reach the unit.

3 Purple Turtle must jump ⬚ tiles to reach the castle door.

A snack

1 Create sets and subsets.

2 Form subsets.
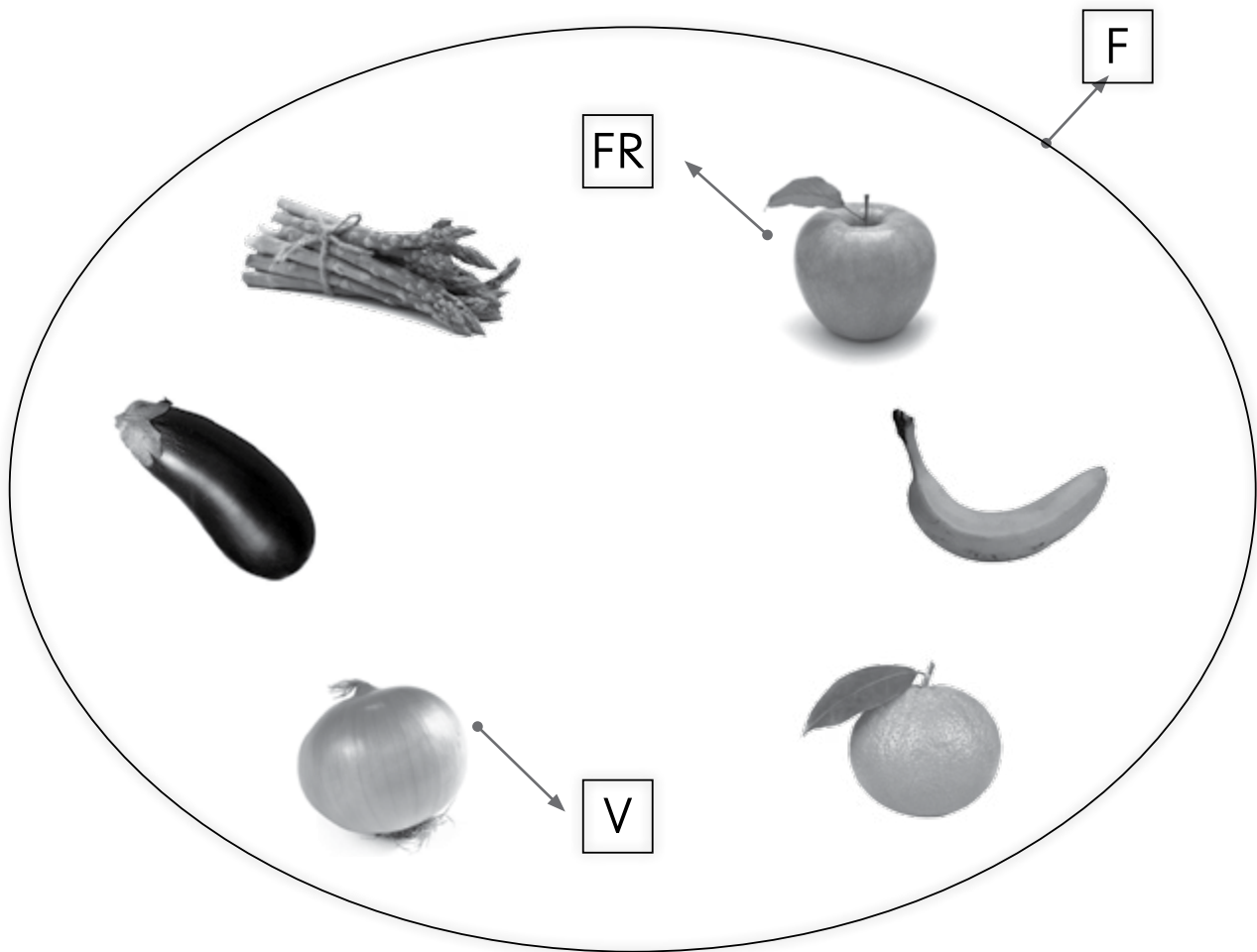
3 Represent the sets.

F = { .... }

V = { .... }

FR = { .... }

④ Break down the numbers.
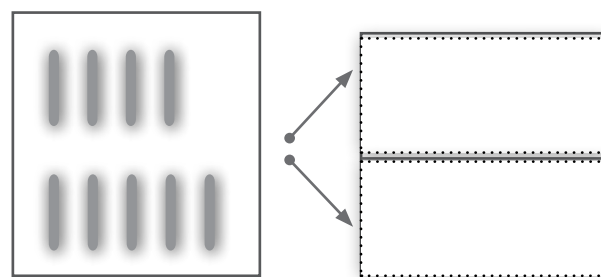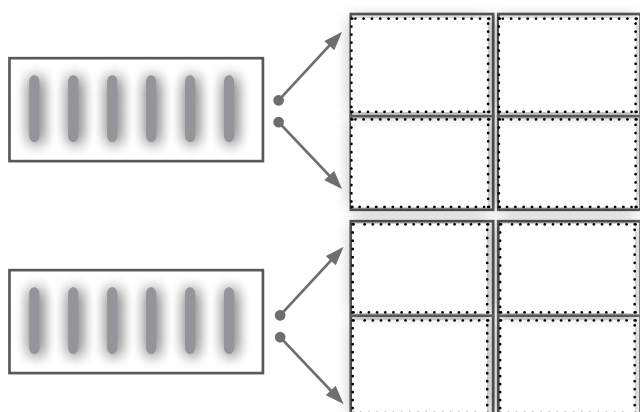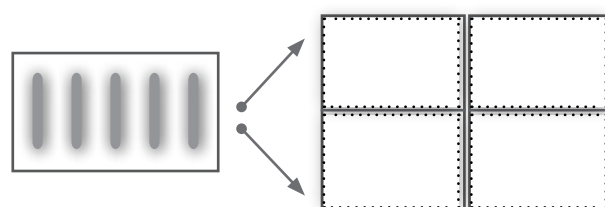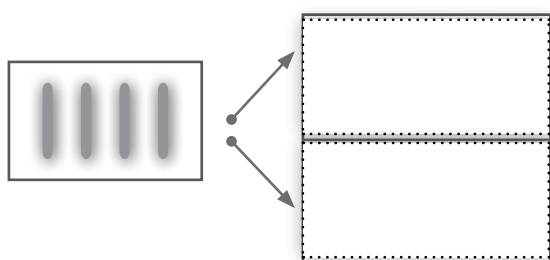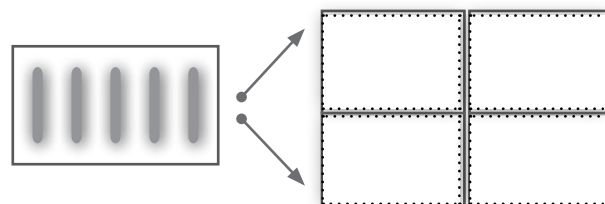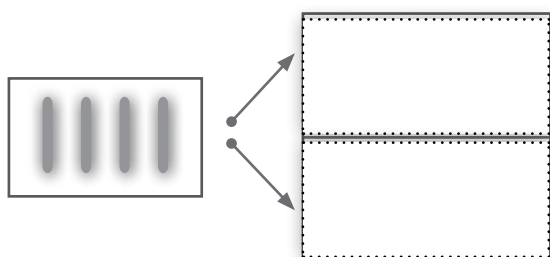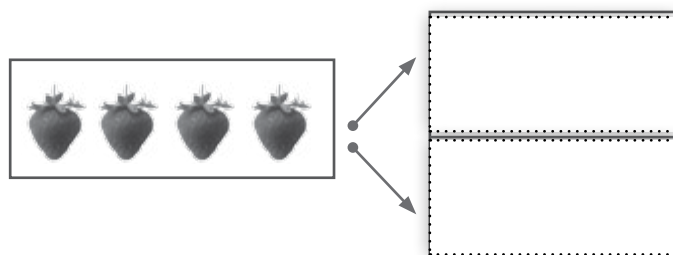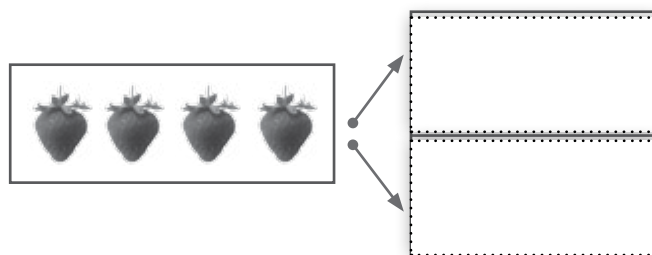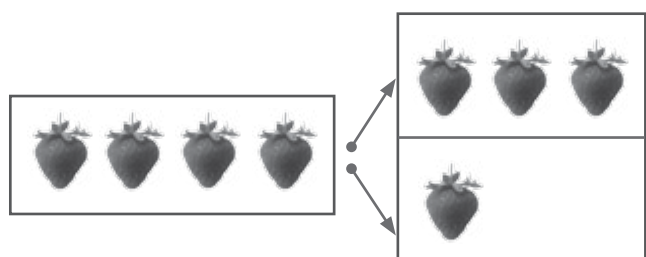
5 Make up the numbers.

2 ⬚
7

4 ⬚
7

3 ⬚
8

6 ⬚
8

5 ⬚
9

7 ⬚
9

6 Help the units cross the river. Draw as many tens as you need for all of them.
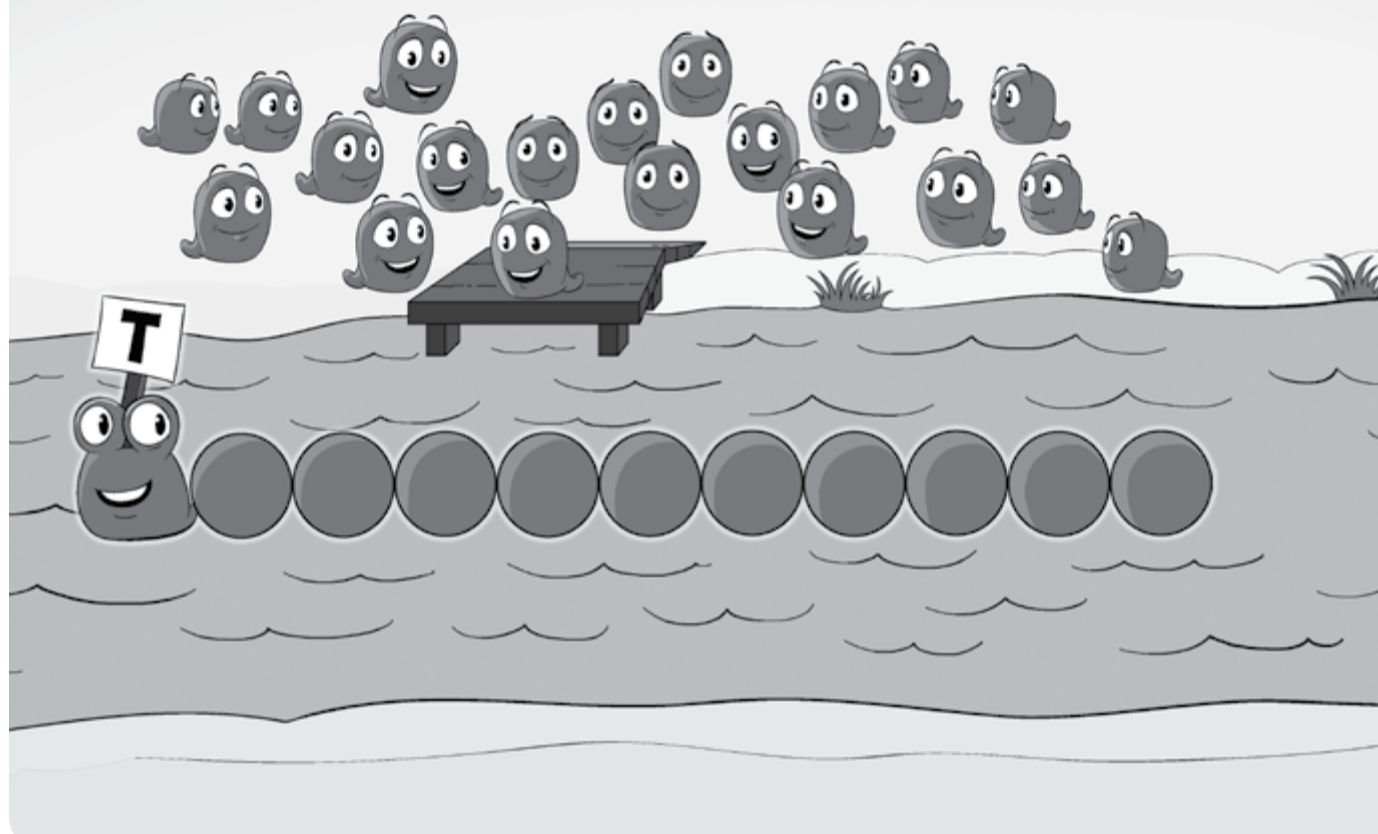
7 Draw the missing fruit kebabs.

5   4   6   3   2
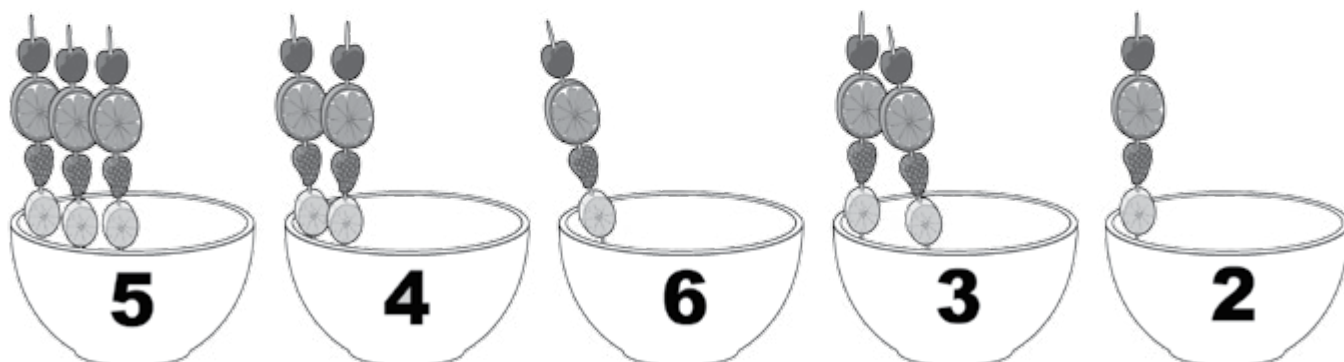
8 Group the units in tens and complete the table.

T	U

T	U

T	U

T	U

9 How many units do you need to add, to make 10? Draw them.

 +   = 10

 +   = 10

 +   = 10

 +   = 10

 +   = 10

Calculate

1 Do the additions and subtractions.

0   1   2   3   4   5   6   7   8   9   10

	+		=	

1 Colour the number of times that Green Dragon jumps.

0 1 2 3 4 5 6 7 8 9 10
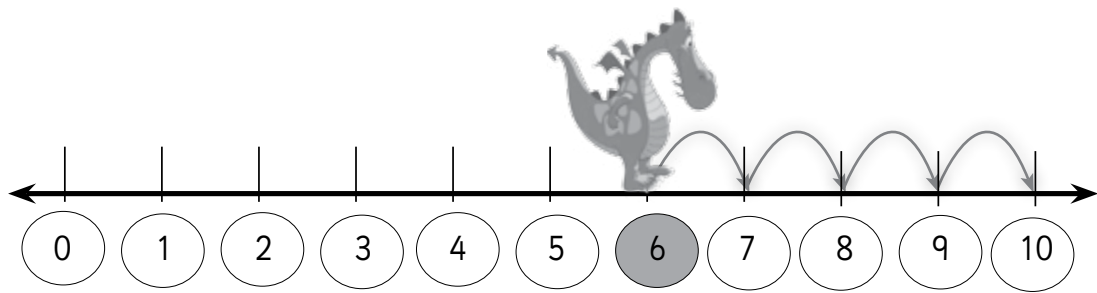
2 If Green Dragon is at number 5 and he moves 4 spaces, which number does he reach?

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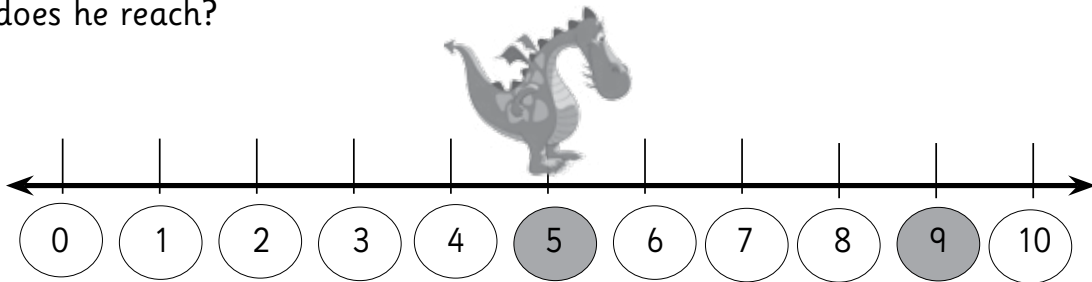
5 + 4 =

3 Colour the number of times that Purple Turtle jumps.

0 1 2 3 4 5 6 7 8 9 10
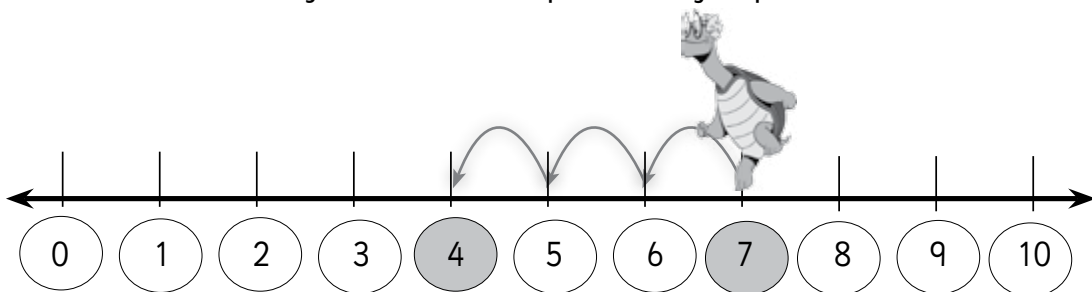
4 If Purple Turtle is at number 7 and it goes back 2 spaces, which number does she reach?

0 1 2 3 4 5 6 7 8 9 10

7 − 2 =

17

Maths

Primary
Activity Book

3
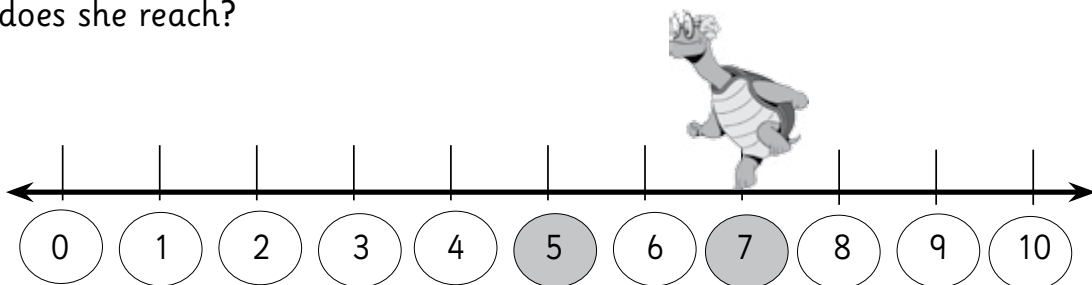
Welcome back!

1 Calculate the profit the museum makes over 6 weeks.

1st week

$$387 \\ + \ 231$$

[ ] G

2nd week

$$412 \\ + \ 499$$

[ ] G

3rd week

$$506 \\ + \ 375$$

[ ] G

4th week

$$788 \\ + \ 191$$

[ ] G

5th week

$$656 \\ + \ 257$$

[ ] G

6th week

$$873 \\ + \ 444$$

[ ] G

Total profit over 6 weeks: [ ] G

2 The museum accountant doesn't know the daily expenses. Help him to work them out.

569 − [273 / 363 / 775 / expenses] = 206

Check:

951 − [465 / 1 338 / 564 / expenses] = 387

Check:

3 Discover the missing numbers.

```
  □29        376        496        128
+ 273      + 5□5      + 474      + 79□
─────      ─────      ─────      ─────
  602        931        □70        922
```

4 Green Dragon only broke some of his money boxes. Colour the pictures he can buy.
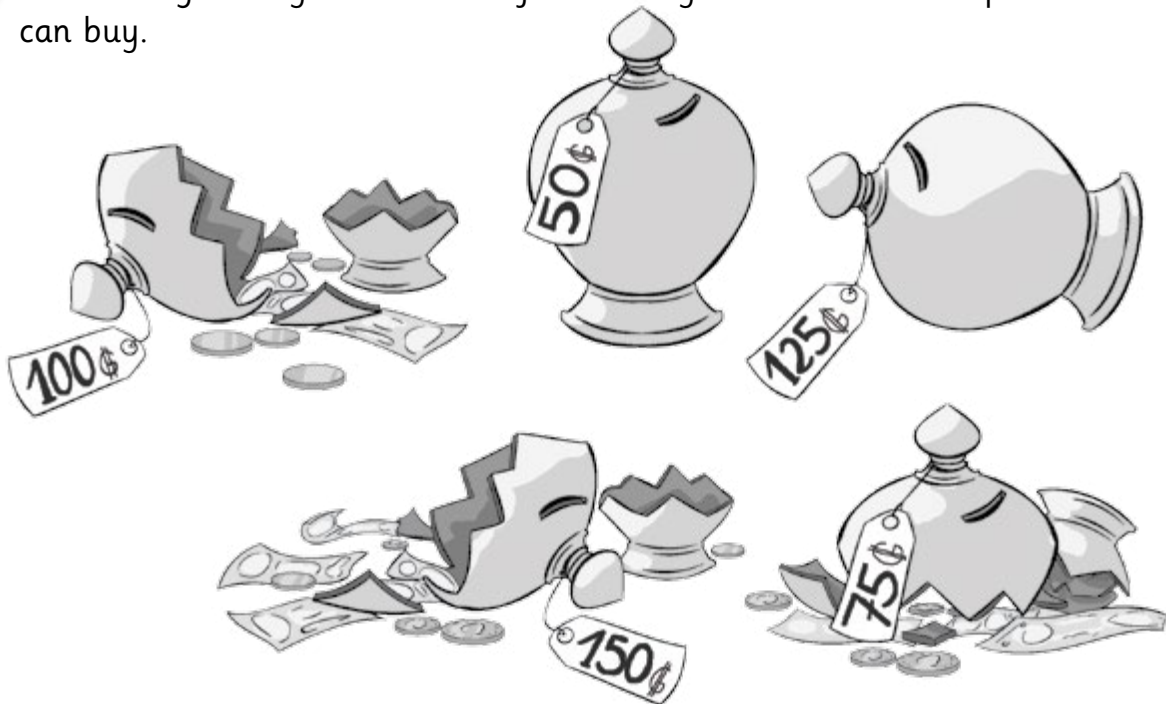
275 G	425 G	175 G	150 G

Girl with a pearl earring. Vermeer.	Sunflowers. Van Gogh.	The tree of life. Klimt	Girl at the window. Dalí.
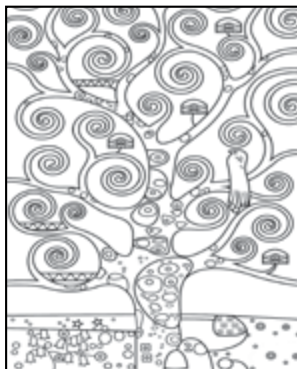
Number of visits to the museum

1 Put a circle round the people in these positions.

- fourth   - eighth   - sixth   - fifth
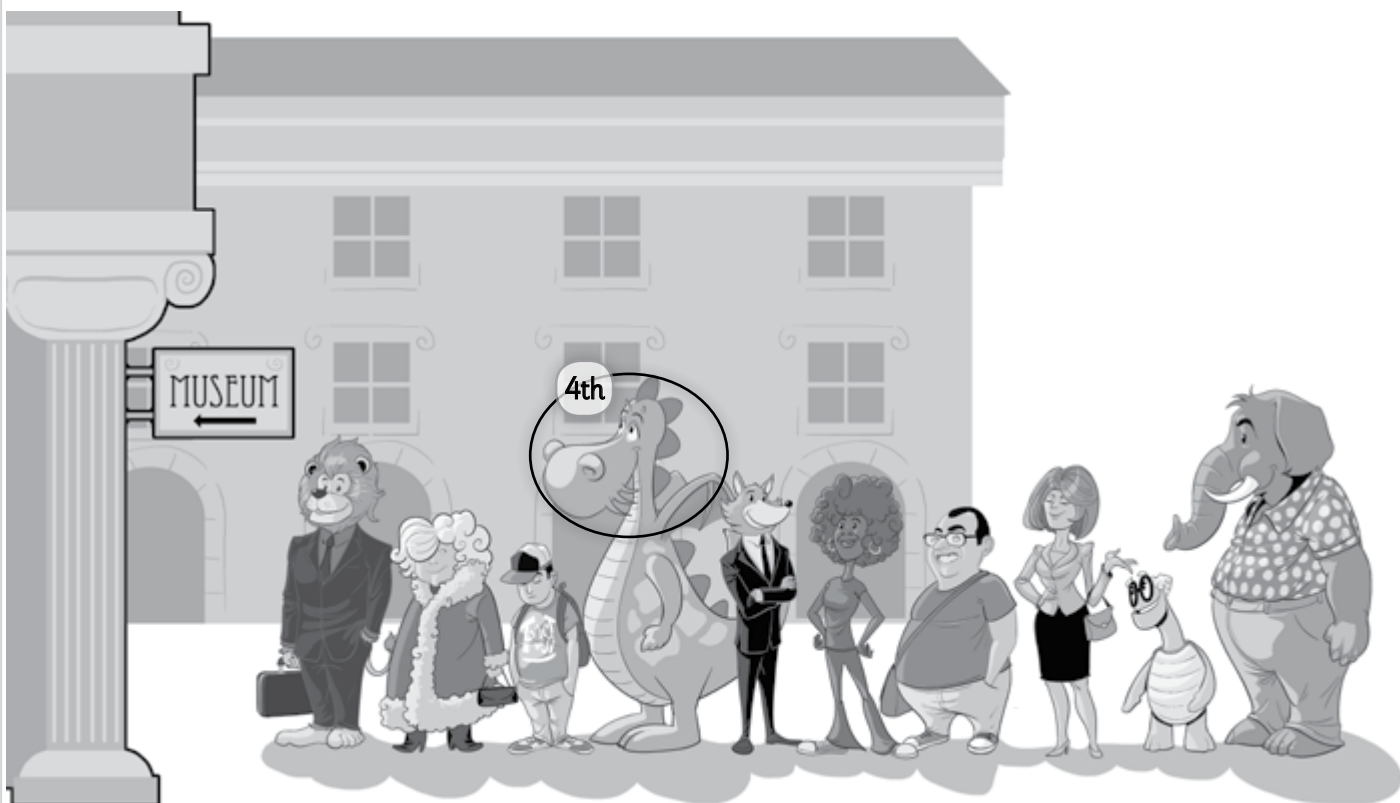
2 Find the ordinal numbers and complete the table.

Position	Word
2nd	
5th	
8th	
11th	
17th	
20th	

```
B O N U Y N M A X Q W I L P X
Z A D E N B R E S V P O U O G
A F I F T H O D D O E K M I F
I N O C T E N C X P M H O G D
D W D S E O F O O L T B N H B
O S E E C S T I K N R Q L T D
Y C C E H T T W E N T I E T H
G I S G J Y T E C U K V N B P
H O M L E A T Q W X L V K A E
C M O U D N C Y O A P E L Z T
U E N Q E N H A T E N I M A S
A G J V E D O O S X O G J P Y
R V E F Z S I N Y A I H L H U
T S U O R A E C B V G T N G K
H L H C E L E V E N T H S S P
```

3 This week the museum has had the number of visits shown below.
Complete.

Monday		One hundred and eight
Tuesday	333	
Wednesday	580	
Thursday		Nine hundred and fifteen
Friday	99	
Saturday		Seven hundred and sixty-four
Sunday	900	

4 Read these numbers and circle.

The digit of the tens:

16	8	801	222	90

The digit of the units:

27	703	10	566	4

6 Complete.

Number	Breakdown	Breakdown	Reading
	3 T + 8 U		
		500 + 30 + 9	
115			
			Two hundred and twenty

5

6 Complete the table.

								597			
										629	
770											
									818		
					945						

7 Join with arrows.

731		2 hundreds and 5 tens		Seven hundred and thirty-one
250		9 hundreds and 9 units		Four hundred and fifty-seven
457		4 hundreds, 5 tens and 7 units		Nine hundred and nine
909		7 hundreds, 3 tens and 1 unit		Two hundred and fifty

8 Mark the correct answer with an X.
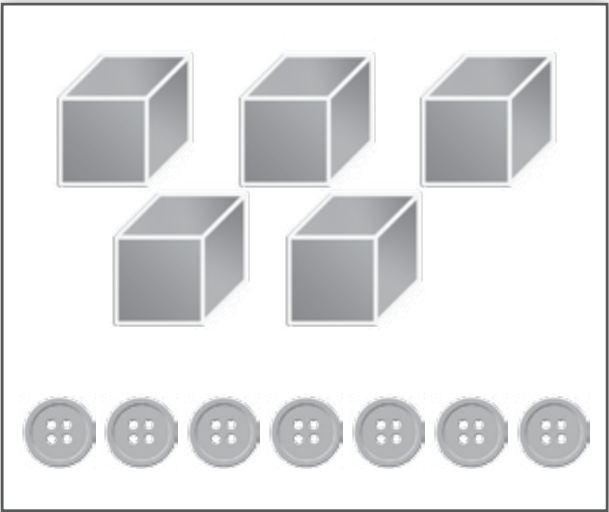
[ ] 570
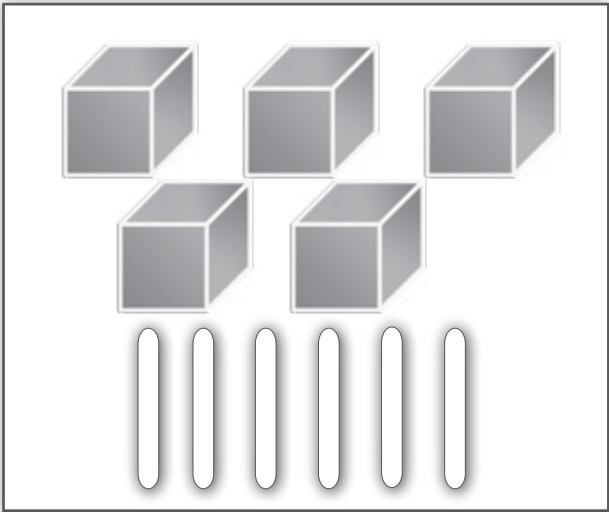
[ ] 570

9 Complete with the signs < , > , = .

501 ⬚ 105   99 ⬚ 250   202 ⬚ 302   85 ⬚ 85

75 ⬚ 96   120 ⬚ 118   136 ⬚ 160   909 ⬚ 990

10 Write the previous and the following numbers.

⬚ ⟶ 399 ⟶ ⬚

⬚ ⟶ 610 ⟶ ⬚

⬚ ⟶ 111 ⟶ ⬚

⬚ ⟶ 234 ⟶ ⬚

11 Put the numbers of tickets sold in order, from the biggest to the smallest.

TICKET Nº 155 5 Gons
TICKET Nº 444 5 Gons
ET Nº 500 5 Gons
TICKET Nº 419 5 Gons
TIC 803 5 Gons
TICK 610 5 Gons
TICKET 105 5 Gons
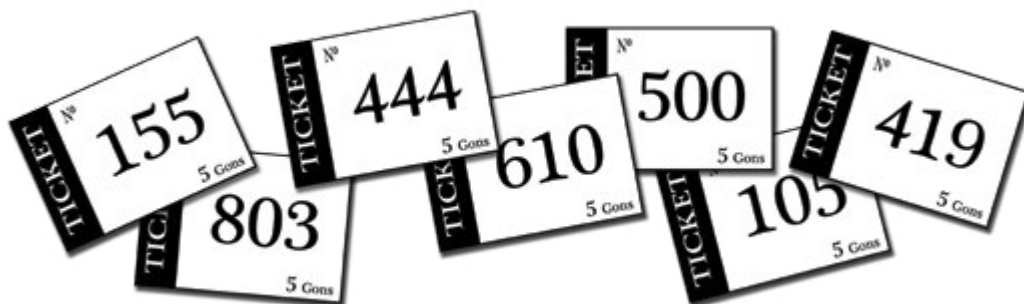
12 Round these numbers off to the nearest ten.

66 [ ]   108 [ ]   933 [ ]

304 [ ]   499 [ ]

13 Write the following numbers on the line: 56, 59, 62, 54.

50   55   60

Which number is closest to 60? [ ]

Which ten is closest to 54? [ ]

14 Read the clues and find the numbers.
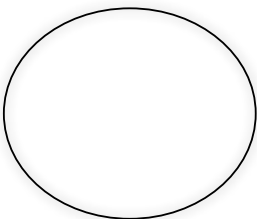
( ) | It is smaller than 500 and bigger than 400.
The addition of the number of the tens and the number of the units is 6.
The number of the units is an odd number bigger than 3.
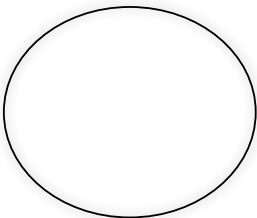
( ) | The number of the units plus the number of the hundreds is 8.
The number of the tens is the same as the number of the units.
It is a number bigger than 400 and smaller than 500.
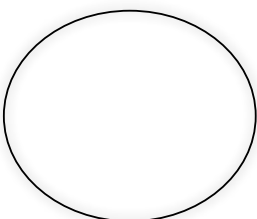
( ) | The number of the units is an even number smaller than 4, and bigger than 1.
The number of the tens plus the number of the hundreds is 7.
It is a three-digit number smaller than 200.

1 Add and subtract hundreds.

460 + 200 =	
360 + 300 =	
520 + 400 =	
670 + 200 =	
240 + 500 =	
470 − 300 =	
650 − 200 =	
330 − 200 =	
890 − 500 =	
570 − 300 =	

2 Complete the operations.

460 +		=	660
360 +		=	660
520 +		=	920
670 +		=	870
240 +		=	740
470 −		=	170
650 −		=	450
330 −		=	130
890 −		=	490
570 −		=	270

3 Continue the series.

300					350					
100								800		
			100							250
							800			950

4 Round the numbers off to the nearest hundred.

Round	Hundred
310	300
298	
125	

Round	Hundred
192	
890	
718	

Problem solving

1 There were 255 planes at the airport. During the morning, 35 more planes landed and 18 planes took off. How many planes are there now?

Information: ....

First, I calculate	Then, I calculate

Answer ....

2 Ana has 72 trading cards more than Carmen. If Ana has 315 trading cards, how many do they have in total?

Information: ....

First, I calculate	Then, I calculate

Answer ....

3 I am 45 years old. I am 7 years older than you. Make up a question.

Information: ....

First, I calculate	Then, I calculate

Answer ....

Offers for groups

1 How many members are there in each group?

2 + 2 + 2 + 2 + 2 ⟶ ☐ x ☐ = 10

6 + 6 + 6 ⟶ ☐ x ☐ = ☐

5 x 3 = ☐ + ☐ + ☐
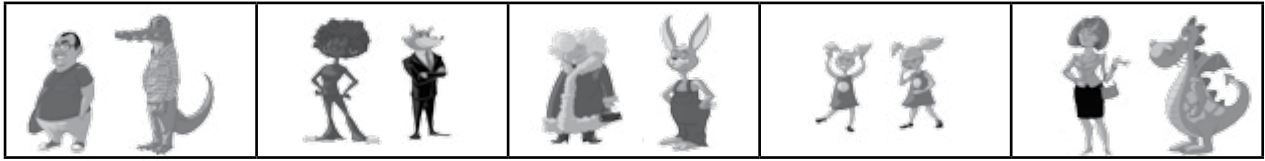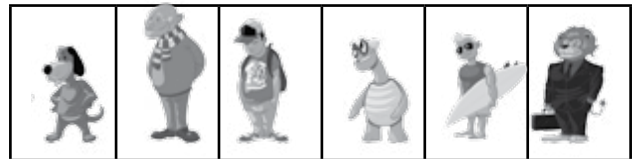
2 Practise the commutative property. Join with arrows.

4 x 2 = 8 = 2 x 4

3 x 4 = 12 = 4 x 3

11

3 Practise the multiplication properties.

(2 x 3) x 4 = [ ] x 4 = [ ]   (6 x 7) x 5 = 42 x [ ] = [ ]

3 x (5 – 4) = [ ] x [ ] – [ ] x [ ] = [ ] – [ ] = [ ]

5 x (8 – 3) = [   ]

4 Circle the common factor.

(2 x 3) + (3 x 4)   (4 x 5) + (2 x 5)   (7 x 7) + (6 x 7)

5 Do the following multiplications.

| 24 | 70 | 82 | 42 |
| x 2 | x 4 | x 2 | x 9 |

| 83 | 51 | 64 | 31 |
| x 3 | x 5 | x 2 | x 7 |
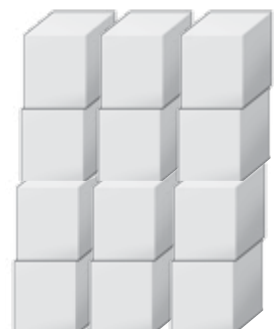
6 Complete the pattern.

2 x		4			10					
5 x	5		15							50
6 x		12				36				
10 x							70	80		

7 Offers for school groups!

Offers for children

Group of 55 children ↔ 9G per child   Group of 110 children ↔ 7G per child

Group of 165 children ↔ 5G per child   Group of 220 children ↔ 2G per child

Three school groups are visiting our museum today. The first group has 165 children, the second has 55 children, and the third has 220 children.
How much does each group pay?

Group 1

It pays [   ] G

Group 2

It pays [   ] G

Group 3

It pays [   ] G

8 Today's group has 21 children. The 3 guides at the museum must divide the children into equal groups. Draw the children and complete the division.

$$21 \div 3 = \boxed{}$$

9 Complete as indicated.

Three exact divisions whose divisor is 7:

| | 7 | | 7 | | 7 |

Check   Check   Check

Three integer divisions whose dividend is 30:

30 | ⸔   30 | ⸔   30 | ⸔

Check   Check   Check

10 Look at the example and complete the table.

Division	Dividend	Divisor	Quotient	Remainder	Type of division
42 ÷ 7	42	7	6	0	Exact division
82 ÷ 9					
31 ÷ 4					
64 ÷ 8					
57 ÷ 6					

11 Calculate breaking down.

252 ÷ 2 = _____

930 ÷ 6 = _____

12 Do these multiplications in your head and write the answers.

10 x 7 = _____   6 x 100 = _____   1 000 x 4 = _____

Calculate

1 Calculate the half and the fourth or quarter of
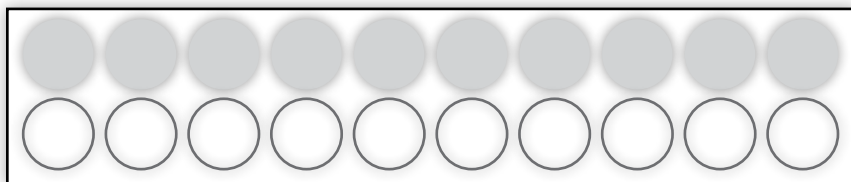
20 ÷ [......] = [......]
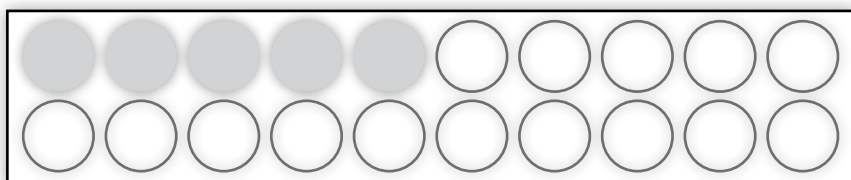
20 ÷ [......] = [......]
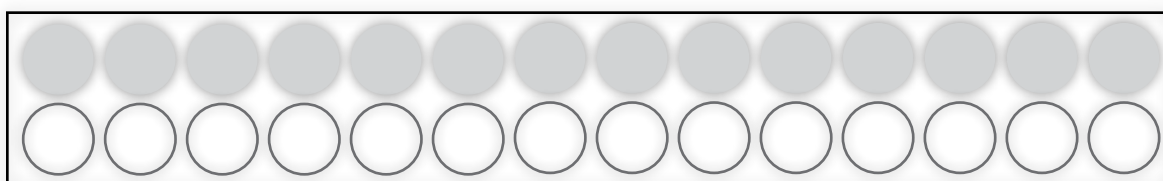
28 ÷ [......] = [......]
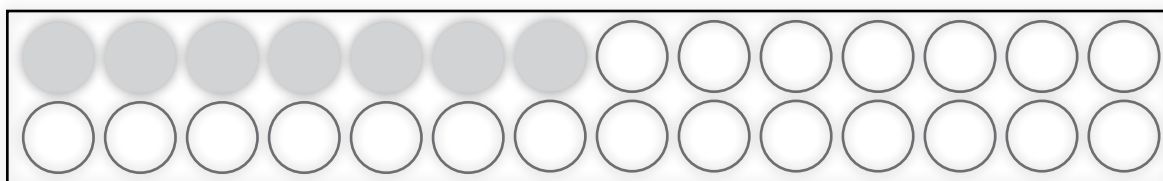
28 ÷ [......] = [......]

2 Calculate the third of
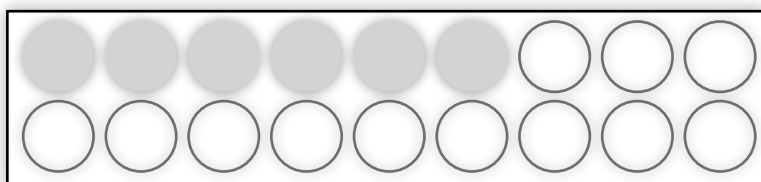
18 ÷ [......] = [......]
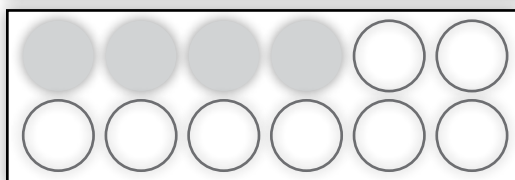
12 ÷ [......] = [......]
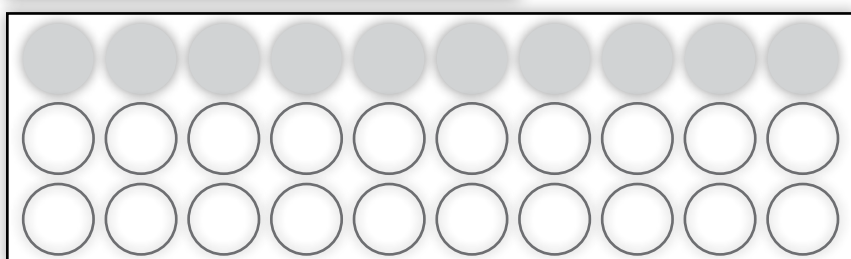
30 ÷ [......] = [......]

1   On his birthday Mario went to the museum. He invited five of his friends to go with him. Entry to the museum cost 25G per person. How much did Mario pay?

Information:

Operation:

Answer:

2   Purple Turtle usually takes 15 minutes to walk to school because she walks very slowly. But today she walked 3 times faster than usual.

Today she took [   ] to arrive.

3   Use a division to show how many gons each person will have if we divide all the gons below equally among 4 friends.

There are [   ] ÷ [   ] = [   ] for each one.

Maths

Primary

Activity Book

6

Welcome back!

Remember that good research means:

1. being humble and accepting that sometimes we all make mistakes
2. taking risks and going past the set limits; we shouldn't put barriers on our investigation – we need to be adventurous
3. spending as much time as possible on the task
4. understanding that researching isn't studying; we need to know how to think
5. being well organised.

Presenting our work

How to carry out "research and investigations".

We should make a guide or 'script' that we can use for future investigations in maths.

This task is going to be done in groups. Your teacher will tell you whom you are working with.

You should use ICT, the class and school libraries, etc.

Now we're ready to start our investigations. You're about to become the Sherlock Holmes of mathematics.
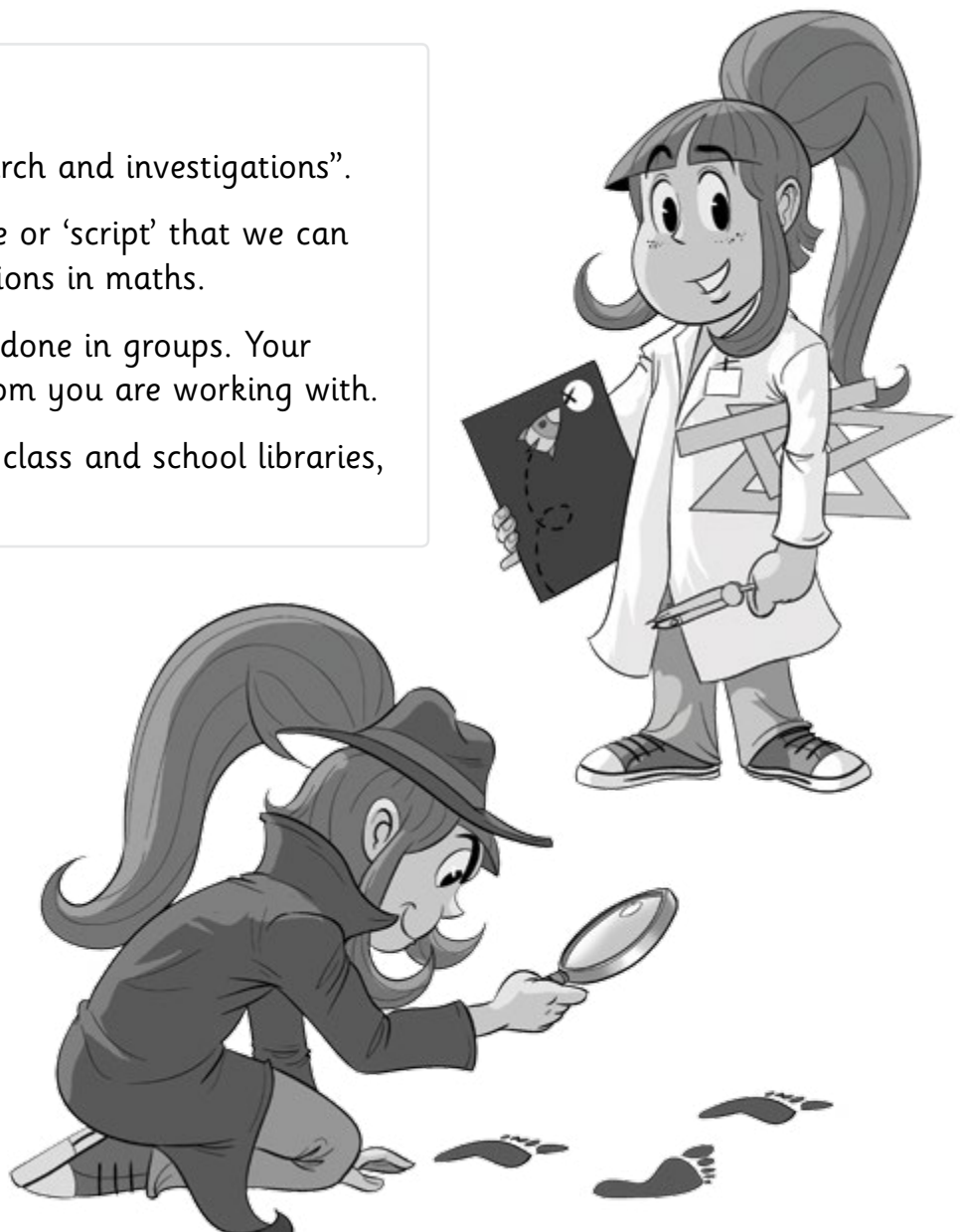
Make a note of the names of all the members of your research team here.

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Sky

1 Write down the numbers from page 4 of your pupil's book and say what magnitude they refer to:

2 Make a table to show the place value of a 12-digit number and put the following numbers in the table:

624 153 978 147   159 357 456 621   415 628 963 457

3 Break the numbers down into their additive form.

364 265 120 647 =

156 900 001 040 =

4

4 Break the numbers down into their additive/multiplicative form.

364 265 120 647 =

156 900 001 040 =

349 742 321 888 =

5 Write the following numbers in words:

624 153 978 147 =

159 357 456 621 =

415 628 963 457 =

6 Invent a number and write it in words.

....

.... = ...

7 Round off to the nearest million.

2 365 987 = ...　5 012 365 = ...

3 365 987 = ...　6 900 000 = ...

7 321 214 = ...　8 547 789 = ...

8 Round off as in the example.

2 365 987 = 2 365 990 = 2 366 000 = 2 370 000 = 2 400 000 = 2 000 000

5 012 365 = ...

3 365 987 = ...

9 Get together with your research team. What conclusion can you come to from the previous exercise?

....

10 Calculate:

25 x (12 + 11) – 2 x (25 – 24) =

3 x (15 – 10) + 2 x (10 – 5) =

12 x (22 + 1) – 3 x (21 – 20) =

5 x (30 – 27) + 4 x (20 – 5) =

30 x (23 + 11) + 9 x (24 – 9) =

4 x (9 – 5) + 2 x (10 + 6) =

20 x (33 – 11) – 2 x (90 – 80) =

6 x (42 – 24) + 4 x (56 – 3) =

Calculate

1 Do the following additions and check your answers:

$$643\,253\,215\,698$$
$$+\quad 154\,987\,546\,178$$

$$415\,120\,654\,932$$
$$+\quad 154\,987\,546\,178$$

2 Do the following subtractions and check your answers:

$$759\,953\,647\,721$$
$$-\quad 498\,365\,412\,644$$

$$354\,698\,560\,001$$
$$-\quad 210\,456\,871\,020$$

3 Calculate:

$$415\,120\,654\,932 \,\big|\, 365$$

$$415\,120\,654\,932$$
$$\times \qquad\qquad 912$$

1 Find the number that meets all the following conditions:

- It has twelve digits.
- The digit' columns in the thousands, ten thousands and hundred thousands are all 5s.
- The numbers in the rest of the tens' columns are all even numbers which run consecutively from right to left.
- Complete the remaining digits with 9.

2 Take the number: 101 123 456 101 and write down all the different parts of the number so that we can write instructions as in the previous problem.

3 Look at this number written in words: two thousand four hundred and seventy-nine trillion, three hundred and fifty-three billion, three hundred and fifty thousand, five hundred and twenty-seven. How many digits has the number got?

4 José observes that the first 4 numbers on his identity card are the lowest consecutive numbers and that the next four are the first consecutive odd numbers. Add up the eight numbers on his identity card.

Land

1 Draw a thermometer and mark the temperatures shown on page 10 of your pupil's book.

2 Write the answers using positive or negative numbers:

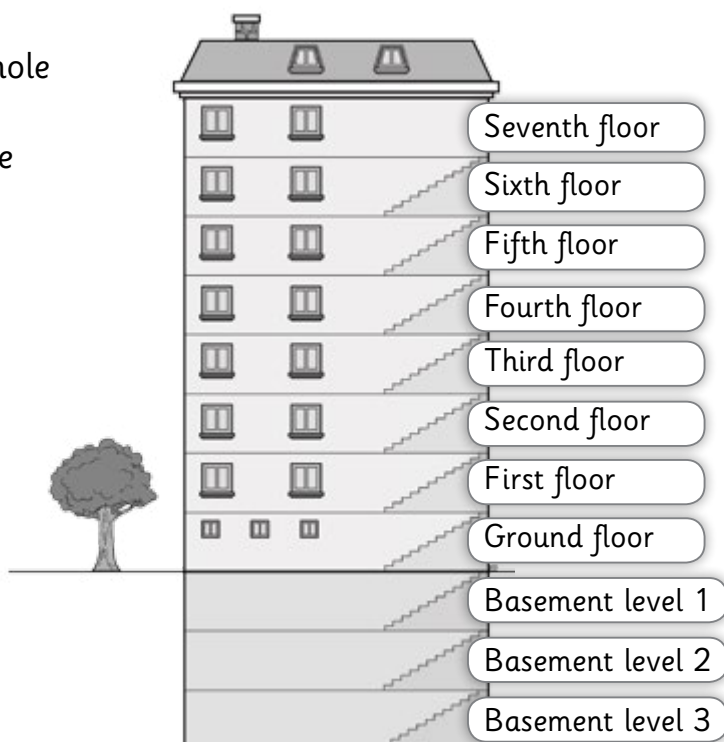The temperature is fifteen degrees below zero. [ ]

Seven metres above sea level. [ ]

The temperature is 23 degrees above zero. [ ]

Go down to basement level 4. [ ]

3 Write the correct whole number next to the different floors of the building.

Seventh floor

Sixth floor

Fifth floor

Fourth floor

Third floor

Second floor

First floor

Ground floor

Basement level 1

Basement level 2

Basement level 3

4 Write the numbers from -7 to +7 on the number line.

0
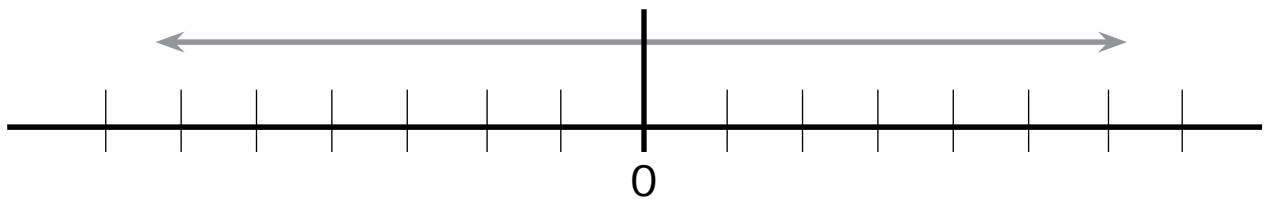
5 What are the opposites of the following numbers?

−3, +6, −8, +1, +9, −2, −7, +5, −9 and 0.

The opposite of −3 = [ ]   [ ] = [ ]

[ ] = [ ]   [ ] = [ ]

[ ] = [ ]   [ ] = [ ]

[ ] = [ ]   [ ] = [ ]

[ ] = [ ]   [ ] = [ ]

6 Calculate the absolute value of the previous numbers:

|−3| = [ ]   [ ] = [ ]   [ ] = [ ]   [ ] = [ ]

[ ] = [ ]   [ ] = [ ]   [ ] = [ ]   [ ] = [ ]

[ ] = [ ]   [ ] = [ ]

7 Mark the following pairs of coordinates on the Cartesian grid:
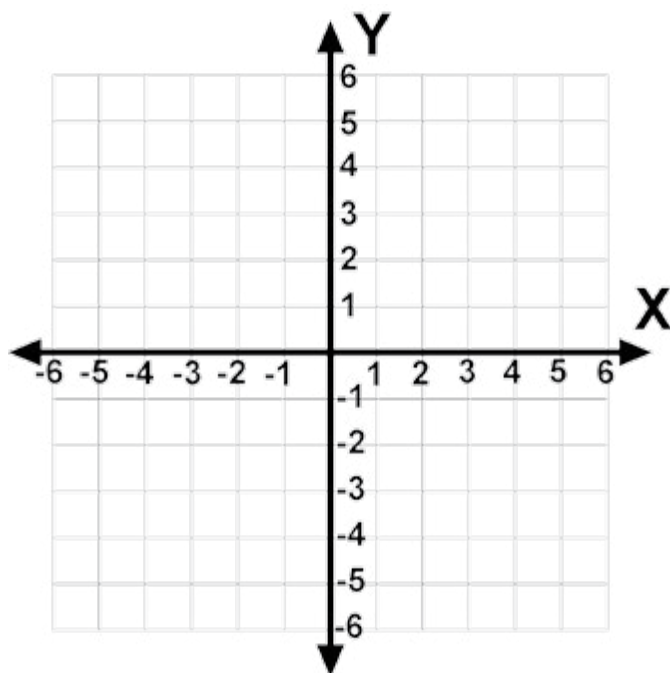
a) (3,1) b) (-4,-5) c) (-1,1) d) (2,-5)

e) (1,6) f) (-6,-1) g) (1,-6) h) (6,-1)

8 Now mark the following pairs of coordinates on this grid:
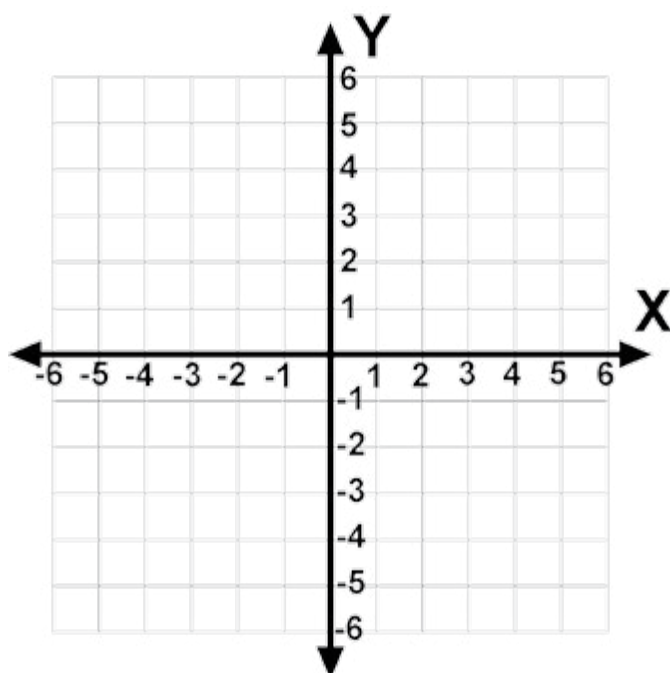
a) (–3, –1) b) (4,5) c) (1, –1) d) (–2, 5)

e) (–1, –6) f) (–6, –1) g) (1, –6) h) (6, –1)

9 Add the following numbers, sometimes called integers, on the number line:

a) $-3 + 4 =$ [   ]

b) $5 - 6 =$ [   ]

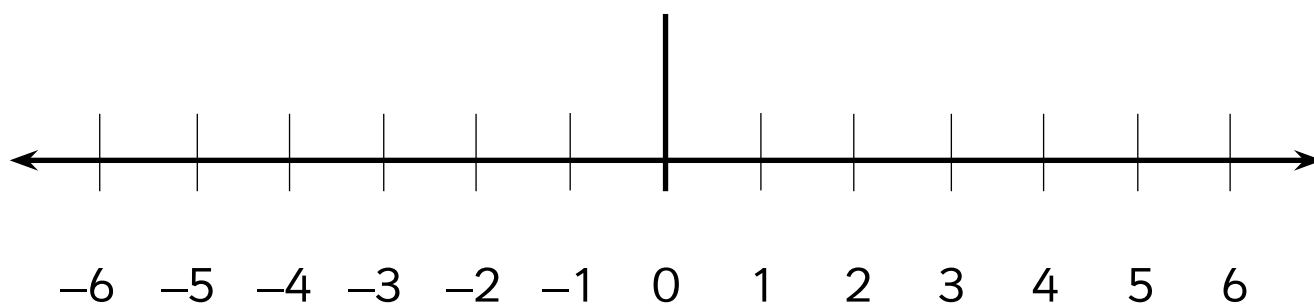c) $2 - 1 =$ [   ]

d) $-6 + 1 =$ [   ]

$$\longleftarrow \quad -6 \quad -5 \quad -4 \quad -3 \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad \longrightarrow$$
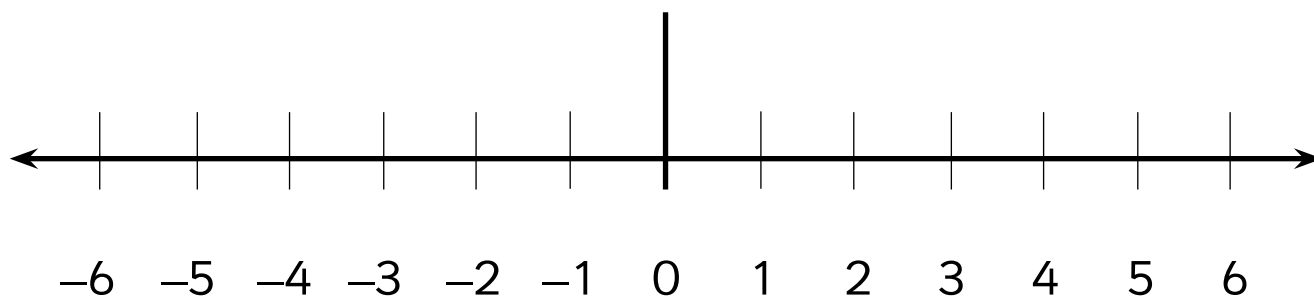
10 Subtract the following numbers, or integers, on the number line:

a) $-3 - 4 =$ [   ]

b) $-5 - 6 =$ [   ]

c) $-2 - 1 =$ [   ]

d) $-6 - 1 =$ [   ]

$$\longleftarrow \quad -6 \quad -5 \quad -4 \quad -3 \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad \longrightarrow$$

Calculate

1   Do the following operations in your head.

$2 \times 1\,000 =$ _____

$5 \times 1\,000\,000 =$ _____

$303 \times 1\,000 =$ _____

$26\,000 \div 1\,000 =$ _____

$36\,000\,000 \div 10\,000 =$ _____

$330 \div 10 =$ _____

2   Work these additions out in your head:

$3\,000\,000 + 500\,000 + 60\,000 + 100 + 2 =$ _____

$82\,000\,000 + 90\,000 + 7\,000 + 50 + 3 =$ _____

$60\,000\,000 + 2\,000\,000 + 32\,000 + 220 + 5 =$ _____

$2\,500\,000 + 100\,000 + 25\,000 + 25 =$ _____

3   Work these divisions out in your head:

$900 \div 300 =$ _____

$220 \div 110 =$ _____

$250 \div 50 =$ _____

$810 \div 90 =$ _____

$270 \div 3 =$ _____

$640 \div 80 =$ _____

$450 \div 5 =$ _____

$720 \div 80 =$ _____

3   Work these multiplications out in your head:

$900 \times 300 =$ _____

$220 \times 20 =$ _____

$250 \times 10 =$ _____

$810 \times 90 =$ _____

$270 \times 2 =$ _____

$640 \times 3 =$ _____

$450 \times 100 =$ _____

$720 \times 3 =$ _____

1 Work with your research group and write down the maximum and minimum temperatures (in degrees Celsius) of the cities in the table:

	Monday		Tuesday		Wednesday		Thursday		Friday	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Moscow										
Madrid										
Caracas										
Berlin										
Rabat										
Peking										
Washington										
Canberra										
Mexico City										

2 Choose some of the information from the previous exercise and show it on the number line.

0
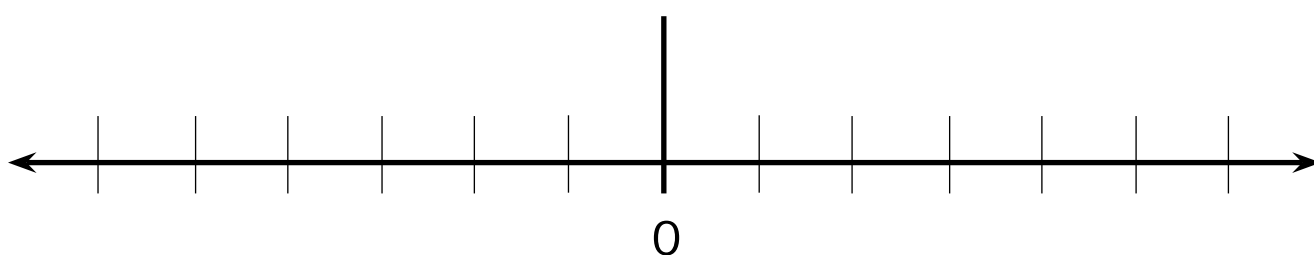
3 The house thermometer is showing minus four degrees outside and plus twenty inside. Write the numbers below:
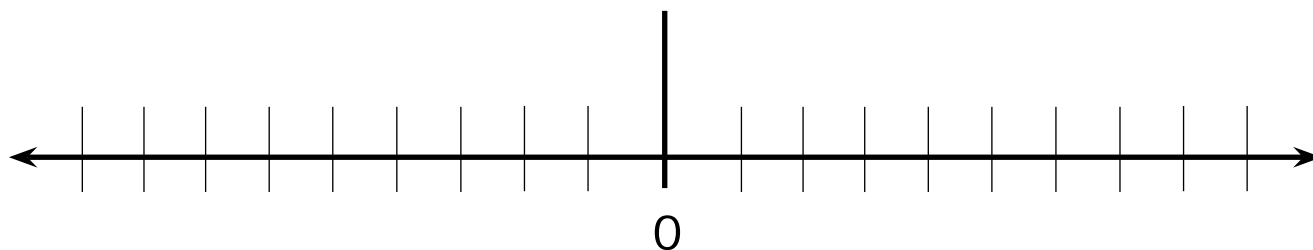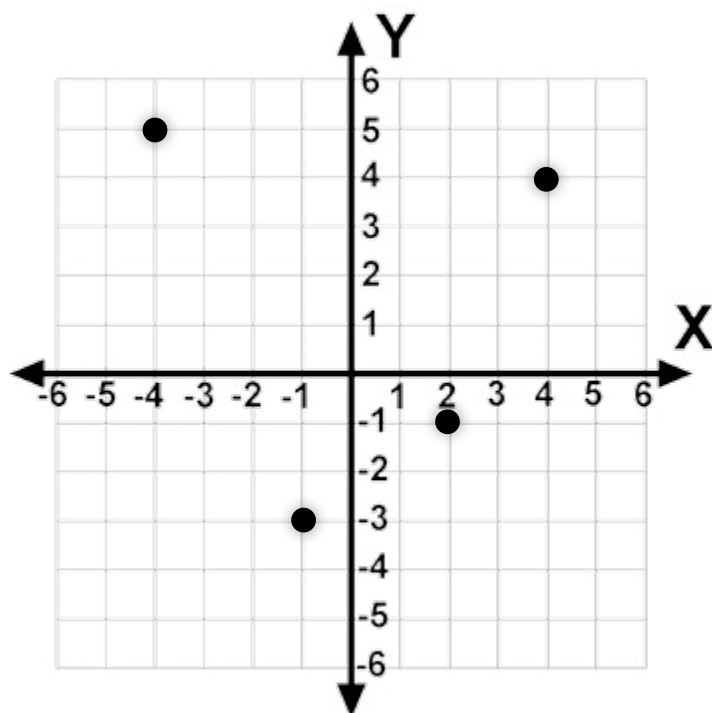
Outside

Inside

1 We have a thermometer that shows 9° C in the day but 10° C lower at night. If we want to show this information on a number line, which way do we move if we are at 9° C?

0

2 Write the coordinates for the points below:

3 Write these numbers on the number line:

−6, −3, 5, 3, −1, 0, 2

0