Maths Activity Booklet **Answers**

twinkl

Number and Place Value **Answers**

1. Continue these number sequences:

   9, 18, 27, 36, 45, **54, 63, 72, 81, 90, 99, 108**

   775, 750, 725, 700, **675, 650, 625, 600, 575**

   5, 4, 3, 2, **1, 0, -1, -2, -3, -4, -5**

2. Find 100 less than these numbers:

   3912 **3812**

   9201 **9101**

   1083 **983**

3. Find 1000 less than these numbers:

   59 003 **58 003**

   17 351 **16 351**

   20 882 **19 882**

4. What is the value of the underlined digit in each number?

   1<u>8</u>46 **8 hundreds**

   <u>2</u>004 **2 thousands**

   1589 **9 ones**

5. Put these numbers in order from smallest to largest.

   10 111 11 011 10 011 11 110 11 101

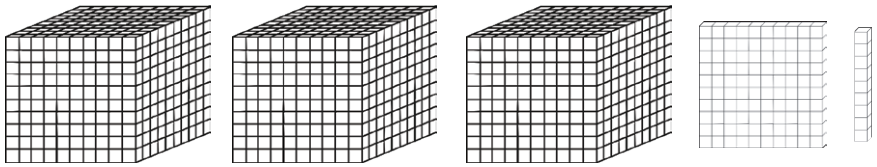
Smallest				**Largest**
10 011	10 111	11 011	11 101	11 110

6. Compare these numbers using <, > or =.

   454 [<] 544 660 [>] 606 2 tens 4 ones [=] 24 ones

Representing Number **Answers**

1. What number is shown below? **3109**



2. Complete the table, showing the numbers in numerals and words.

2109	**Two thousand, one hundred and nine.**
1293	One thousand, two hundred and ninety-three.
29 431	**Twenty-nine thousand, four hundred and thirty-one.**
75 098	Seventy-five thousand and ninety-eight.

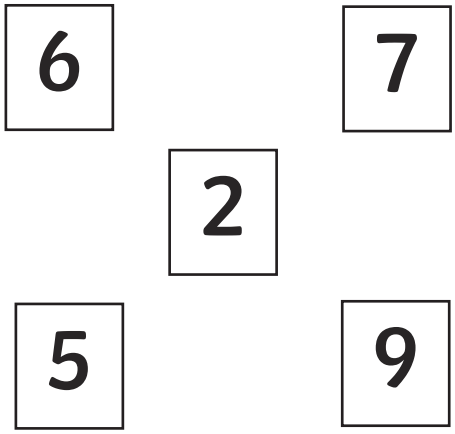
3. Use the information in the table to work out the value of these Roman numerals.

LXXII = **72**

XIV = **14**

CCLIX= **259**

Roman	Numeral
I	1
V	5
X	10
L	50
C	100



a) What is the largest number that can be made from these digit cards? **97 652**

b) What is the smallest number that can be made from these digit cards? **25 679**

Addition and Subtraction **Answers**

1. Complete these calculations mentally:

421 + 50 = **471**

376 + 200 = **576**

250 - 99 = **151**

2. Complete these calculations:

1 3 5 7	3 5 9 2	7 9 8 5	5 $\cancel{3}^{2}$ ^{1}1 9
+ 2 6 4 1	+ 4 2 3 8	- 1 3 4 2	- 3 2 6 7
3 9 9 8	**7 8 3 0**	**6 6 4 3**	**2 0 5 2**
	1 1		

3. Complete these calculations:

3410 + **2245** = 5655

6720 – **1500** = 5220

4. Use appropriate calculations to solve these problems.

a) At a cinema, there is room for 750 people in a screen. If the cinema sells 641 tickets for a screen, how many are left?

750 – 641 = 109

b) In one day, 2345 people visit the cinema. 1032 of them go and see an action film and the others go and see a comedy. How many people went to see the comedy?

2345 – 1032 = 1313 people

Multiplication and Division **Answers**

1. Fill in the missing numbers in the multiplication square.

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	**3**	4	**5**	6	**7**	8	9	**10**	11	12
2	2	**4**	6	8	**10**	12	14	**16**	18	20	**22**	24
3	3	**6**	**9**	12	15	**18**	21	24	**27**	30	33	**36**
4	**4**	8	12	**16**	20	24	**28**	32	36	**40**	44	48
5	5	10	**15**	20	25	**30**	35	40	**45**	50	55	**60**
6	6	**12**	18	24	30	36	**42**	**48**	54	60	**66**	72
7	**7**	14	21	**28**	**35**	42	49	56	**63**	70	77	**84**
8	8	16	**24**	32	40	**48**	56	64	72	**80**	88	96
9	**9**	18	27	**36**	45	54	63	**72**	81	90	99	108
10	10	**20**	30	40	**50**	60	70	80	90	100	**110**	120
11	**11**	22	33	**44**	55	66	**77**	88	**99**	**110**	121	**132**
12	12	24	**36**	48	60	**72**	84	**96**	108	120	**132**	144

2. Explain the pattern of the 9 times table.

The tens column increases by 1 each time and the ones column decreases by 1 at a time. Also, when the digits are added together they equal 9 (with the exception of 99).

3. Complete these calculations:

   250 × 4 = **1000**

   555 × 100 = **55 500**

   2540 × 0 = **0**

4. Use your knowledge of multiplication and division methods to solve these problems.

   a) A box of glue sticks contains 128 glue sticks. There are 4 classes in the school. How many glue sticks does each class get?

   32 glue sticks.

   b) To make a model, each child needs 8 lolly sticks. If lolly sticks come in packs of 30, how many packs would be needed for 28 children to make a model?

   224 lolly sticks are needed in total, so 8 packets are needed (8 × 30 = 240)

5. Use formal methods to complete these calculations.

   a) 45 × 6 = **270**

   b) 333 ÷ 9 = **37**

6. If we know that 12 × 13 = 156, what other calculations do we know? Write them below.

   13 × 12 = 156, 156 ÷ 12 = 13, 156 ÷ 13 = 12

7. Fill in the missing numbers.

   11 × 12 = 132 125 ÷ **25** = 5

   8 × **15** = 120 **350** ÷ 7 = 50

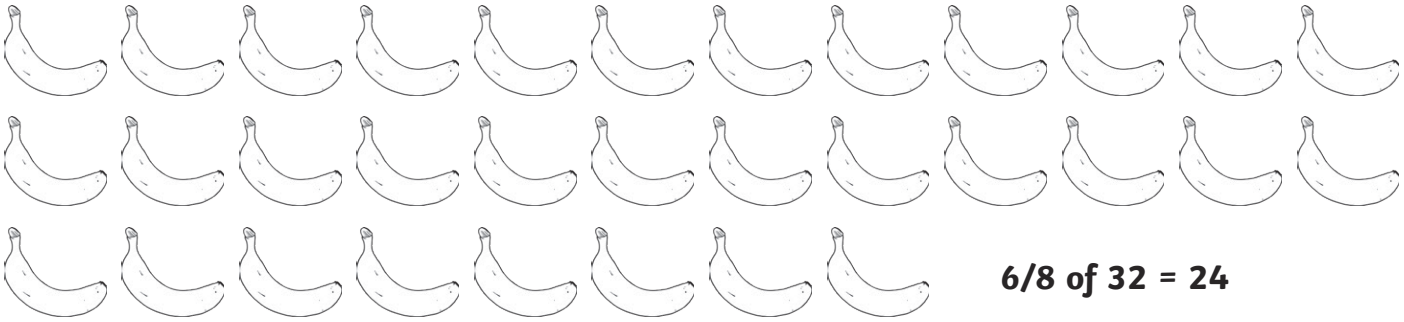
Fractions **Answers**

1. Continue the number sequences.

$\frac{2}{10}, \frac{3}{10}, \frac{4}{10}, \frac{5}{10}, \mathbf{\frac{6}{10}}, \mathbf{\frac{7}{10}}, \mathbf{\frac{8}{10}}, \mathbf{\frac{9}{10}}, \mathbf{\frac{10}{10}}$

$\frac{56}{100}, \frac{54}{100}, \frac{52}{100}, \frac{50}{100}, \mathbf{\frac{48}{100}}, \mathbf{\frac{46}{100}}, \mathbf{\frac{44}{100}}, \mathbf{\frac{42}{100}}$

2. Find $\frac{6}{8}$ of these bananas.



6/8 of 32 = 24

3. a) What fraction of the shape is shaded? $\mathbf{\frac{4}{6}}$

b) Write 2 equivalent fractions to the amount shaded.

Accept $\frac{2}{3}$, $\frac{6}{9}$, $\frac{8}{12}$, $\frac{10}{15}$, $\frac{20}{30}$, $\frac{40}{60}$, $\frac{400}{600}$ or any other correct equivalent fraction.

4. Use the fraction wall to help you answer these questions.

1																							
$\frac{1}{3}$								$\frac{1}{3}$								$\frac{1}{3}$							
$\frac{1}{6}$				$\frac{1}{6}$				$\frac{1}{6}$				$\frac{1}{6}$				$\frac{1}{6}$				$\frac{1}{6}$			
$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$	
$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$

a) How many sixths are equivalent to $\frac{2}{3}$? $\mathbf{\frac{4}{6}}$

b) How many twelfths are equivalent to $\frac{6}{24}$? $\mathbf{\frac{3}{12}}$

c) How many twenty-fourths are equivalent to $\frac{5}{6}$? $\mathbf{\frac{20}{24}}$

d) Would you rather have $\frac{7}{12}$ or $\frac{15}{24}$ of a cake? Why? **Pupils' own responses, showing understanding that $\frac{15}{24}$ is a larger fraction than $\frac{7}{12}$.**

5. Complete these calculations:

$\frac{1}{10} + \frac{3}{10} = \mathbf{\frac{4}{10}} = \mathbf{\frac{2}{5}}$

$\frac{3}{8} + \frac{4}{8} = \mathbf{\frac{7}{8}}$

$\frac{7}{9} - \frac{2}{9} = \mathbf{\frac{5}{9}}$

$\frac{4}{6} - \frac{1}{6} = \mathbf{\frac{3}{6}} = \mathbf{\frac{1}{2}}$

Put these fractions in order from smallest to largest.

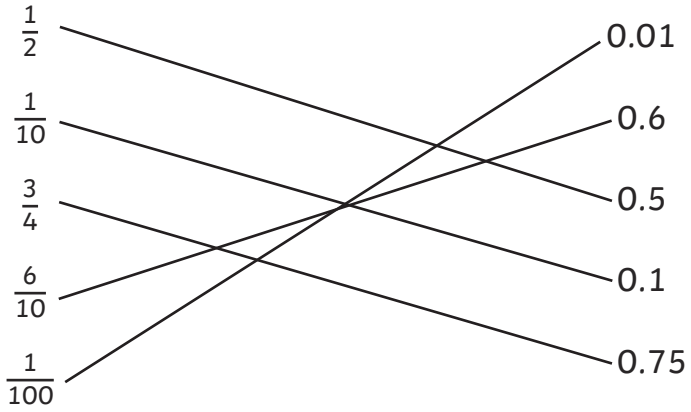
$\frac{3}{6}$ $\frac{2}{3}$ $\frac{1}{10}$ $\frac{2}{8}$ $\frac{5}{6}$

Smallest **Largest**

$\mathbf{\frac{1}{10}}$	$\mathbf{\frac{2}{8}}$	$\mathbf{\frac{3}{6}}$	$\mathbf{\frac{2}{3}}$	$\mathbf{\frac{5}{6}}$

Fractions and Decimals **Answers**

1. Match the decimal to its equivalent fraction.



2. Complete the table. One has been done for you.

	÷ 10	**÷ 100**
13	1.3	0.13
42	**4.2**	**0.42**
68	**6.8**	**0.68**
3	**0.3**	**0.03**

3. Round these decimals to the nearest **whole** number.

1.2 **1**

5.6 **6**

2.21 **2**

3.5 **4**

1.55 **2**

4. Compare these decimals using <, > or =.

0.5 [**>**] 0.05 1.02 [**=**] 1.020 3.75 [**<**] 3.775

Measurement **Answers**

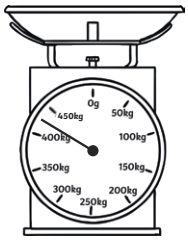
1. a) Measure this line using a ruler. Write its length in cm and in mm.

   = **The line measures 8.5cm or 85mm.**

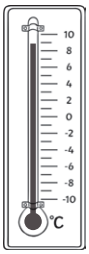
   b) Use a ruler to draw a line that measures 53mm.

   Accept straight lines drawn to exactly 53mm.

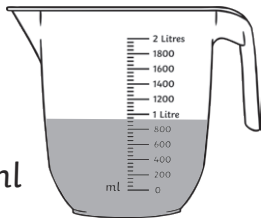
2. Write the amount shown on each scale.



425 kg



9 °C



950 ml

3. Convert these units.

   a) 1500g = **1.5** kg

   b) 2450g = **2.45** kg

   c) 1.75m = **175** cm

   d) 12.5cm = **125** mm

   e) 1.2km = **1200** m

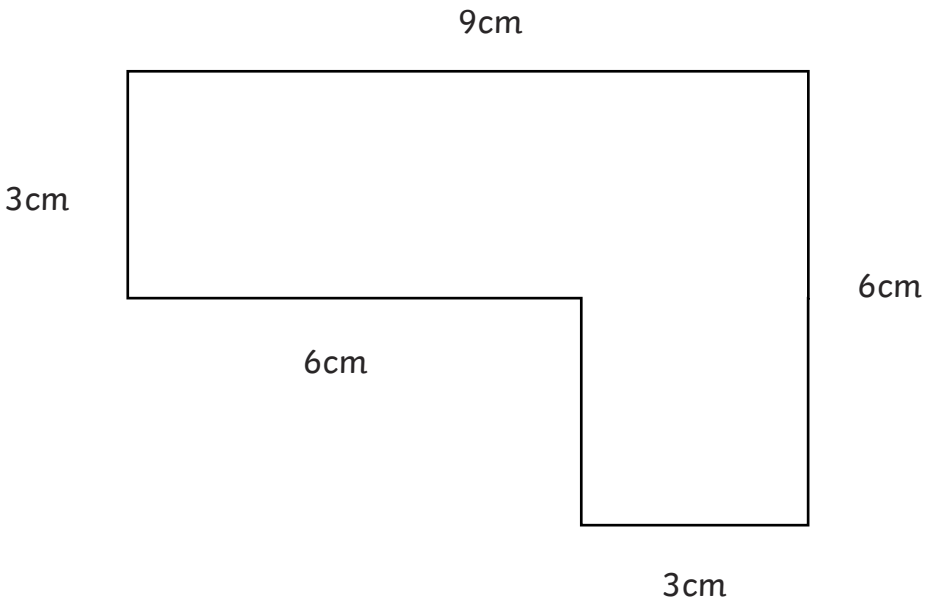
   f) 2300ml = **2.3** l

4. Anna says five 750ml bottles will hold more than three 1l bottles. Is she right? Explain how you know.

   Anna is correct as five 750ml bottles will hold 3750ml in total, which is 3.75l. Three 1l bottles will hold 3l in total, which is 3000ml. So the five bottles will hold more.

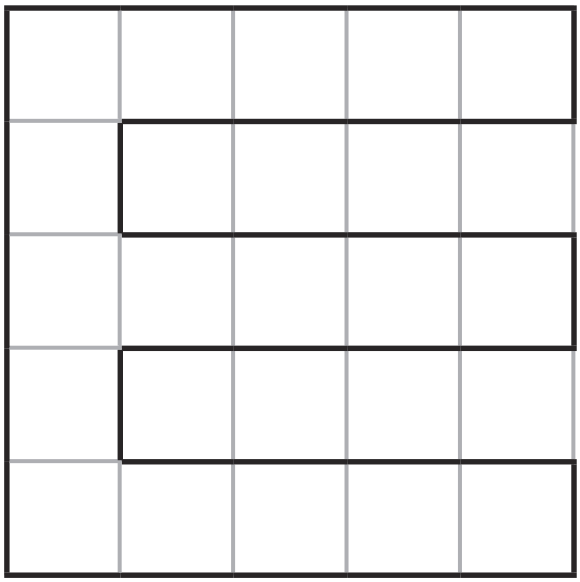
Area and Perimeter **Answers**

1. Calculate the perimeter of this shape.



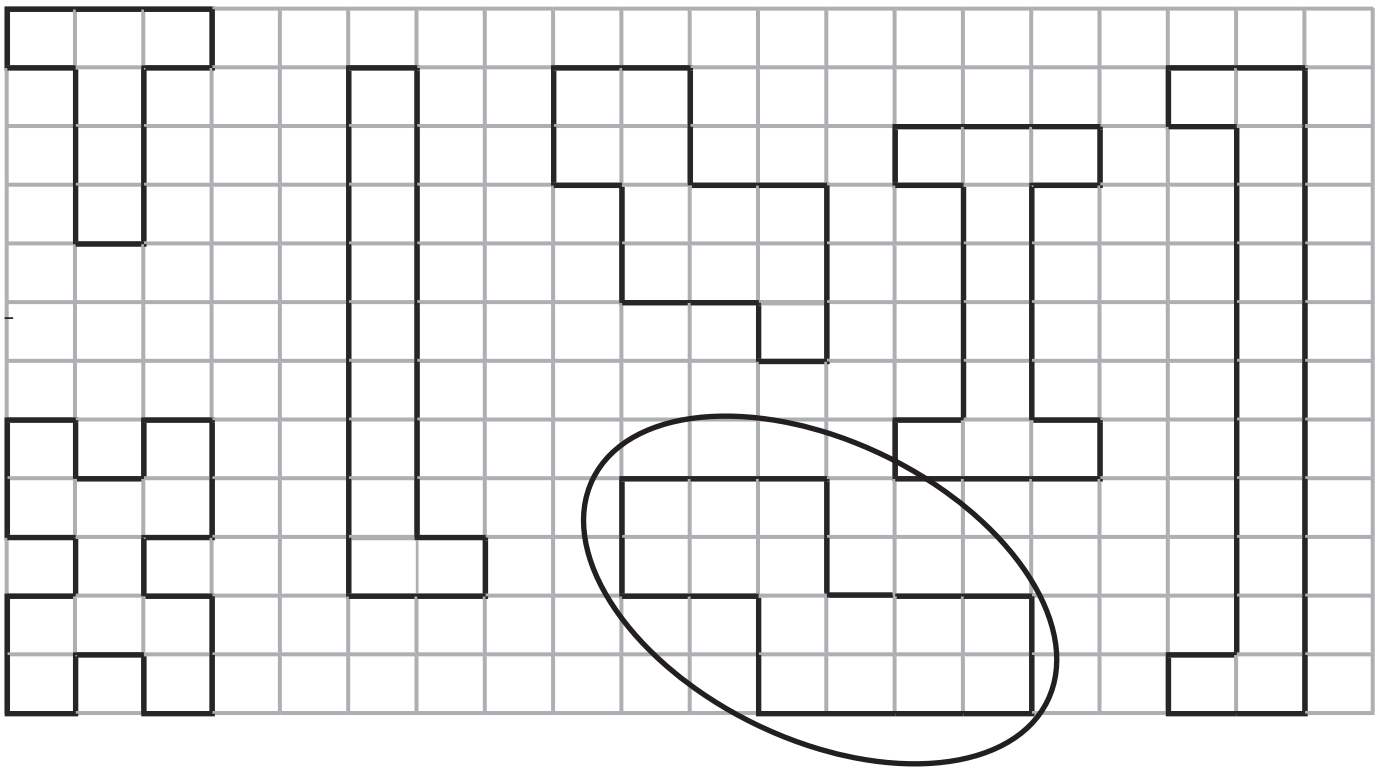
Perimeter = **30 cm**

2. What is the area of this shape?



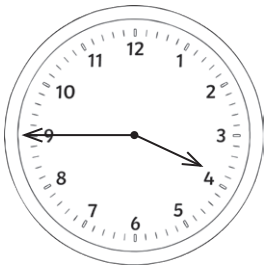
Area = **17 cm²**

3. Which of these shapes has the largest area?

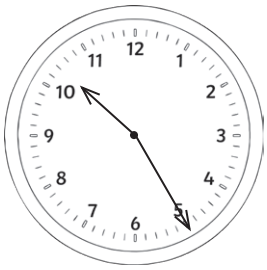


Time **Answers**

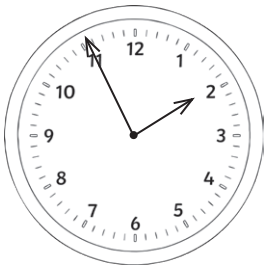
1. Write the time these clocks show.



3:45 or quarter to 4

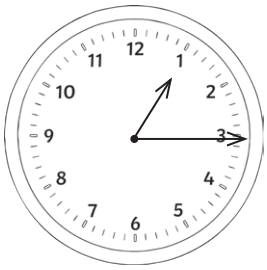


10:25 or twenty-five past 5

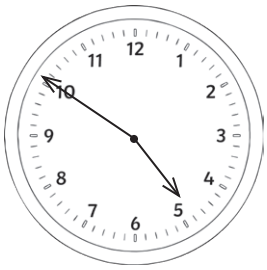


1:55 or five to 2

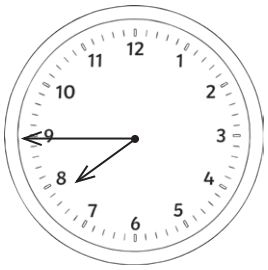
2. Draw the hands to show the given time on each clock.



1:15 or quarter past 1



4:50 or ten to 5



7:45 or quarter to 8

3. A film lasts for 165 minutes. How long is the film in minutes and hours?

   2 hours 45 minutes

4. Complete the sentences.

There are **60** seconds in 1 minute.

There are **60** minutes in 1 hour.

There are **24** hours in 1 day.

There are **7** days in 1 week.

There are **365** days in 1 year.

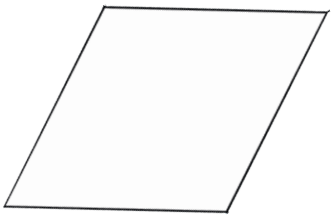
There are **12** months in 1 year.

5. How many days are in June? **30 days**

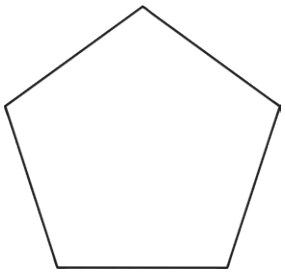
Shape **Answers**

1. Name these 2D shapes.

trapezium

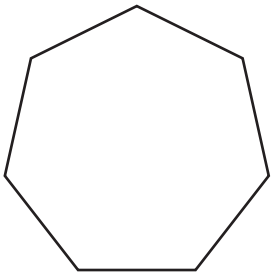


rhombus



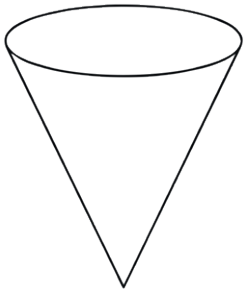
pentagon

parallelogram

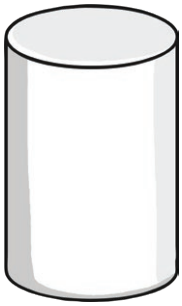


heptagon

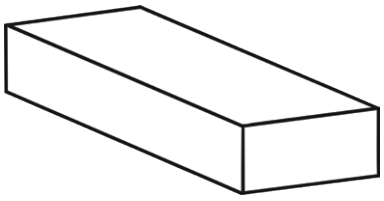
2. Name these 3D shapes.



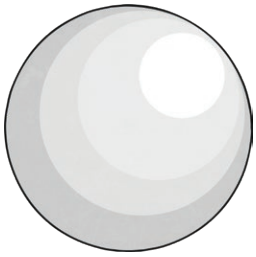
cone



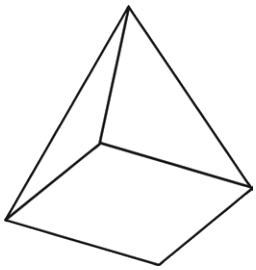
cylinder



rectangular prism OR cuboid



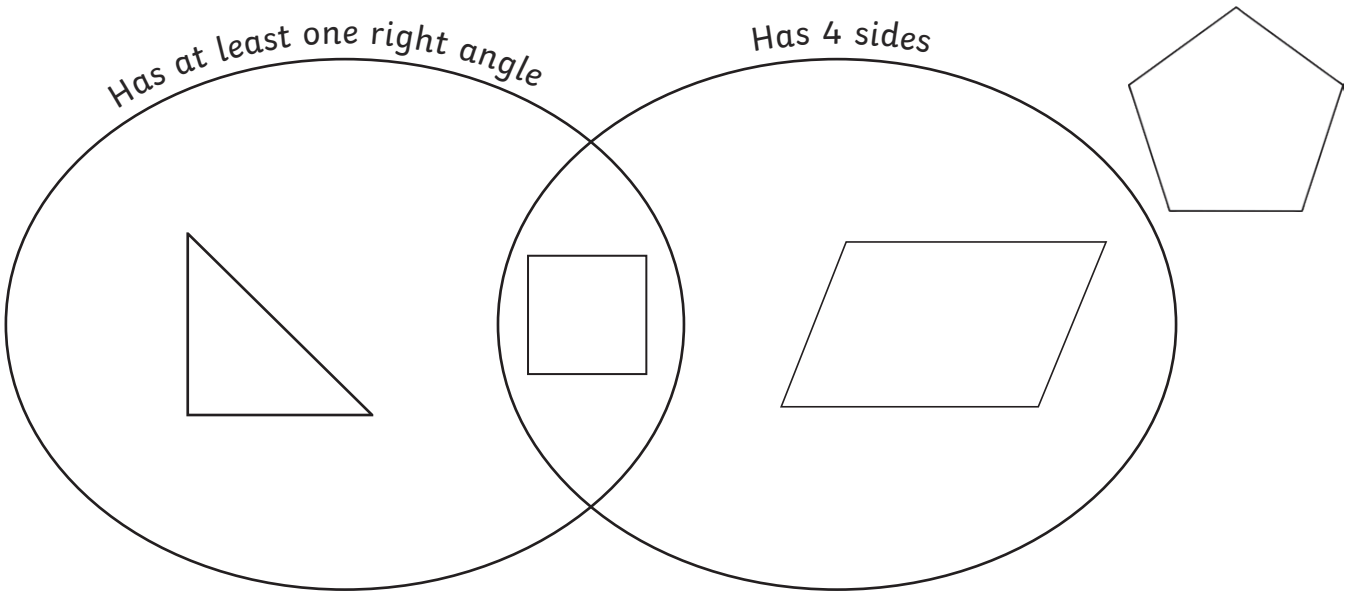
sphere



square-based pyramid

3. Draw the following shapes in the correct places on the Venn diagram.

   - square
   - right angled triangle
   - pentagon
   - parallelogram



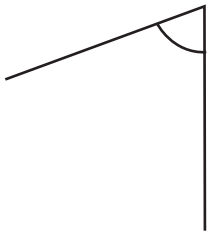
4. Match the type of triangle to its definition.

Equilateral	All sides and angles are equal
Isosceles	2 sides and angles are equal
Scalene	No sides or angles are equal
Right-angled triangle	One angle is a right angle

Angles **Answers**

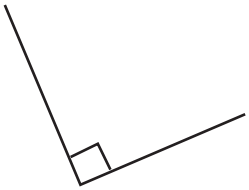
1. Order these angles from smallest to largest.

A

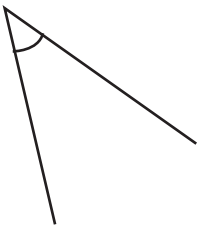


B

C

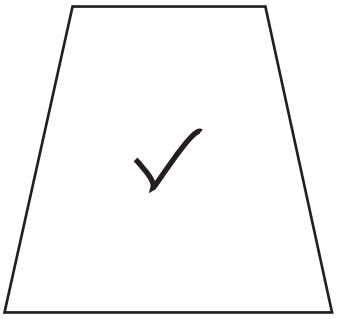


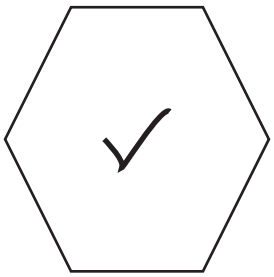
D

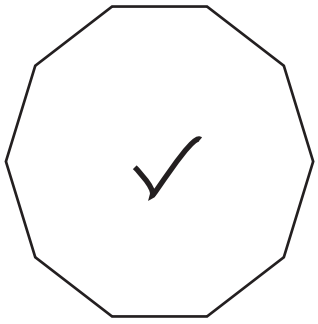


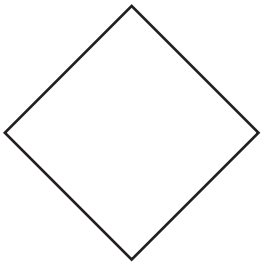
D, A, C, B

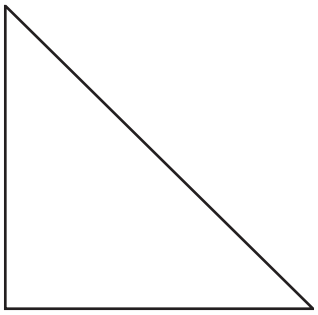
2. Tick all the shapes that have **obtuse** angles.





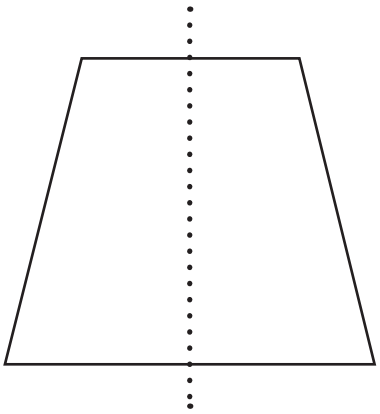


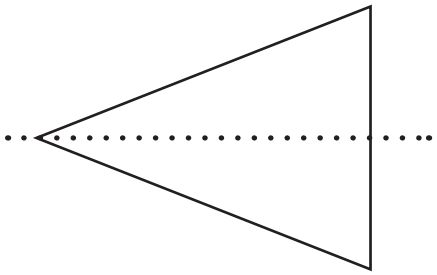


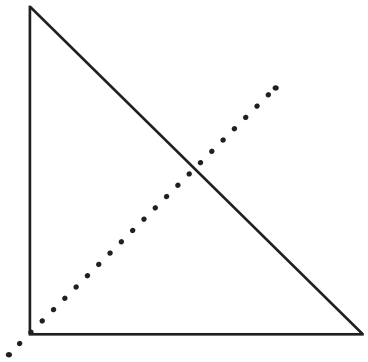


Symmetry **Answers**

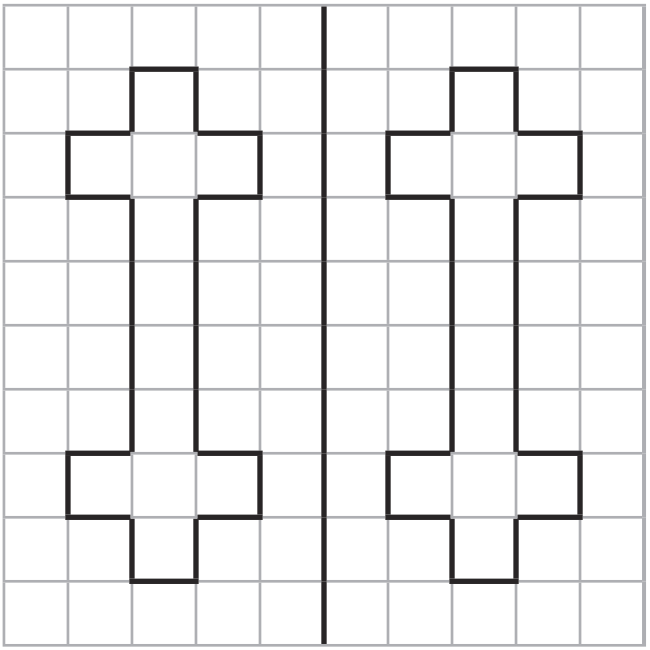
1. Draw a line of symmetry on these shapes.

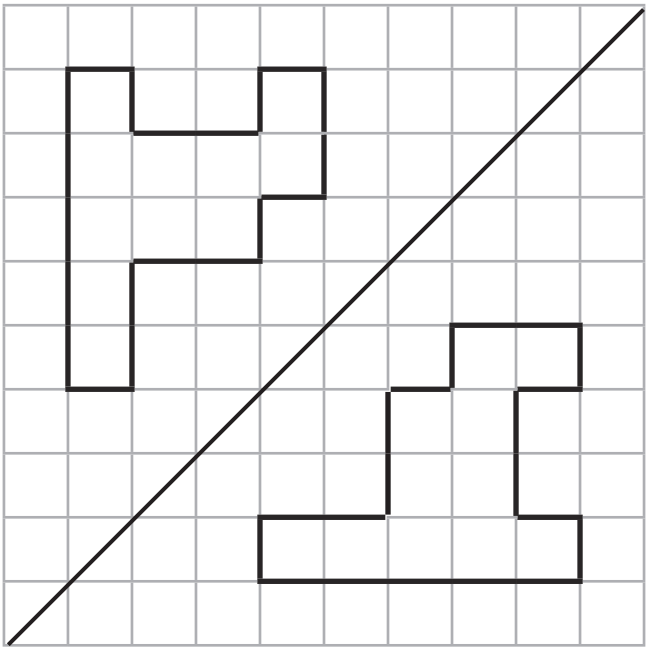






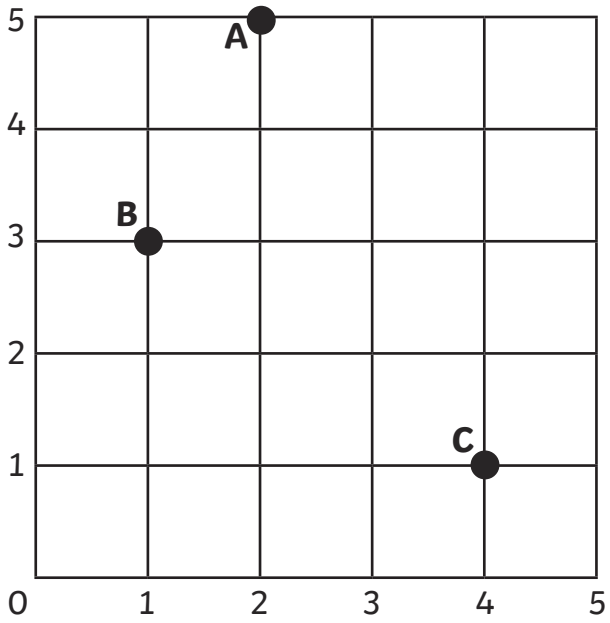
2. Reflect the shapes in the mirror line.





Position and Direction **Answers**

1. Write the coordinates for the points marked on the grid.



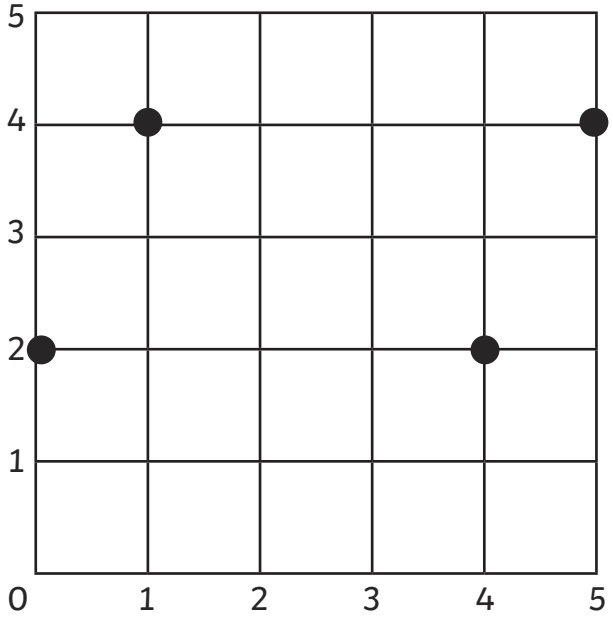
A **(2,5)**

B **(1,3)**

C **(4,1)**

2. Plot these coordinates on the grid. What shape is made?

Parallelogram



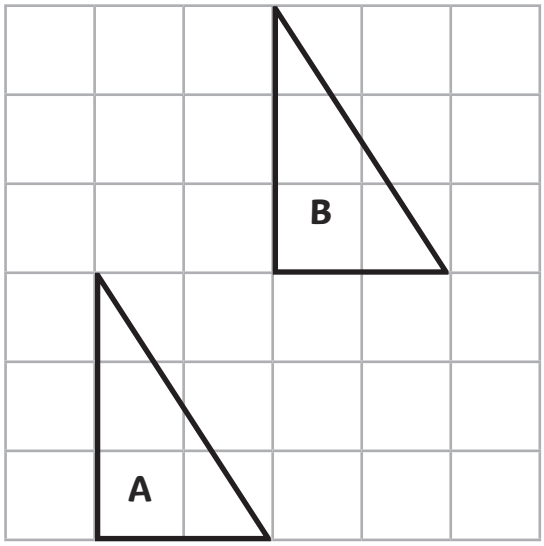
(0, 2)

(1, 4)

(4, 2)

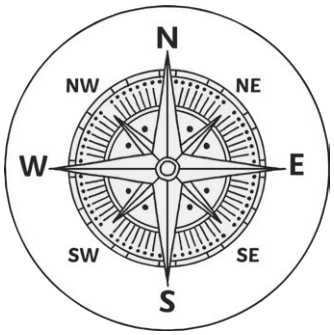
(5, 4)

3. Translate this triangle 2 squares to the right and 3 squares up. Label this new triangle B.



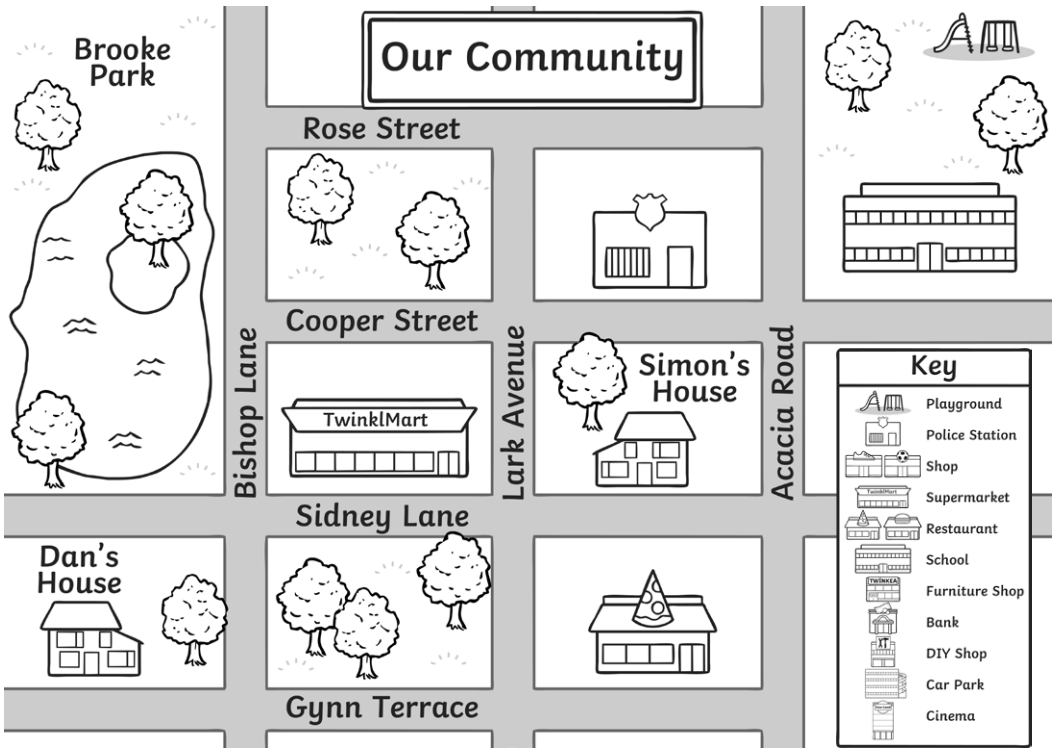
4. Amy is walking north east. She turns quarter of a turn anticlockwise. What direction is she walking now?

North West



5. Simon left his house and turned right. He made a right turn at the next junction and right at the junction after. Where is Simon?

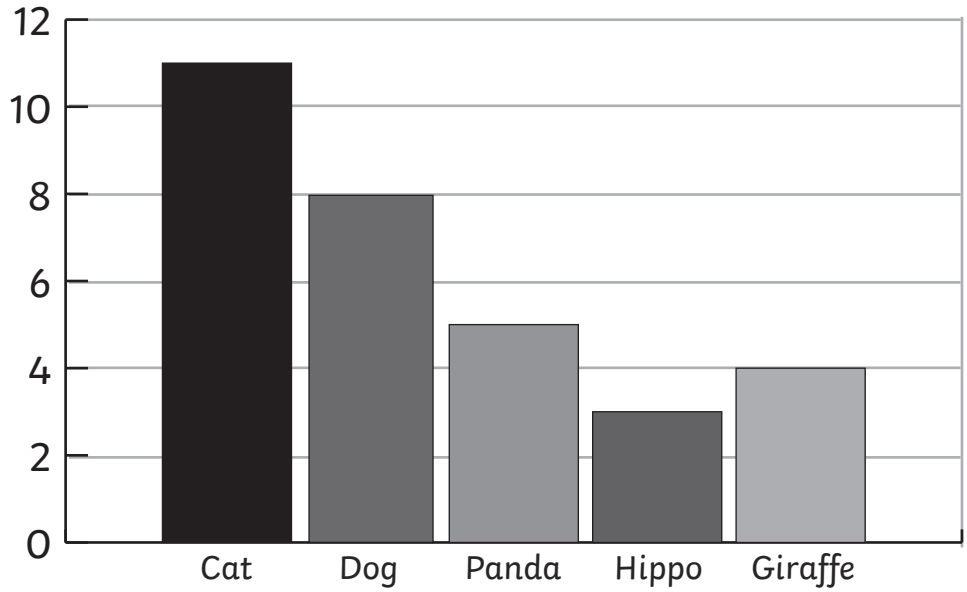
Police Station



Statistics **Answers**

1. A class were asked to choose their favourite animals. These were the results:

Animal	Tally
Cat	𝍸 𝍸 |
Dog	𝍸 |||
Panda	𝍸
Hippo	|||
Giraffe	||||



a) Use the information in the bar chart to complete the information in the table.

See completed table for answers.

b) Add the information for 'Dog' to the bar chart.

See completed bar chart.

c) Which was the most popular animal?

Cat

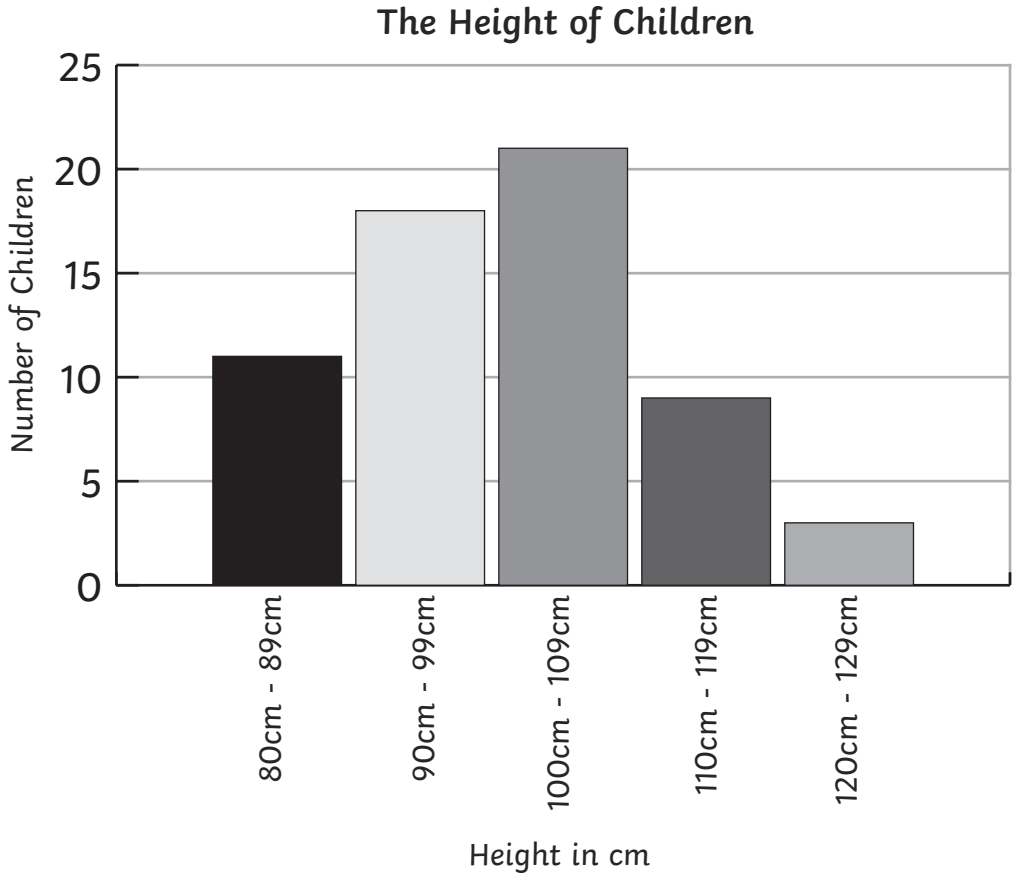
d) Which animal was half as popular as a dog?

Giraffe

e) How many children were asked in total?

31

2. A school measured the heights of all children. The results are shown in the graph below.



a) Which height was the least common in the school?

120cm – 129cm

b) How many children measured less than 1m?

29 children

c) 3 more children joined the school who measure between 110cm – 119cm. Add this information to the graph.

The 4th bar should now show 12.

d) After these children joined, how many children were measured in total?

65 children