Maths Assessment Pack

Guidance on Using the Assessments

The Twinkl maths assessments have been written to support teachers in assessing children's progress within the different content areas of the programmes of study for the 2014 Maths Curriculum.

The assessments reflect the content of the curriculum for the current year group. Any children working significantly below or above expectations may be assessed using year 1 or year 3 materials. (Although it should be noted that the government has specified that children should be engaging in using and applying rather than accelerated content).

When to Use the Assessments

There is an assessment for each of the areas of study.

For year 2 these areas are set out below.

Assessment	Total number of marks available
Number and Place Value	18
Number - Addition and Subtraction	20
Number - Multiplication and Division	20
Number - Fractions	20
Measurement	25
Geometry - Properties of Shape	20
Geometry - Position and Direction	10
Statistics	20

Each assessment may be used:

- before teaching the unit to assess strengths and weaknesses pupils may have in order to inform planning.
- during a unit to assess how pupils are able to apply new learning.
- at the end of a unit to assess pupils progress within that particular area.

Delivery of the Assessments

Answers and teacher scripts for mental maths can be found at the end of the pupil pages for each assessment.

Any extra materials required by the teacher or the pupils will be indicated on the teacher script.

All the assessments are suitable for class delivery although they can be given to smaller groups if required.

There are no time limits for the assessments and children may receive help with reading the instructions if necessary.

Tracking from the Assessments

Each assessment can be used alongside the **New Curriculum Year 2 Maths Assessment Spreadsheet** to track pupil progress.

The statement being tested is clearly marked on the teacher answer sheet. This links directly to the spreadsheet.

The spreadsheet has been set up with conditional formatting so that inputting the numbers 1/2/3 will turn the cells green/orange/red. Using the colour coding green for achieved, amber for partly achieved and red for not achieved, teachers will have an at a glance picture of a child's needs or any common areas of strength or weakness within the class in order to inform future planning. A pdf alternative is also available.

Used alongside teacher judgements and pupil's exercise books a clear picture of a child's progress can be built up and used as evidence for parents, pupil progress meetings or any outside agencies visiting school.

Name:

Maths Assessment Year 2 Term 3: Number and Place Value

1. Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.
2. Recognise the place value of each digit in a two-digit number.
3. Compare and order numbers up to 100; use < > and = signs.
4. Read and write numbers to at least 100 in numerals and in words.
5. Use place value and number facts to solve problems.

Name: Date:

15 total marks

Maths Assessment Year 2 Term 3: Number and Place Value

1. Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.

Continue these sequences:

36	34	32				
25	30	35				
89	79	69				
				30	33	36

4 marks

2. Recognise the place value of each digit in a two-digit number.

Circle any number that has a digit with a value of eight.

18 25 81 68 82 38

1 mark

3. Compare and order numbers up to 100; use < > and = signs.

a) Write these amounts in order of size, starting from the smallest.

45	54	14	51	41	15

1 mark

b) Put the < or > or = sign between these numbers.

6 tens and 5 ones ☐ 56 eighty eight ☐ 88 19 ☐ 91

3 marks

4. Read and write numbers to at least 100 in numerals and in words.

a) Write the number seventy in digits: ☐

b) Write the number 64 in words:

2 marks

Total for this page

5. Use place value and number facts to solve problems.

a) I have 50p and I give away 12p. How much money do I have left?

p

1 mark

b) Using these 3 number cards, make 3 different 2-digit numbers.

1 mark

c) What number is represented by the arrow on this number line?

1 mark

d) What number is 10 more than 13?

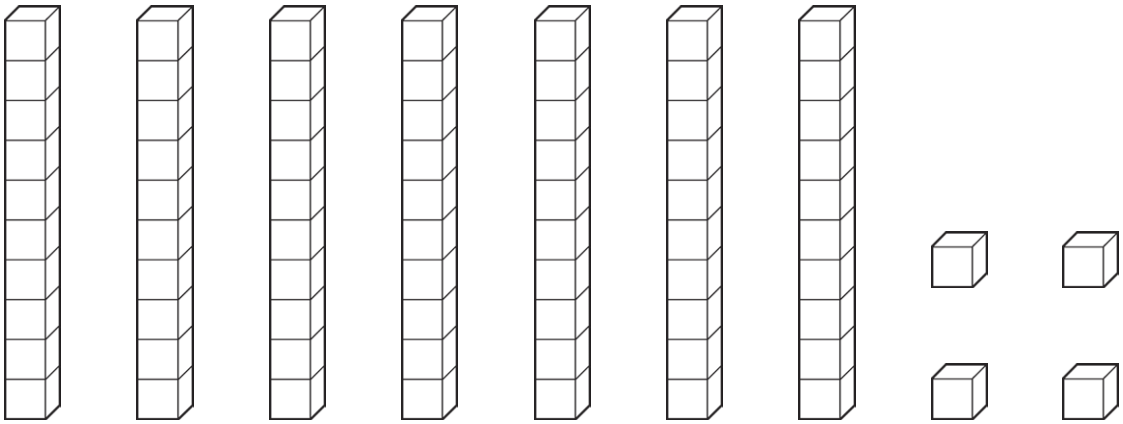
1 mark

Total for this page

6. Identify, represent and estimate numbers using different representations, including the number line.

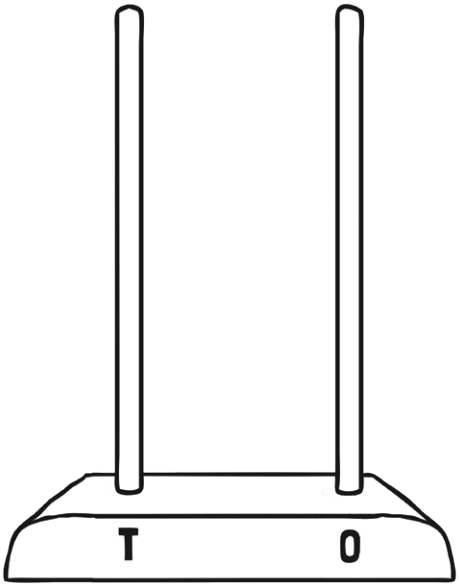
a) Here are some sticks that represent tens and cubes that represent ones. What number is represented by these tens and ones?

1 marks



b) Here is an empty abacus. Draw beads to show the number 53.

1 marks



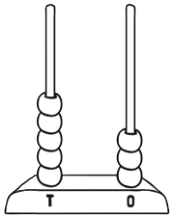
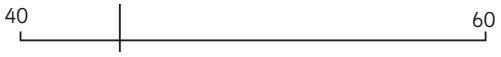
c) Here is a number line from 40 to 60. Draw an arrow to where the number 45 will be on the number line.

1 marks

40 60

Total for this page

Answer Sheet: Maths Assessment Year 2 Term 3: Number and Place Value

question	answer	marks	notes
1. Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.			
	36, 34, 32, **30, 28, 26, 24** 25, 30, 35, **40, 45, 50, 55** 89, 79, 69, **59, 49, 39, 29** 18, 21, 24, 27, **30, 33, 36**	4	1 mark for each correct.
2. Recognise the place value of each digit in a two-digit number.			
	18, 68, 38	1	1 mark for all 3 correctly identified.
3. Compare and order numbers up to 100; use < > and = signs.			
a	14, 15, 41, 45, 51, 54	1	1 mark for all correct.
b	6 tens and 5 ones **>** 56 eighty eight **=** 88 19 **<** 91	3	1 mark for each correct answer.
4. Read and write numbers to at least 100 in numerals and in words.			
a	70	1	
b	sixty-four	1	
5. Use place value and number facts to solve problems.			
a	38p	1	Accept 38 as it is place value being tested not measures.
b	35, 39, 53, 59, 93, 95	1	Award 1 mark for any 3 correct combinations
c	37	1	
d	23	1	
6. Identify, represent and estimate numbers using different representations, including the number line.			
a	74	1	
b	Show the abacus with 53  	1	
c	Answer between 43 and 47  	1	
		Total 18	

Name:

Maths Assessment Year 2 Term 3: Addition and Subtraction

1. Add and subtract numbers mentally.
2. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
3. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
4. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
5. Solve problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.

Name: Date:

/20 total marks

Maths Assessment Year 2 Term 3: Addition and Subtraction

1. Add and subtract numbers mentally.

Listen to the teacher and write the answer in the box.

a) ☐ b) ☐ c) ☐

d) ☐ e) ☐ f) ☐

g) ☐ h) ☐ i) ☐

9 marks

2. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.

Circle the two numbers that add up to 100.

30 **40** **50** **10** **60** **20**

1 mark

3. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

Use **24** + **67** = **91** to complete these:

67 + ☐ = 91 ☐ - 67 = ☐

2 marks

4. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

a) If 23 + 62 = 85, put a circle around the calculation that is incorrect.

85 - 23 = 62 85 - 62 = 32 62 + 23 = 85

1 mark

b) Complete this subtraction calculation and an addition calculation to check the answer.

57 - 18 = ☐

Checked using: ☐ + ☐ = ☐

1 mark

Total for this page

c) Find the missing numbers.

28 + ☐ = 51 ☐ - 26 = 35

2 marks

5. Solve problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.

Solve these puzzles and show how you worked them out.

a) Class 1 collect £23 for Comic Relief and Class 2 collect £39. How much did they collect altogether?

☐

2 marks

b) The teacher in Class 1 puts some money into the class collection to make it match the collection in Class 2. How much does he give?

☐

2 marks

Total for this page

Answer Sheet: Maths Assessment Year 2 Term 3: Addition and Subtraction

question 1	Teacher script for mental maths questions				
a	45 + 9 =	**b**	29 - 5 =	**c**	34 - 8 =
d	57 - 30 =	**e**	69 + 20 =	**f**	35 + 41 =
g	57 - 32 =	**h**	56 - 39 =	**i**	5 + 7 + 7 =

question	answer	marks	notes
1. Add and subtract numbers mentally. **Teacher script for mental maths questions.**			
a	54	1	
b	24	1	
c	26	1	
d	27	1	
e	89	1	
f	76	1	
g	25	1	
h	17	1	
i	19	1	
2. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.			
	30 (40) 50 10 (60) 20	1	
3. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.			
a	67 + **24** = 91	Up to 2 marks	1 mark for each correct answer.
b	**91** – 67 = **24**		
4. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.			
a	85 – 62 = 32	1	Do not award a mark if there is evidence of working out rather than using the inverse relationship.
b	57 – 18 = **39** Checked using: 39 + 18 = 57 or 18 + 39 = 57	1	

question	answer	marks	notes
c	28 + **23** = 51 **61** - 26 = 35	2	
5. Solve problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods.			
a	£62	2	Award 2 marks for a correct answer; 1 mark for evidence of working out using the correct operation regardless of whether the correct answer is reached.
b	£16	2	
		Total 20	

Name:

Maths Assessment Year 2 Term 3: Multiplication and Division

1. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.
3. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
4. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Name: Date:

20 total marks

Maths Assessment Year 2 Term 3: Multiplication and Division

1. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

a) The teacher has asked a child to circle the odd numbers. Put a cross by the number incorrectly circled and tick by the number missed.

45 22 17 93 56 68

2 marks

b) Solve the following calculations.

9 x 10 = ☐ 8 x 5 = ☐ 35 ÷ 5 = ☐

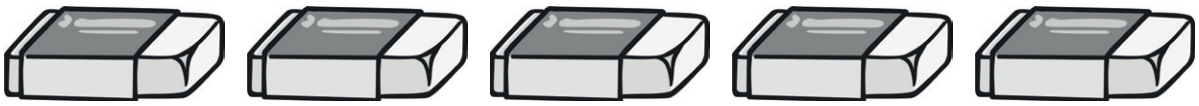
half of 22 = ☐ double 9 = ☐ ☐ ÷ 10 = 7

5 x 5 = ☐ 7 x 2 = ☐ ☐ ÷ 2 = 4

9 marks

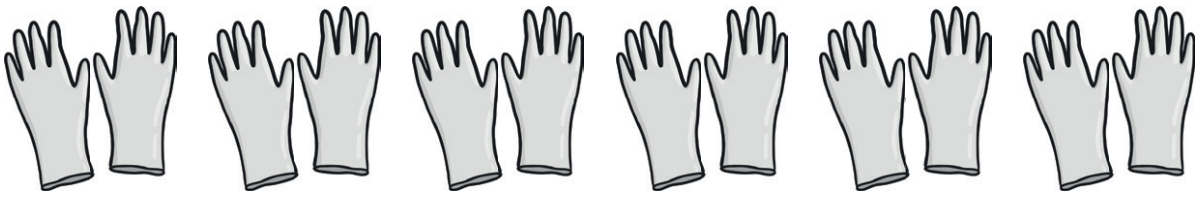
2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.

Write a multiplication or a division sentence around the following pictures.



A box contains 5 rubbers. 30 children are given a rubber each. How many boxes of rubbers are needed?

1 marks



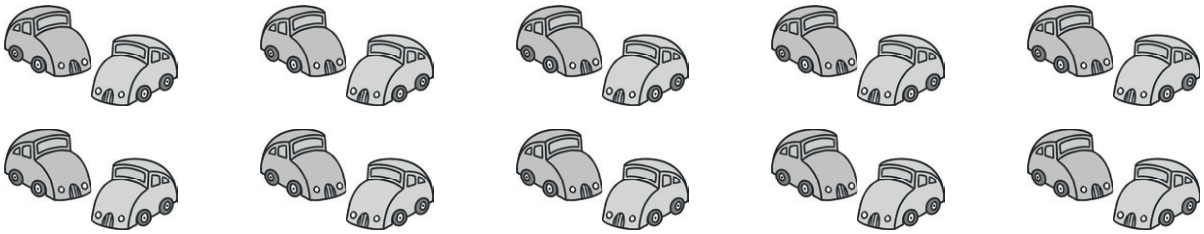
I find 6 pairs of gloves in a draw. How many gloves are there altogether?

1 mark

Total for this page

3. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Write 2 multiplication sentences and 2 division sentences for the following array.



☐ x ☐ = ☐ ☐ ÷ ☐ = ☐

☐ x ☐ = ☐ ☐ ÷ ☐ = ☐

4 mark

4. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

How many sets of 5 one penny coins can be made from 25 coins?

☐

There are 110 children in Key Stage 1. The teachers organise the children into football teams of 11 players. How many teams will there be?

☐

How many shoes in 7 pairs of shoes?

☐

3 marks

Total for this page

Name:

Maths Assessment: Measurement

1. Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.
2. Compare and order lengths, mass, volume/capacity and record the results using >, < and =.
3. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
4. Find different combinations of coins that equal the same amounts of money.
5. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
6. Compare and sequence intervals of time.
7. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
8. Know the number of minutes in an hour and the number of hours in a day.

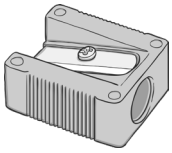
Name: Date:

25 total marks

Maths Assessment: Measurement

1. Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.

a) Tick the boxes of which objects you would measure in metres.



length of a sharpener ☐

distance around the earth ☐

height of a house ☐

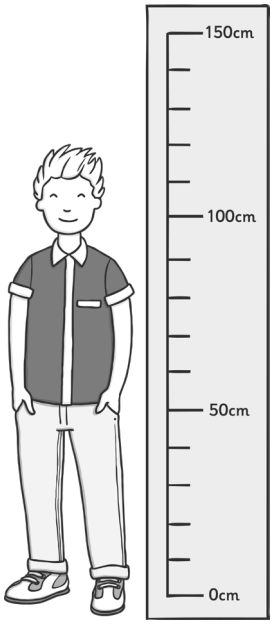
length of a classroom ☐

1 mark

b) Draw a line 2cm longer than this line. Use a ruler.

1 mark

c) How tall is Jack?



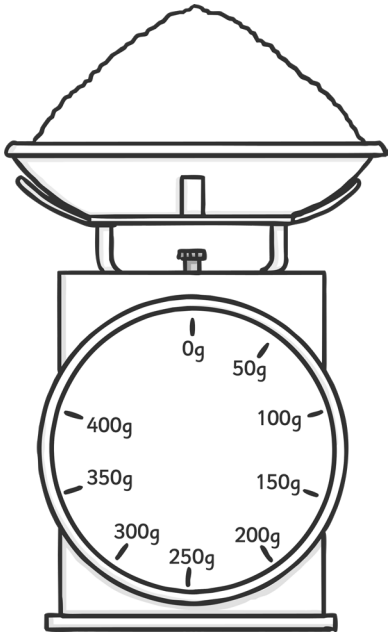
1 mark

d) Jack's younger sister is half his height. How tall is she?

1 mark

Total for this page

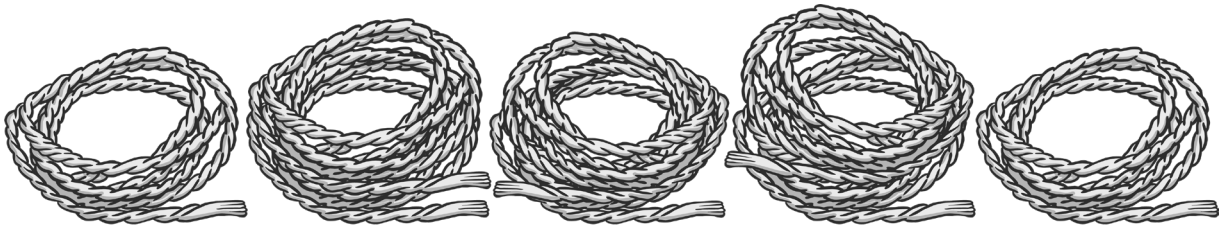
e) There is 150g of flour on the scales for a cake. Mark the arrow to show 150g on the scale.



1 mark

2. Compare and order lengths, mass, volume/capacity and record the results using >, < and =.

a) Here are some pieces of string. The length of each piece is written beneath. Write the sizes in order from the smallest to the largest.



34cm **107cm** **1m** **2m** **65cm**

smallest laraest

1 mark

b) Complete the following by writing a number to make the sentences correct.

1kg > ☐ g

☐ cm < $\frac{1}{2}$ m

1 litre = ☐ ml

3 marks

Total for this page

3. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.

Sara's mum gives her one pound thirty-six pence to buy some pencils. Ring the coins that she might use.

Write one pound thirty-six pence in figures:

2 marks

4. Find different combinations of coins that equal the same amounts of money.

Marosh pays 21p for a packet of crisps. What coins might he use? Find 4 different ways to make 21p.

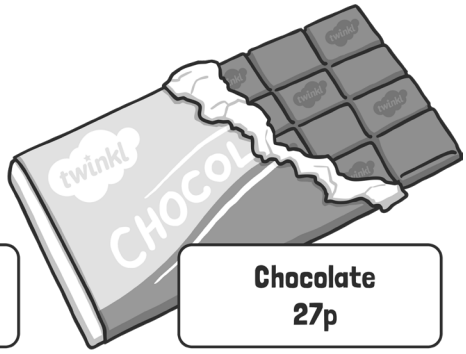
4 marks

Total for this page

5. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

a) Albie buys a carton of juice and a chocolate bar. How much does she spend?

Juice Box
45p



Chocolate
27p

1 mark

b) Jan's mum spends 32p on a packet of stickers. How much change will she get from £1?

1 mark

6. Compare and sequence intervals of time.

Put these intervals of time in order from shortest to longest.

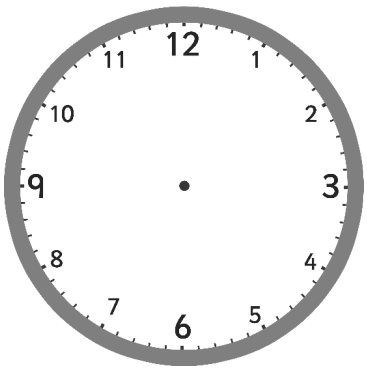
4 days	2 weeks	1 week	1 month	10 days

1 mark

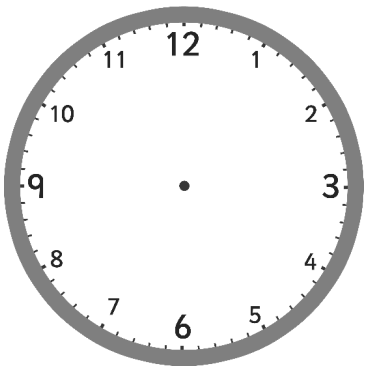
Total for this page

7. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.

Put hands on the clocks so they show the times shown below.



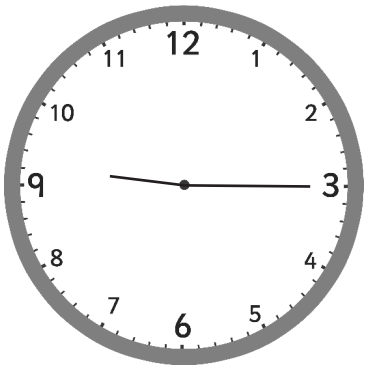
a) 7 o'clock



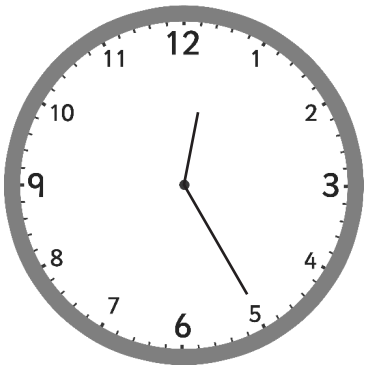
b) twenty five to 3

2 marks

What time do the following clocks show?



c) _____



d) _____

2 marks

8. Know the number of minutes in an hour and the number of hours in a day.

a) How many minutes in one hour? _____

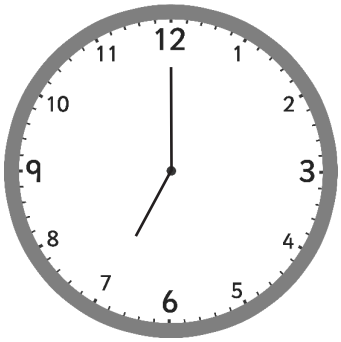
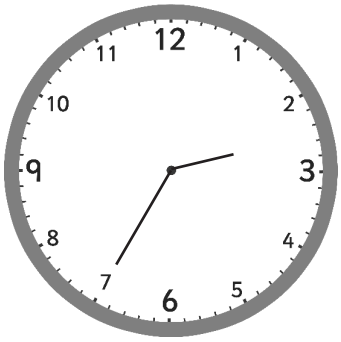
b) How many minutes in two hours? _____

c) How many hours in 2 days? _____

3 marks

Total for this page

question	answer	marks	notes
1. Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.			
a	 length of a sharpener ☐  distance around the earth ☐  weight of a house ☑  length of a classroom ☑	1	1 mark for all correct.
b	Line of 8cm	1	
c	1.2m or 1m 20 cm or 120cm	1	Award ½ a mark if the child has answered correctly but not put m/cm in the answer box.
d	60cm or 0.6m	1	Award ½ a mark if the child has answered correctly but not put m/cm in the answer box.
e	Line drawn to 150g	1	Line should be pointing to mark between 100g and 200g.
2. Compare and order lengths, mass, volume/capacity and record the results using >, < and =.			
a	34cm, 65cm, 1m, 107cm, 2m	1	Award 1 mark all correct.
b	1kg > **less than 1000g** **less than 50cm** < $\frac{1}{2}$m 1 litre = **1000 ml**	3	1 mark for each correct answer.
3. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.			
	Circled – £1, 20p, 10p, 5p, 1p (accept other correct answers) **£1.36**	2	1 mark for the coins correctly circled to the value of £1.36. 1 mark for the value written correctly.
4. Find different combinations of coins that equal the same amounts of money.			
	Accept any combinations of coins which total 21p.	4	1 mark for each correct combination.
5. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.			
a	72p	1	Award ½ mark if unit of measure has not been used.
b	68p	1	Award ½ mark if unit of measure has not been used.

question	answer	marks	notes
6. Compare and sequence intervals of time.			
	4 days, 1 week, 10 days, 2 weeks, 1 month	1	
7. Tell and write the time to five minutes, including quarter past / to the hour and draw the hands on a clock face to show these times.			
a	7:00 	1	Accept hands where it is clear which is minutes and which is hours. Hands should be pointing to 12 and 7.
b	2:35 	1	Accept hands where it is clear which is minutes and which is hours. Hour hand should be roughly half way between 2 and 3.
c	9.15 or quarter past 9	1	
d	12.25 or twenty-five past 12	1	
8. Know the number of minutes in an hour and the number of hours in a day.			
a	60	1	
b	120	1	
c	48	1	
		Total 25	

Answer Sheet: Maths Assessment Year 2 Term 3: Multiplication and Division

question	answer	marks	notes
1. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.			
a	(45) 22 ✓ (93) ~~56~~ 68	2	1 mark for each correct answer.
b	1)**90** 2)**40** 3)**7** 4)**11** 5)**18** 6)**70** 7)**25** 8)**14** 9)**8**	9	
2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.			
a	30 ÷ 5 = 6	1	
b	2 x 6 = 12 or 6 x 2 = 12	1	
3. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.			
	2 x 10 = 20 10 x 2 = 20 20 ÷ 2 = 10 20 ÷ 10 = 2	4	1 mark for each different, correct sentence.
4. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.			
a	5 sets	1	
b	10 teams	1	
c	14 shoes	1	
		Total 20	

Name:

Maths Assessment Year 2 Term 3: Fractions

1. Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, and $\frac{3}{4}$ of a length, shape, set of objects or quantity.
2. Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Name: Date:

20 total marks

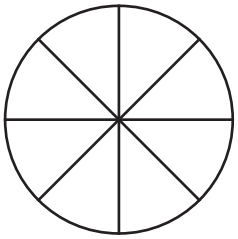
Maths Assessment Year 2 Term 3: Fractions

1. Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, and $\frac{3}{4}$ of a length, shape, set of objects or quantity.

a) Complete the colouring of this shape so $\frac{1}{2}$ is shaded:

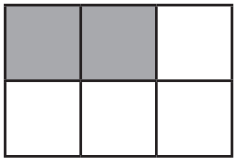
1 mark

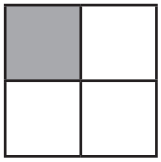
b) Colour $\frac{3}{4}$ of this shape.



1 mark

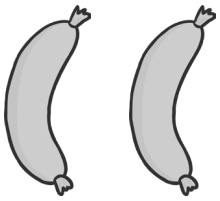
c) What fraction of these shapes is shaded?





1 mark

d) Jerome and his sister have eaten $\frac{3}{4}$ of the sausages. There are 2 left. How many have they eaten?



1 mark

e) Some children made some peg dolls. Put a circle around $\frac{1}{3}$ of them.

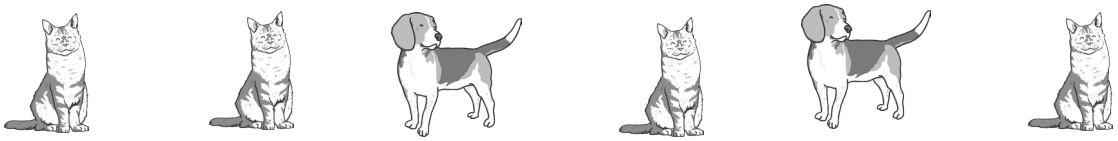
How many dolls is $\frac{2}{3}$?

2 marks

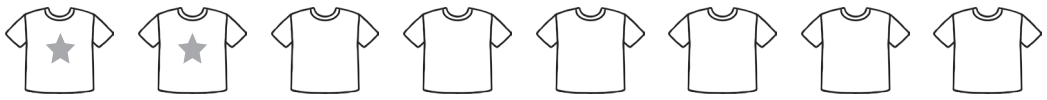
Total for this page

f) Use one of the fractions to answer each question: $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{3}{4}$

A man has 6 pets. What fraction of the pets are dogs?



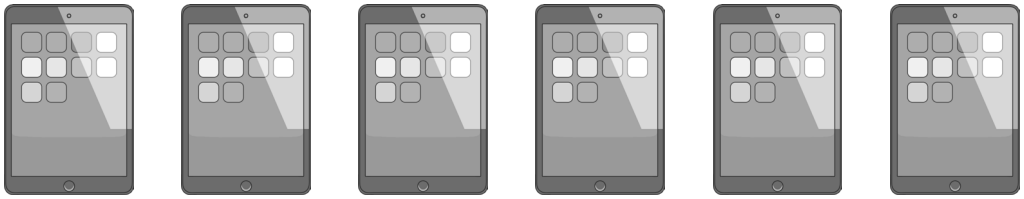
A shop sells 8 t-shirts in 1 day.



What fraction of the t-shirts have a star?

What fraction of the t-shirts are plain?

A class has 12 tablets; after lending some to another class here is how many that they have left.



What fraction do they have left?

4 marks

2. Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

a) Fill in the answers:

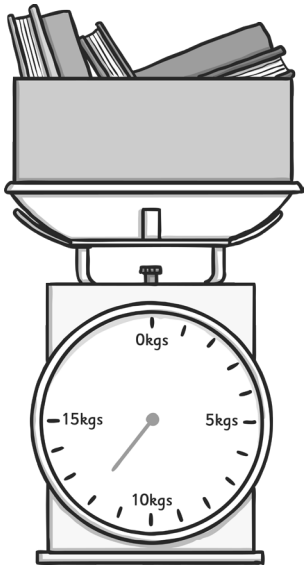
$\frac{1}{2}$ of 16 = $\frac{1}{4}$ of 12 = $\frac{1}{3}$ of 18 =

$\frac{1}{2}$ of 24 = $\frac{1}{4}$ of 20 = $\frac{1}{3}$ of 9 =

6 marks

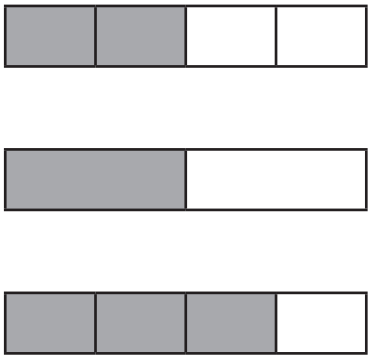
Total for this page

b) A box of books is put onto some weighing scales. How much would half of the books weigh?



1 mark

c) Circle the shapes that have the same fraction shaded.



Write the 2 equivalent fractions shown.

=

3 marks

Total for this page

question	answer	marks	notes
1. Recognise, find, name and write fractions ⅓, ¼, ²⁄₄, and ¾ of a length, shape, set of objects or quantity.			
a	3 more shaded so 5 are shaded altogether	1	
b	6 segments shaded	1	
c	⅓ or ²⁄₆, ¼	1	
d	6 sausages	1	
e	3 dolls circled 6	2	1 mark for correctly circling 3 dolls. 1 mark for writing '6 dolls'.
f	dogs: ⅓ star: ¾ plain: ¾ tablet devices: ½	4	1 mark for each correct answer.
2. Write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of ²⁄₄ and ½.			
a	½ of 16 = **8** ¼ of 12 = **3** ⅓ of 18 = **6** ½ of 24 = **12** ¼ of 20 = **5** ⅓ of 9 = **3**	6	One for each correct answer.
b	6kg	1	
c	½ and ¾ shaded ½ = ²⁄₄	3	2 marks for ringing the correct shapes. 1 mark for writing the correct equivalent fractions.
		Total 20	

Name:

Maths Assessment Year 2 Term 3: Geometry – Properties of Shapes

1. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
2. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
3. Identify 2-D shapes on the surface of 3-D shapes.
4. Compare and sort common 2-D and 3-D shapes and everyday objects.

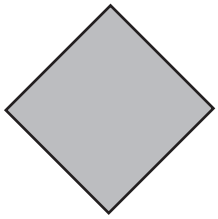
Name: Date:

20 total marks

Maths Assessment Year 2 Term 3: Geometry – Properties of Shapes

1. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.

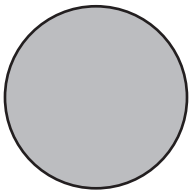
Name these shapes and describe their properties.



a) Name of shape

Number of sides

Number of corners



b) Name of shape

Number of sides

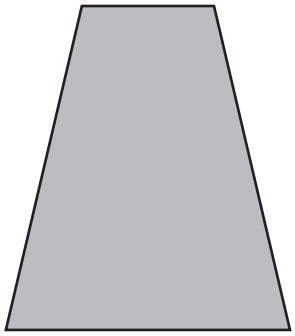
Number of corners

4 marks

Use a ruler to draw one line of symmetry through the following shapes.

c)

d)



2 marks

e) Draw a triangle. Use a ruler.

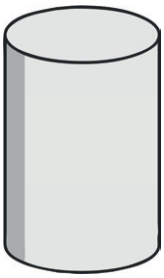
1 mark

Total for this page

2. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.

Name these shapes and fill in the properties.

a) Name of shape

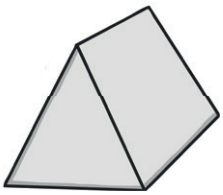


Number of faces

Number of edges

Number of vertices

b) Name of shape



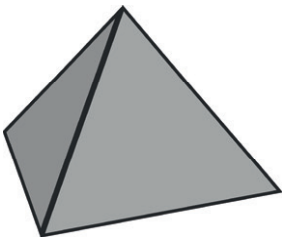
Number of faces

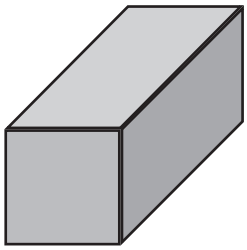
Number of edges

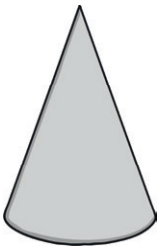
Number of vertices

4 marks

c) I am thinking of a 3-D shape. It has 6 faces: 2 squares and 4 rectangles. It has 8 vertices. Tick the shape I am describing.







Can you tell me what it is called?

1 mark

Total for this page

3. Identify 2-D shapes on the surface of 3-D shapes.

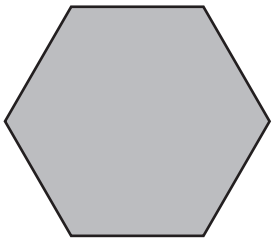
Match the 3-D shape to the 2-D shapes which form its faces.

cube	rectangles
cuboid	triangles
tetrahedron	squares

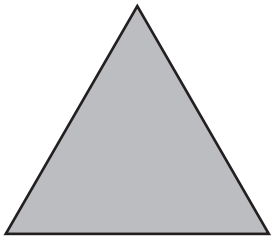
2 marks

4. Compare and sort common 2-D and 3-D shapes and everyday objects.

a) Tell me one thing that is the same and one thing that is different about these 2 shapes.



Hexagon



Equilateral triangle

Same

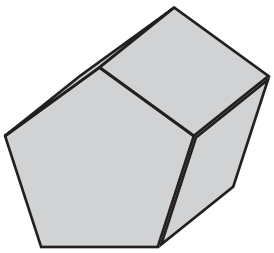
Different

2 marks

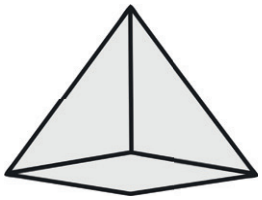
Total for this page

b) Write the letter for each shape in the Carroll Diagram.

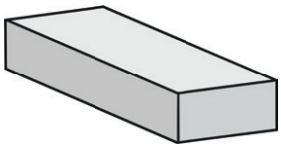
	Has rectangle faces	Has no rectangle faces
Has less than 9 vertices		
Has 10 vertices or more		



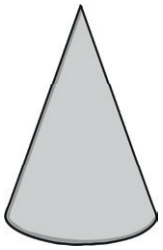
A



B



C

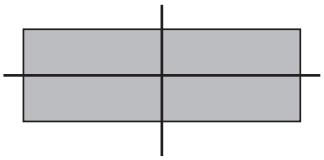
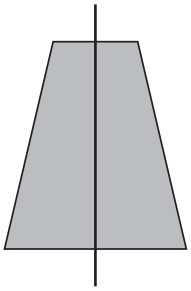
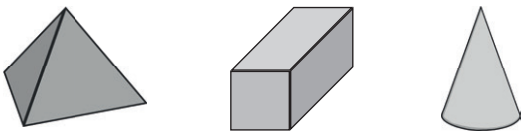


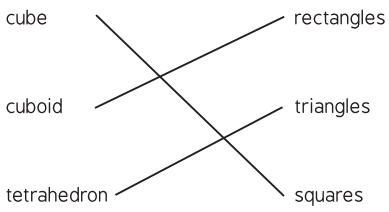
D

4 marks

Total for this page

Answer Sheet: Maths Assessment Year 2 Term 3: Geometry - Properties of Shapes

question	answer	marks	notes
1. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.			
a	Square 4 sides 4 corners	2	One mark for naming the shape and 1 for all properties correct.
b	Circle 1 side 0 corners	2	One mark for naming the shape and 1 for all properties correct.
c		1	One mark for drawing any line of symmetry.
d		1	One mark for drawing any line of symmetry.
e	Any shape with 3 straight sides	1	
2. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.			
a	Cylinder 3 faces 2 edges 0 vertices	2	1 mark for the name and 1 for all the correct properties.
b	Triangular prism 5 faces 9 edges 6 vertices	2	1 mark for the name and 1 for all the correct properties.
c	 ☐ ☑ ☐ Cuboid	1	1 mark for correctly identifying and naming the shape. Square prism and rectangular prism also acceptable.

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">3. Identify 2-D shapes on the surface of 3-D shapes.</td></tr>
<tr><td></td><td> 
</td><td>2</td><td>2 marks for all correct.
1 mark for 1 correct.
(There is a chance that children may answer this differently as squares are also rectangles, and a cuboid can have both square and rectangle faces. If a child draws a line from both the cube and cuboid to rectangles and squares or from the cube and cuboid to rectangles, they would still be technically correct. However, if a child draws a line from the cuboid to squares only, they would be incorrect.)</td></tr>
<tr><td colspan="4">4. Compare and sort common 2-D and 3-D shapes and everyday objects.</td></tr>
<tr><td>a</td><td>Same - They both have sides / angles of equal length / size. (i.e. they are regular)

Different - One has a 6 sides and the other 3.</td><td>2</td><td>Accept any similarity and difference.

Accept any words to a similar effect.</td></tr>
<tr><td>b</td><td><table>
<tr><th></th><th>Has rectangle faces</th><th>Has no rectangle faces</th></tr>
<tr><td>Has less than 9 vertices</td><td>C, B could be here</td><td>B, D</td></tr>
<tr><td>Has 10 vertices or more</td><td>A</td><td></td></tr>
</table></td><td>4</td><td>1 mark for each correct, 4 for all correct.

*Because a square is a special case of a rectangle.</td></tr>
<tr><td colspan="2"></td><td>Total 20</td><td></td></tr>
</table>

Name:

Maths Assessment Year 2 Term 3: Geometry – Position and Direction

1. Order and arrange combinations of mathematical objects in patterns and sequences.
2. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter half and three quarter turns (clockwise and anticlockwise).

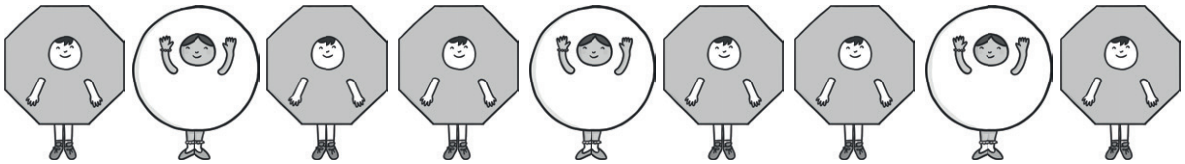
Name: Date:

10 total marks

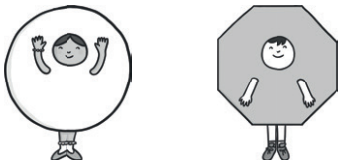
Maths Assessment Year 2 Term 3: Geometry – Position and Direction

1. Order and arrange combinations of mathematical objects in patterns and sequences.

Here is a sequence:

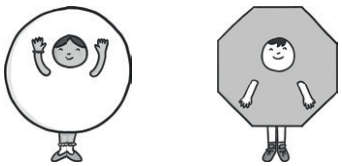


a) Ring the shape that would be next in the sequence:



1 mark

b) Ring the shape that would be the 11th shape in the sequence:



1 mark

c) Explain why the octagon would be the 15th shape in the sequence.

1 mark

d) Draw the next shape in the sequence.

1 mark

e) Can you describe what is happening in the above pattern?

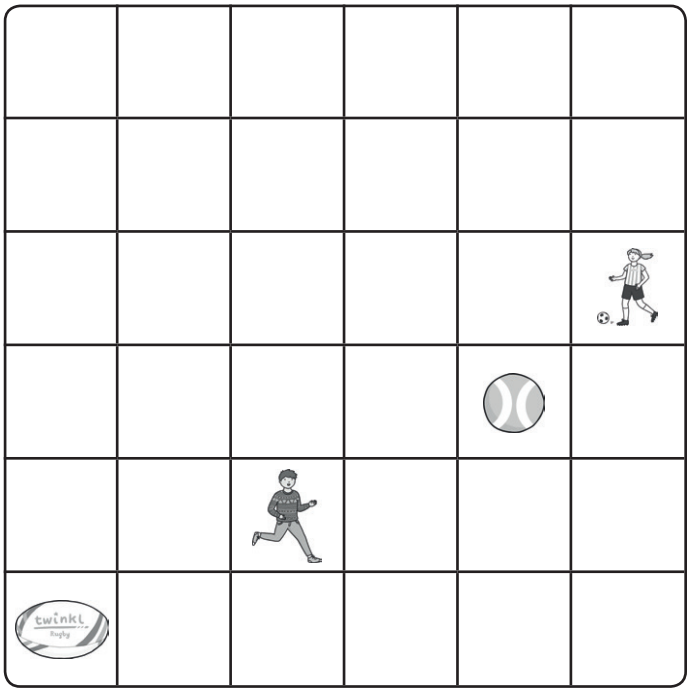
You might use words like:

clockwise, anticlockwise, half , quarter or three quarter turn

1 mark

Total for this page

2. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter half and three quarter turns (clockwise and anticlockwise).



a) The girl moves forward 3 squares and makes a quarter turn clockwise and moves forward one more square. Draw the football in the square in which you have finished.

1 mark

b) Describe how the boy can move to the tennis ball.

You might use words like:

clockwise, anticlockwise, half, quarter or three quarter turn.
Walk forwards ____ squares.

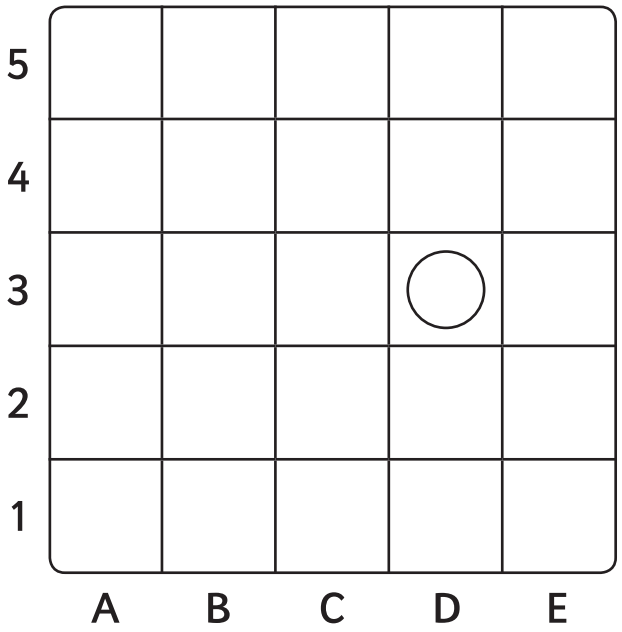
_____

_____

1 mark

Total for this page

c) Using the grid below, write an X in square B5.

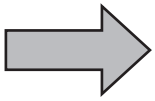


1 mark

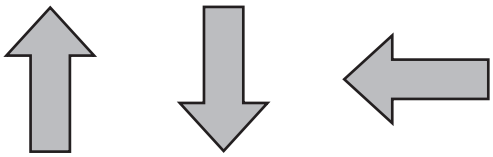
d) In which square is the ◯?

1 mark

e) Turn this arrow one quarter turn anticlockwise.



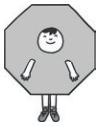
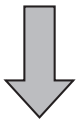
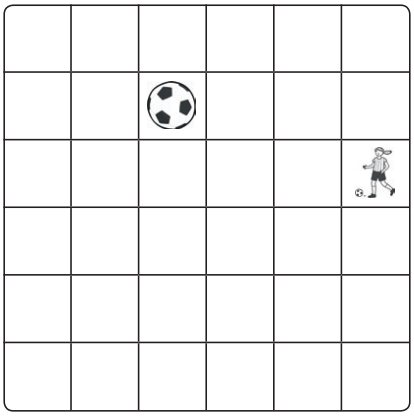
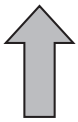
Circle the arrow that shows which way the arrow will point after the turn.



1 mark

Total for this page

Answer Sheet: Maths Assessment Year 2 Term 3: Geometry - Position and Direction

question	answer	marks	notes
1. Order and arrange combinations of mathematical objects in patterns and sequences.			
a		1	
b		1	
c	I counted up octagon, circle, octagon until I got to 15. The pattern is in 3s and as 15 is a multiple of 3, the fifteenth shape will be the third shape.	1	Accept any reasonable explanation.
d		1	
e	Each shape is turning a half turn.	1	Accept any words to this effect.
2. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter half and three quarter turns (clockwise and anticlockwise).			
a		1	
b	Move forward 2 squares, quarter turn anticlockwise and forward 1 square.	1	
c	X in B5	1	
d	D3	1	
e		1	
		Total 10	

Name:

Maths Assessment Year 2 Term 3: Statistics

1. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
2. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
3. Ask and answer questions about totalling and comparing categorical data.

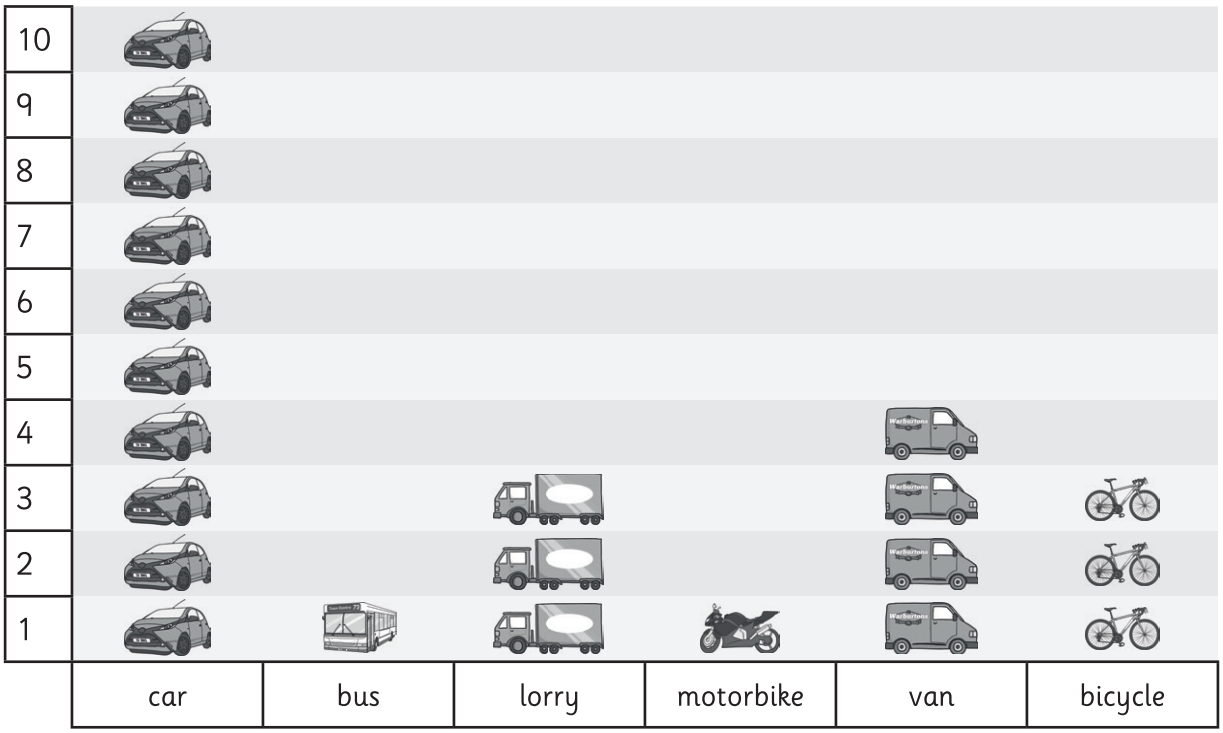
Name: Date:

25 total marks

Maths Assessment Year 2 Term 3: Statistics

1. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
2. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
3. Ask and answer questions about totalling and comparing categorical data.

This pictogram shows the vehicles passing school in 1 hour.



a) How many lorries passed the school?

b) How many two-wheeled vehicles passed the school?

c) How many vehicles passed the school altogether?

d) How many more cars than vans passed the school?

e) The next vehicles to pass the school were a group of 8 cyclists. How would this change which was the most common vehicle to pass the school?

5 marks

Total for this page

f) Fill in the gaps in the tally chart about class 3.

Vehicle	Tally	Total
Car		
Lorry		13
Bus		
Motorbike		6
Van		
Bicycle		0

5 marks

Write 2 different questions you could ask someone about this tally chart information.

1 mark

1 mark

Total for this page

Some children did a sponsored swim to raise money for new books for school.

Class	Boys	Girls	Total
Class 1	13	15	
Class 2	15	12	27
Class 3		17	28
Class 4	18	13	31
Class 5	14		30

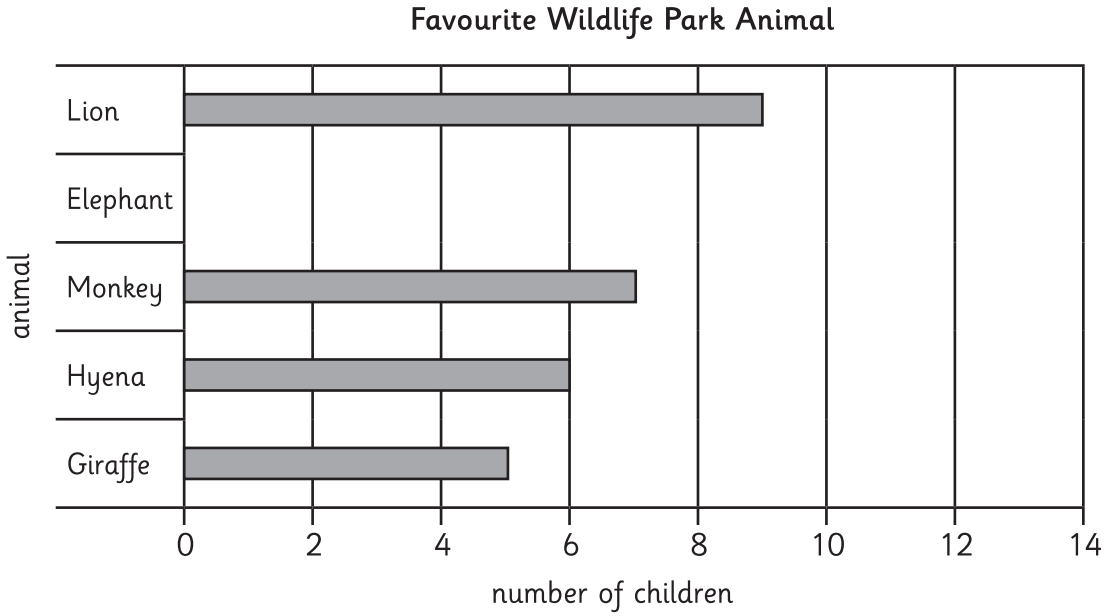
g) Complete the table.

h) Which class has the most boys?

i) How many more girls are there than boys altogether?

5 marks

Following a visit to a Wildlife Park, the children chose their favourite animal.



j) 13 children choose the elephant. Draw the bar for the elephant

k) How many more children preferred the lion to the giraffe?

l) How many children chose their favourite animal?

3 marks

Total for this page

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">1. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

2. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.

3. Ask and answer questions about totalling and comparing categorical data.</td></tr>
<tr><td>a</td><td>3</td><td>1</td><td></td></tr>
<tr><td>b</td><td>4</td><td>1</td><td></td></tr>
<tr><td>c</td><td>22</td><td>1</td><td></td></tr>
<tr><td>d</td><td>6</td><td>1</td><td></td></tr>
<tr><td>e</td><td>The most common vehicle would change from cars to bicycles.</td><td>1</td><td>1 mark for mentioning both car and bicycle and that it changes from car to bicycle.</td></tr>
<tr><td>f</td><td><table><tr><th>Vehicle</th><th>Tally</th><th>Total</th></tr><tr><td>Car</td><td>𝍸 𝍸 𝍸 ||</td><td>17</td></tr><tr><td>Lorry</td><td>𝍸 𝍸 |||</td><td>13</td></tr><tr><td>Bus</td><td>||||</td><td>4</td></tr><tr><td>Motorbike</td><td>𝍸 |</td><td>6</td></tr><tr><td>Van</td><td>𝍸 |||</td><td>8</td></tr><tr><td>Bicycle</td><td></td><td>0</td></tr></table>One mark for each relevant question asked</td><td>7</td><td>Accept any reasonable questions which can be asked from the information in the tally chart.

Award 1 mark for each different type of question e.g. award only 1 mark for the questions - How many vans? How many cars?</td></tr>
<tr><td>g</td><td><table><tr><th>Class</th><th>Boys</th><th>Girls</th><th>Total</th></tr><tr><td>Class 1</td><td>13</td><td>15</td><td>28</td></tr><tr><td>Class 2</td><td>15</td><td>12</td><td>27</td></tr><tr><td>Class 3</td><td>11</td><td>17</td><td>28</td></tr><tr><td>Class 4</td><td>18</td><td>13</td><td>31</td></tr><tr><td>Class 5</td><td>14</td><td>16</td><td>30</td></tr></table></td><td>3</td><td></td></tr>
<tr><td>h</td><td>Class 4</td><td>1</td><td></td></tr>
<tr><td>i</td><td>2 more girls</td><td>1</td><td></td></tr>
<tr><td>j</td><td>Bar should be halfway between 12 and 14.</td><td>1</td><td></td></tr>
<tr><td>k</td><td>4</td><td>1</td><td></td></tr>
<tr><td>l</td><td>40</td><td>1</td><td></td></tr>
<tr><td colspan="2"></td><td>Total 20</td><td></td></tr>
</table>