Home learning pack

Contents:

Reading

Reading activities are included in the pack. Each activity can be completed over two days. The first day can be spent reading the text and discussing what it means before finding the meaning of any words that the children are unsure of.

The second day can be spent answering the questions. Remind the children to think about point, evidence and explain.

Writing

There are three writing tasks that are included. Each task can take three days to complete. The first day should be spend planning out/researching what the children would like to write. Day two should be spent drafting and writing down ideas. Day three should have the extended write written up on the paper.

Maths

The maths activities are focused on times tables, arithmetic practice and reasoning practice. These can be completed in any order and are designed just to keep the children practicing the skills for SATS. There is a data handling pack that is included, which the children can work through over the course of 2-3 days. The children will need to read through carefully to decided how they will need to solve the questions.

Topic

A separate sheet is provided to explain the topic work. Further examples can be found on SeeSaw.

Science

A separate sheet is provided to explain the science work. Further examples can be found on SeeSaw.

Spelling

The key spellings for Year 6 have been included in the pack. These can all be practiced at any times during the two weeks. I have also included the 10 spellings we would have been covering over the next two weeks. These can be completed daily and then the children can be tested at the end of each week.

If you have any issues, feel free to email or send me a message on SeeSaw and I will get back to you.

Topic

This term, we have been looking at the Roman Empire as well as the Geography of Italy. As part of this we have looked at Mount Vesuvius and volcanoes in general. The next are o look at is earthquakes.

Task

The challenge is to research information regarding earthquakes and what causes them. The children can focus on earthquakes from history, the causes of earthquakes or where they are likely to occur. This can be completed by writing, using diagrams or pictures to support what they have learnt through the research.

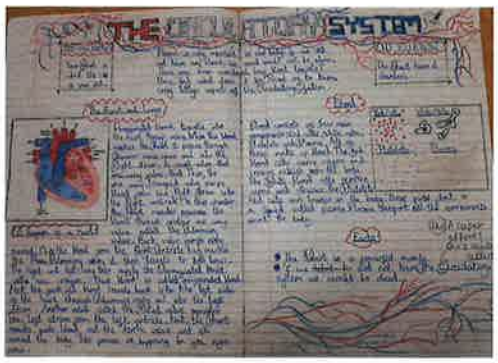
The children have worked hard this year on their presentation in theme, working using double page spreads to display their learning in unique and independent ways.. I have included examples of how the children could set out their findings, but ultimately, it is up to them to present their learning in the way they feel is best on their double page.

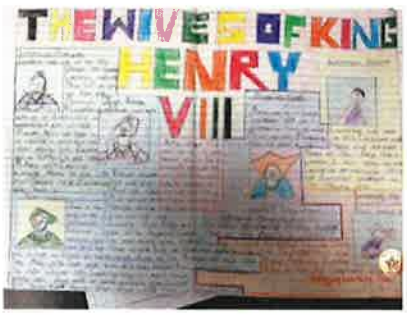
I have included a few links below to start the children off on their research:

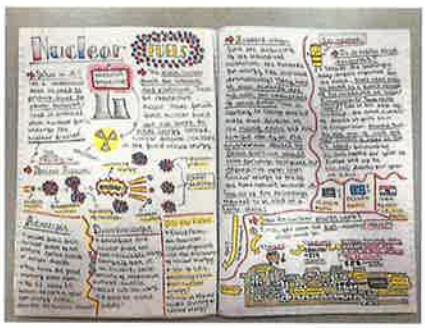
https://www.theschoolrun.com/homework-help/earthquakes

https://www.coolkidfacts.com/earthquakes-for-kids/

http://www.sciencekids.co.nz/sciencefacts/earth/earthquakes.html







This is a 15 minute test relating to fractions. Encourage the children to get the denominators the same on the addition and subtraction questions before trying to answer them. When finding a fraction of an amount (e.g. 1/3 of 30) they should divide by the denominator before multiplying by the numerator.

Q1.

$\frac{5}{6}$ of 72 =

1 mark

Q2.

$\frac{7}{8}$ of 5,000 =

1 mark

Q3.

$\frac{5}{7} + \frac{3}{21} =$

1 mark

Q4.

$1\frac{1}{2} \times 40 =$

1 mark

Q5.

$2\frac{1}{3} + \frac{5}{6} =$

1 mark

Q6.

$$\frac{62}{100} - \frac{38}{100} =$$

1 mark

Q7.

$$\frac{2}{6} - \frac{1}{8} =$$

1 mark

Q8.

$$\frac{4}{5} \div 4 =$$

1 mark

Q9.

$$\frac{5}{8} \div 2 =$$

1 mark

Q10.

$$\frac{5}{6} \times 24 =$$

1 mark

Q11.

$$\frac{4}{5} = \frac{\square}{100}$$

1 mark

Q12.

$$\frac{1}{8} + \frac{3}{4} =$$

1 mark

Q13.

$$\frac{1}{8} \text{ of } 32 =$$

1 mark

Q14.

$$6\frac{1}{6} - 2\frac{1}{7} =$$

1 mark

Q15.

$$\frac{1}{5} \div 2 =$$

This is a 15 minute test based on multiplying and dividing by 10,100 and 1000. The children can be reminded to move the numbers around the decimal point and that they can draw a place value grid to help them do this.

Q1.

343.1 ÷ 1,000 =

1 mark

Q2.

6.7 ÷ 100 =

1 mark

Q3.

20.61 × 10 =

1 mark

Q4.

3.6 ÷ 10 =

1 mark

Q5.

34.8 × 1,000 =

1 mark

Q6.

25.34 × 10 =

1 mark

Q7.

2.89 ÷ 100 =

1 mark

Q8.

0.06 × 100 =

1 mark

Q9.

12.05 ÷ 100 =

1 mark

Q10.

67.91 × 100 =

1 mark

Q11.

5.55 ÷ 10 =

1 mark

Q12.

9.78 × 1,000 =

1 mark

Q13.

1,100 × 600 =

1 mark

Q14.

700 × 900 =

1 mark

Q15.

0.9 ÷ 100 =

1 mark

This is a 10 minute test focused on order of operations. Remind the children to consider BODMAS or BIDMAS to help them remember the order they should solve the problem.

Q1.

60 ÷ (30 − 24) =

1 mark

Q2.

700 − ☐ = 280

1 mark

Q3.

60 − 42 ÷ 6 =

1 mark

Q4.

900 ÷ (45 × 4) =

1 mark

Q5.

20 − 4 × 2 =

1 mark

Q6.

$120 - 15 \times 5 =$

1 mark

Q7.

$3^2 + 10 =$

1 mark

Q8.

$6^2 + 10 =$

1 mark

Q9.

$9^2 - 36 \div 9 =$

1 mark

Q10.

$50 + (36 \div 6) =$

1 mark

Creative Writing Task:

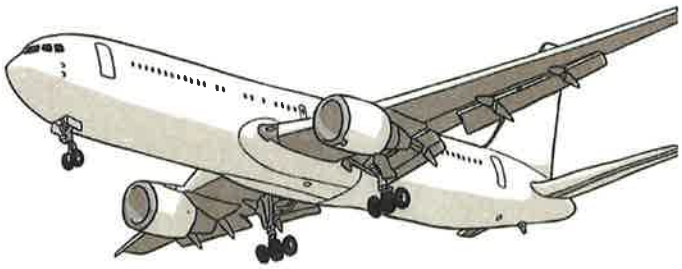
Advertising Your Town

You have 30 minutes to complete the following task. Use the checklist to help you.

Persuade your reader to take their next holiday to the place where you live.

Checklist

- Plan your writing thoroughly using the sheets provided.
- Think about what will make your writing unique – can you include a twist or standout viewpoint?
- Use a wide range of vocabulary, punctuation and sentence structures.
- Ensure that your handwriting is neat and legible.
- Write at least one side of A4.
- Read through your work. Remember to check your spelling, punctuation and grammar and neatly correct any errors.



Creative Writing Task:

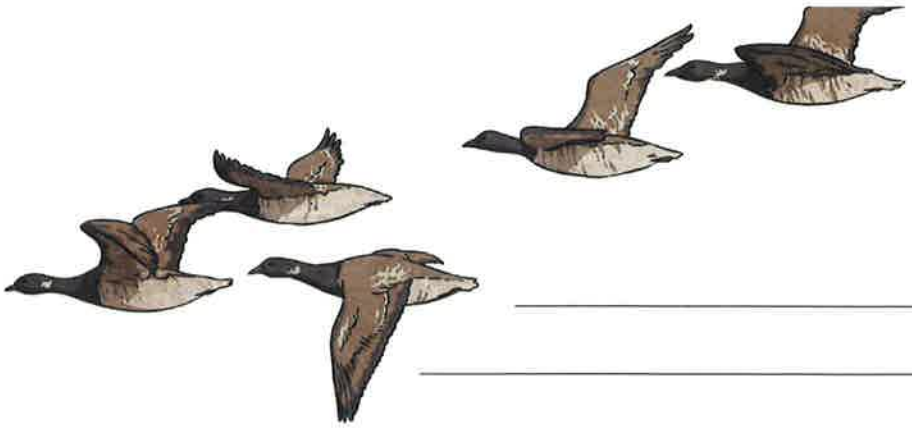
The Ascent

You have 30 minutes to complete the following task. Use the checklist to help you.

The word 'ascend' means 'to rise or climb up'. Write a story with the title 'The Ascent'.

Checklist

- Plan your writing thoroughly using the sheets provided.
- Think about what will make your writing unique – can you include a twist or standout viewpoint?
- Use a wide range of vocabulary, punctuation and sentence structures.
- Ensure that your handwriting is neat and legible.
- Write at least one side of A4.
- Read through your work. Remember to check your spelling, punctuation and grammar and neatly correct any errors.



Creative Writing Task:

Letter to Your MP

You have 30 minutes to complete the following task. Use the checklist to help you.

Write a letter to your local MP about a change that you feel is needed in your community. If you do not know the name of your local MP, begin your letter with 'Dear Sir/Madam'.

Checklist

- Plan your writing thoroughly using the sheets provided.
- Think about what will make your writing unique – can you include a twist or standout viewpoint?
- Use a wide range of vocabulary, punctuation and sentence structures.
- Ensure that your handwriting is neat and legible.
- Write at least one side of A4.
- Read through your work. Remember to check your spelling, punctuation and grammar and neatly correct any errors.

TimesTables.me.uk

Printable Times Tables Quiz Generator

Name: _____

Number of Questions: **60**
Testing: **2×**, **3×**, **4×**, **5×**, **6×**, **7×**, **8×**, **9×**, **10×**, **11×**, **12×**

10 × 7 = _____	4 × 3 = _____	3 × 4 = _____	5 × 8 = _____
2 × 12 = _____	10 × 11 = _____	7 × 8 = _____	6 × 12 = _____
10 × 4 = _____	2 × 9 = _____	5 × 6 = _____	3 × 9 = _____
4 × 7 = _____	2 × 12 = _____	10 × 12 = _____	5 × 10 = _____
12 × 7 = _____	4 × 11 = _____	6 × 1 = _____	1 × 3 = _____
6 × 5 = _____	11 × 5 = _____	11 × 11 = _____	12 × 9 = _____
9 × 7 = _____	11 × 7 = _____	10 × 4 = _____	12 × 2 = _____
9 × 9 = _____	5 × 2 = _____	5 × 3 = _____	9 × 8 = _____
7 × 1 = _____	12 × 6 = _____	8 × 6 = _____	1 × 6 = _____
4 × 4 = _____	12 × 10 = _____	7 × 9 = _____	9 × 1 = _____
6 × 11 = _____	8 × 11 = _____	10 × 9 = _____	3 × 6 = _____
10 × 7 = _____	9 × 3 = _____	8 × 2 = _____	7 × 6 = _____
12 × 10 = _____	4 × 1 = _____	4 × 2 = _____	10 × 5 = _____
3 × 2 = _____	10 × 3 = _____	12 × 8 = _____	4 × 9 = _____
2 × 7 = _____	12 × 2 = _____	2 × 6 = _____	2 × 9 = _____

TimesTables.me.uk

Printable Times Tables Quiz Generator

Name: _____

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Testing: **2×**, **3×**, **4×**, **5×**, **6×**, **7×**, **8×**, **9×**, **10×**, **11×**, **12×**

5 × 6 = _____	11 × 9 = _____	11 × 4 = _____	8 × 12 = _____
1 × 12 = _____	9 × 4 = _____	12 × 4 = _____	6 × 2 = _____
6 × 5 = _____	12 × 3 = _____	8 × 2 = _____	7 × 9 = _____
7 × 2 = _____	9 × 10 = _____	3 × 7 = _____	12 × 6 = _____
10 × 7 = _____	4 × 1 = _____	10 × 1 = _____	2 × 6 = _____
3 × 6 = _____	9 × 12 = _____	6 × 12 = _____	12 × 5 = _____
12 × 2 = _____	1 × 4 = _____	10 × 2 = _____	10 × 4 = _____
7 × 11 = _____	10 × 8 = _____	8 × 1 = _____	5 × 12 = _____
8 × 10 = _____	8 × 3 = _____	8 × 5 = _____	11 × 8 = _____
3 × 1 = _____	6 × 4 = _____	1 × 6 = _____	5 × 11 = _____
2 × 3 = _____	5 × 3 = _____	9 × 7 = _____	12 × 11 = _____
8 × 7 = _____	8 × 4 = _____	12 × 10 = _____	3 × 4 = _____
5 × 4 = _____	2 × 8 = _____	4 × 5 = _____	7 × 4 = _____
5 × 8 = _____	10 × 5 = _____	9 × 8 = _____	8 × 9 = _____
8 × 4 = _____	4 × 11 = _____	7 × 3 = _____	4 × 12 = _____

Key Stage 2

Mathematics

Reasoning: Pack 1 Test 1a

Name	
Date	

/35
total marks

Name: Date:

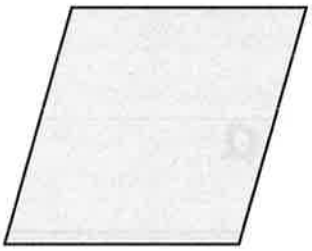
Key Stage 2 Maths Reasoning: Pack 1 Test 1a

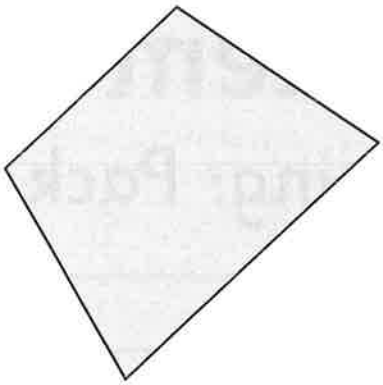
1. Order the following numbers from smallest to largest: 426, 412, 462, 416, 402

smallest largest

1 mark

2. Draw all the lines of symmetry on these quadrilaterals.





2 marks

3. Draw lines to match the following calculations to the correct answers.

56 × 0

56

56 ÷ 1

0

56 × 1

1 mark

4. Write the decimal equivalents to match the following fractions.

$\frac{1}{4}$ = ☐

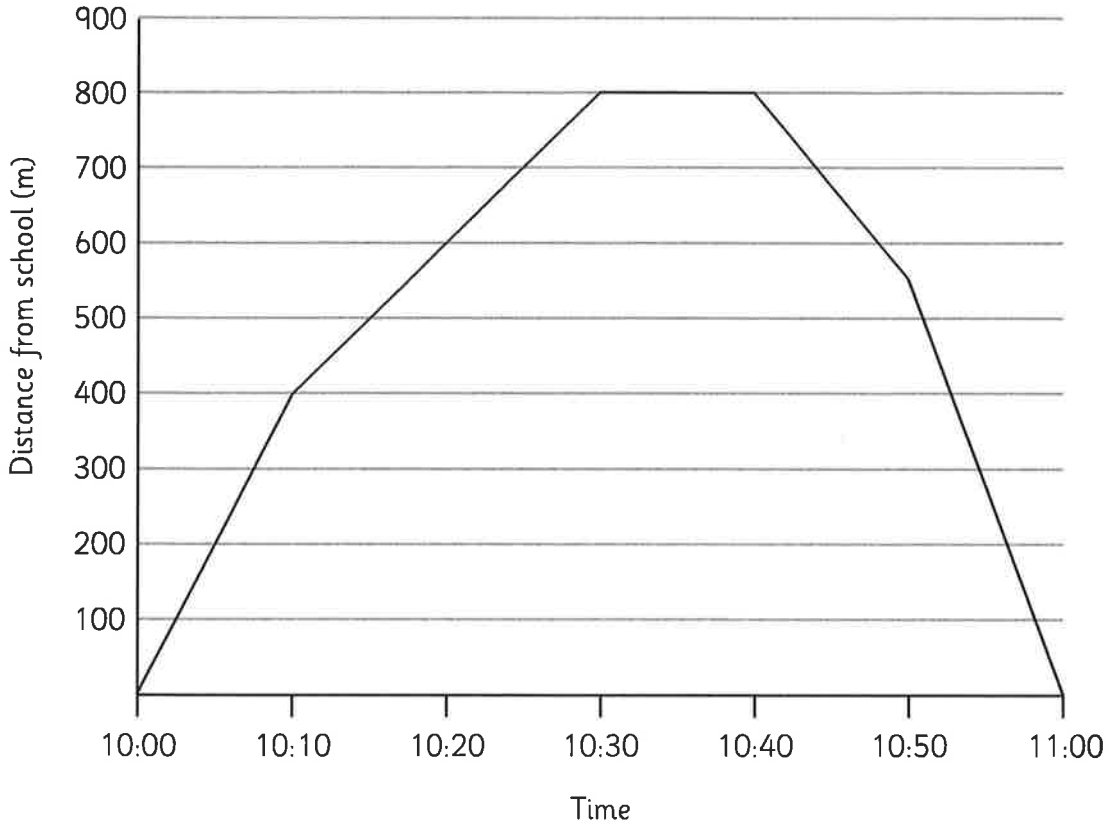
$\frac{1}{2}$ = ☐

$\frac{3}{4}$ = ☐

1 mark

Total for this page

5. Children in a class walk around their local area. The graph shows how far they had travelled from school during the visit.



a) How far were the children from their school at 10:20?

1 mark

b) For how long are the children at least 500m away from school?

1 mark

6.

a) Accurately measure these 2 lines.

1 mark

b) Write the difference in size between the 2 lines.

1 mark

Total for this page

7. Continue the following sequence:

0.006, 0.012, 0.018, ☐, ☐, ☐

1 mark

8. A shop sells T-shirts and shorts for the following prices:

A mother buys 3 T-shirts and a pair of shorts for her son. She pays with a £10 and a £5 note. With what coins could she be given change?

2 marks

9. Complete this subtraction calculation:

$$\begin{array}{r} 6\ 0\ 1\ 2 \\ -\ \square\ 2\ \square\ 4 \\ \hline 2\ 7\ 3\ 8 \end{array}$$

2 marks

Total for this page

10. James has to be home by 4:30pm. He is 35 minutes late. Write the time he arrives home in 24-hour time.

1 mark

11. The number p is 20 more than the number q.

Using algebra, write the relationship between p and q.

2 marks

12. Write all the factors of 24:

1 mark

13. Use the following line to draw an angle of 34° at point A.

Use a ruler and a protractor or angle measurer.

A B

1 mark

Total for this page

14. A teacher needs 70 lengths of string cut to 40cm each. If balls of string are 10m long, how many balls will be needed.

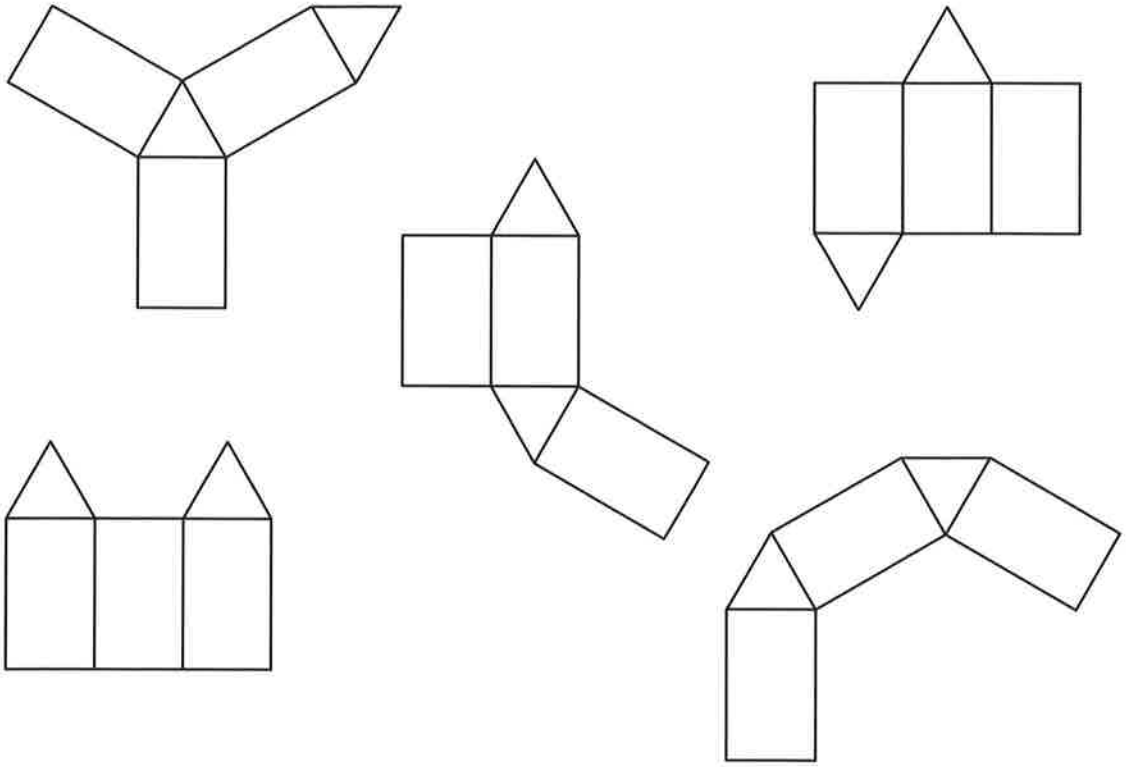
2 marks

15. Two numbers have a difference of 0.7 and a sum of 1. What are the numbers?

2 marks

Total for this page

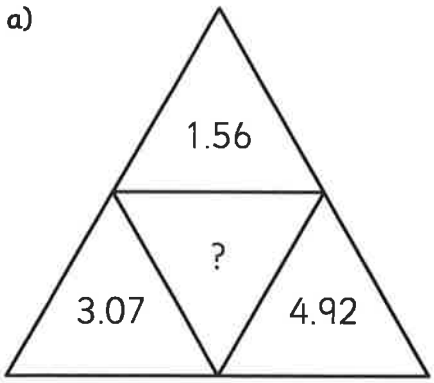
16. Circle the nets which will make a triangular prism.



2 marks

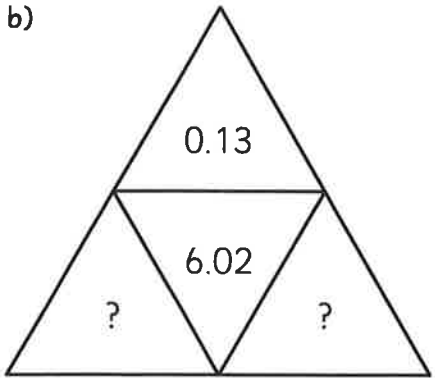
17. Complete the triangles so that the number in the centre is the sum of the numbers on the outside.

a)



1 mark

b)



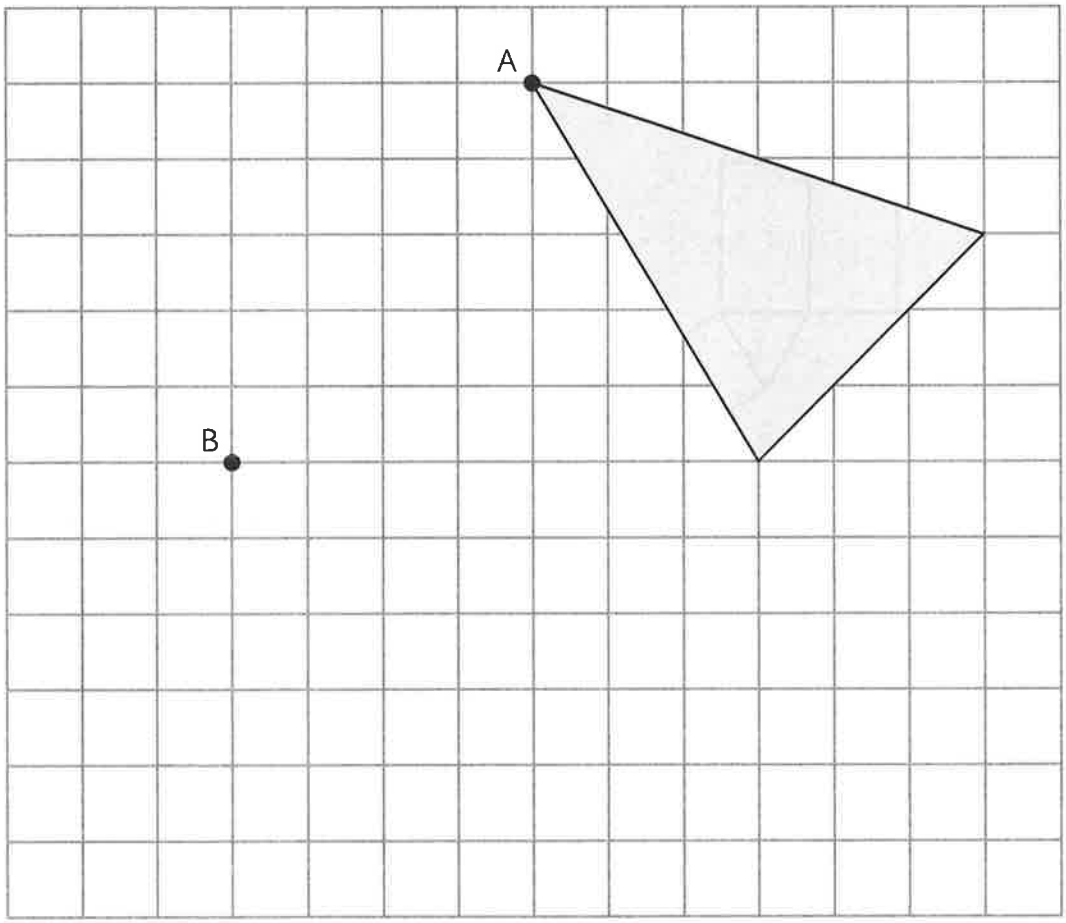
1 mark

Total for this page

18. Here is a shaded shape on a grid.

The shape is translated so that point A moves to point B.

Draw the shape in its new position.



2 marks

19. Round the number 347 500 to the nearest 1000, 10 000 and 100 000.

To the nearest 1000 ☐

To the nearest 10 000 ☐

To the nearest 100 000 ☐

2 marks

Total for this page

20. Write down 3 numbers where the following are true:

The total of the 3 numbers is 20.

The product of the 3 numbers is 90.

2 marks

21. Here are the ingredients for raspberry ripple ice cream.

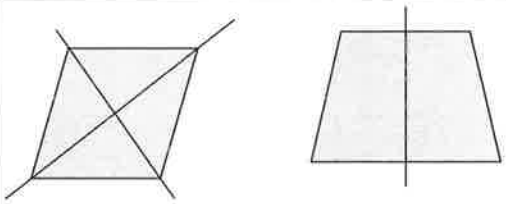
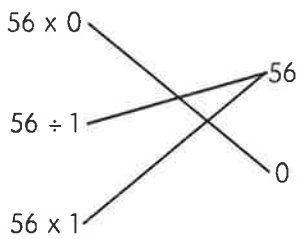
250g raspberries
225g caster sugar
2 large eggs
4 large egg yolks
600ml double cream

A mother has 5 litres of cream to make ice cream for a party. Sugar comes in 1kg bags. How many bags of sugar will be needed?

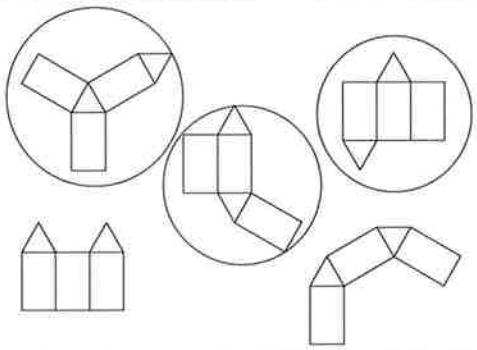
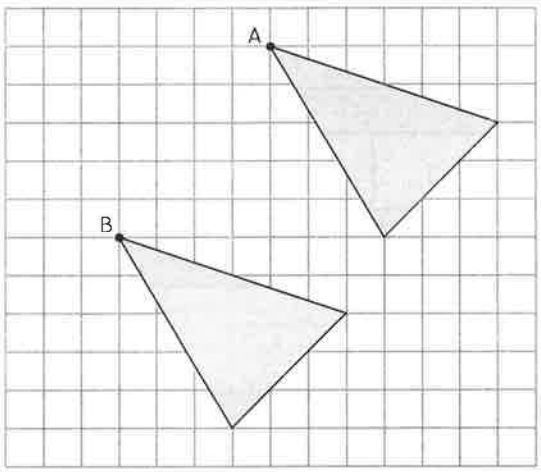
2 marks

Total for this page

Answer Sheet: Key Stage 2 Maths Reasoning: Pack 1 Test 1a

question	answer	marks	notes
1.			
	402, 412, 416, 426, 462	1	
2.			
		2	
3.			
		1	1 mark for all correct.
4.			
	0.25 0.5 0.75	1	
5.			
a	600m	1	
b	Answers between 36 and 40 minutes inclusive.	1	
6.			
a	10.3 cm or 103 mm 4.6 cm or 46 mm	1	Allow 1mm error on each.
b	5.7cm or 57 mm	1	Allow correct calculation based on incorrect answers to 6a.
7.			
	0.024, 0.03, 0.036	1	Allow 0.030.

question	answer	marks	notes
8.			
	Any combination of coins to make 26p	2	2 marks for correct answer 1 mark for correctly calculating the change as 26p but incorrect coins. 1 mark for 1 error in calculation but gives answer using the least coins for that amount.
9.			
	6**0**1**2** **3**2**7**4 2738	2	1 mark per digit
10.			
	17:05	1	
11.			
	p = q + 20 or q = p – 20	2	1 mark for an incorrect expression that uses p, q, 20, = and either + or -. e.g. q = p + 20
12.			
	1, 2, 3, 4, 6, 8, 12, 24	1	
13.			
	Allow 32° - 36° (See end of answers for an accurate answer of the angle)	2	
14.			
	3 balls	2	(40 cm x 70 = 2 800 cm = 28 m) 3 balls = 30 m 1 mark for incorrect answer due to one error of calculation.
15.			
	0.85 and 0.15	2	2 marks for both numbers correct. 1 mark for correct method but 1 calculation mistake.

question	answer	marks	notes
16.			
		2	2 marks for 3 correct. 1 mark for 2 correct and none incorrect.
17.			
a	9.55	1	
b	2 numbers that add up to 5.89	1	
18.			
		2	2 marks for correct answer. 1 mark if triangle's corners are at B and one other correctly placed.
19.			
	348 000 350 000 300 000	2	2 marks for all correct. 1 mark for 2 correct.
20.			
	2, 3 and 15 or 1, 9 and 10	2	2 marks for a correct answer. 1 mark for a set of numbers that correctly meets 1 criteria.

question	answer	marks	notes
21.			
	2 bags	2	2 marks for correct answer. 1 mark for incorrect answer where it is calculated that 8 1/3 times the recipe is required.
		Total 35	

Year 6

Mathematics

Arithmetic: Paper 10

Name	
Date	

/40
total marks

1 104 - 10 =

1 mark

2 309 x 4 =

1 mark

3 31 x 5 =

1 mark

Total for this page

4 7.1 - 0.9 =

1 mark

5 7 x 8 =

1 mark

6 ☐ = 6479 + 588

1 mark

Total for this page

7 2.222 + 0.3 =

1 mark

8 317 x 1 =

1 mark

9 409 - 300 =

1 mark

Total for this page

10 $\frac{5}{6} - \frac{1}{6} =$

1 mark

11 $0.561 \times 1000 =$

1 mark

12 $7^2 + 1 =$

1 mark

Total for this page

13 810 ÷ 9 =

1 mark

14 209 - 78 =

1 mark

15 78.01 x 10 =

1 mark

Total for this page

16 6700 - 923 =

1 mark

17 25% of 3600 =

1 mark

18 $\frac{11}{12} + \frac{7}{12} =$

1 mark

Total for this page

19 3.27 x 9 =

1 mark

20 70 x 60 =

1 mark

21 50 000 + 505 =

1 mark

Total for this page

22 5680 ÷ 4 =

1 mark

23 31.7 - 17.85 =

1 mark

Total for this page

24 94 x 26 =

		9	4
	x	2	6

2 marks

25 89 402 - 45 691 =

1 mark

Total for this page

26 5040 ÷ 16 =

1 6 5 0 4 0

2 marks

27 $\frac{1}{5} \times \frac{4}{5} =$

1 mark

Total for this page

28 779 x 68 =

	7	7	9
x		6	8

2 marks

29 14 + 2 x 6 =

1 mark

Total for this page

30 $\frac{6}{7} \div 2 =$

1 mark

31 $10 \times 1\frac{1}{5} =$

1 mark

32 $3\frac{1}{2} + 1\frac{1}{6} =$

1 mark

Total for this page

33 $3692 \div 71 =$

7	1	3	6	9	2

2 marks

34 $\frac{2}{5} \div 5 =$

1 mark

Total for this page

35 $\frac{9}{10} - \frac{1}{3} =$

1 mark

36 35% of 180 =

1 mark

Total for this page

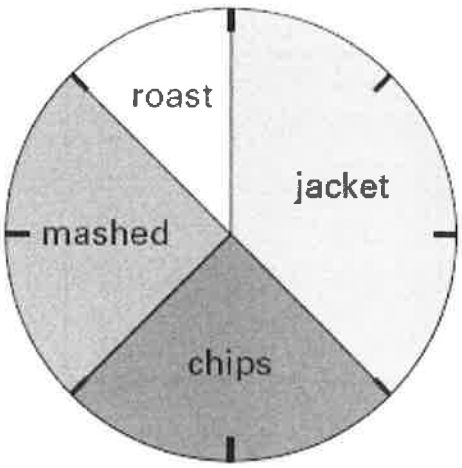
Answer Sheet: Key Stage 2: Arithmetic Paper 10

Guidance: Children will have 30 minutes for this test. Long division and long multiplication questions are worth **2 marks** each. Children will be awarded 2 marks for a correct answer. They may get 1 mark for showing a formal method. All other questions are worth 1 mark each.

question	answer	marks
1	**94**	1
2	**1236**	1
3	**155**	1
4	**6.2**	1
5	**56**	1
6	**7067**	1
7	**2.522**	1
8	**317**	1
9	**109**	1
10	$\frac{2}{3}$ or $\frac{4}{6}$	1
11	**561**	1
12	**50**	1
13	**90**	1
14	**131**	1
15	**780.1**	1
16	**5777**	1
17	**900**	1
18	$\frac{18}{12}$ or $\frac{3}{2}$ or $1\frac{6}{12}$ or $1\frac{1}{2}$	1
19	**29.43**	1
20	**4200**	1
21	**50 505**	1

question	answer	marks
22	**1420**	1
23	**13.85**	1
24	**2444**	2
25	**43 711**	1
26	**315**	2
27	$\frac{4}{25}$	1
28	**52 972**	2
29	**26**	1
30	$\frac{3}{7}$	1
31	**12**	1
32	$4\frac{2}{3}$	1
33	**52**	2
34	$\frac{2}{25}$	1
35	$\frac{17}{30}$	1
36	**63**	1
		Total 40

1. This pie chart shows how the children in Class 6 best like their potatoes cooked.



32 children took part in the survey.

Look at the four statements below.

For each statement put a tick (✓) if it is **correct**.

Put a cross (✗) if it is **not correct**.

10 children like chips best. ☐

25% of the children like mashed potatoes best. ☐

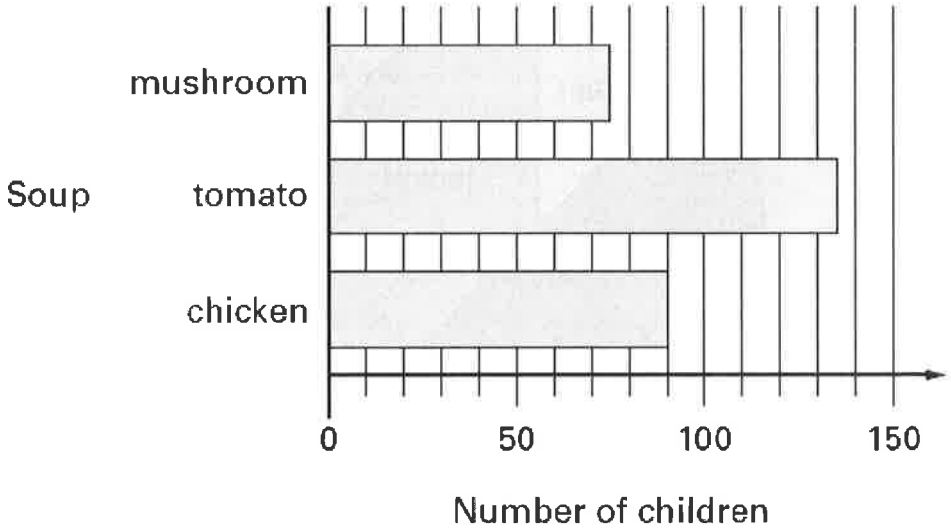
1/5 of the children like roast potatoes best. ☐

12 children like jacket potatoes best. ☐

2 marks

2. All the children at Park School chose their favourite soup.

The graph shows the results.



How many more children chose **chicken** soup than **mushroom** soup?

1 mark

Robbie says,

'More than half of the children chose tomato soup'.

Is he correct?
Circle Yes or No.

Yes / No

Explain how you can tell from the graph.

.....

.....

.....

1 mark

3. On Monday all the children at Grange School each play one sport.

They choose either hockey or rounders.

There are 103 children altogether in the school.

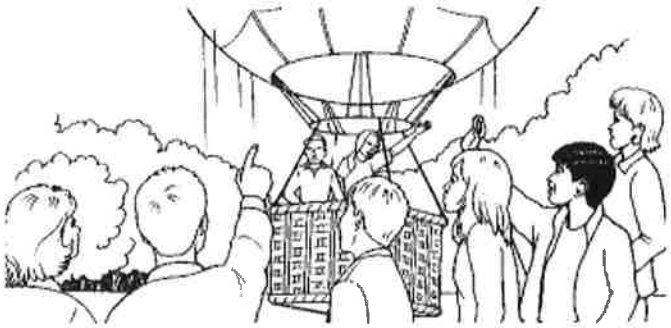
27 girls choose hockey.

Write all this information in the table.
Then complete the table.

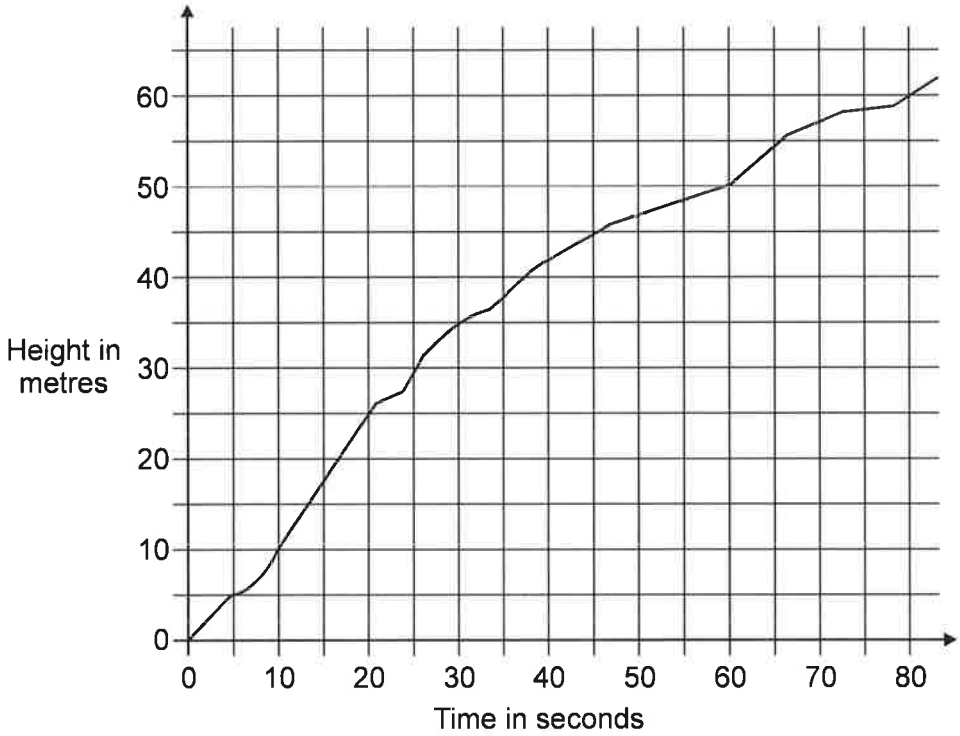
	hockey	rounders	Total
boys	22		
girls			53
Total			

2 marks

4.



This graph shows the height of a balloon at different times.



From the graph, find the height of the balloon at 50 seconds.

m

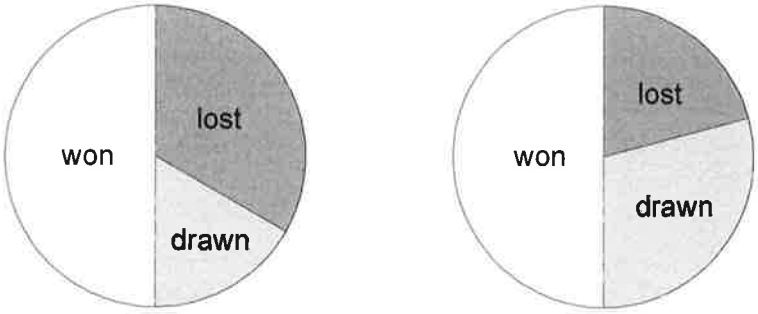
1 mark

Use the graph to find out how long it took the balloon to rise from 30 metres to 60 metres.

seconds

1 mark

5. The pie charts show the results of a school's netball and football matches.



Netball Football

The netball team played 30 games.

The football team played 24 games.

Estimate the percentage of games that the **netball team lost**.

%

1 mark

David says,

'The two teams won the same number of games'.

Is he correct?
Circle Yes or No. Yes / No

Explain how you know.

.....

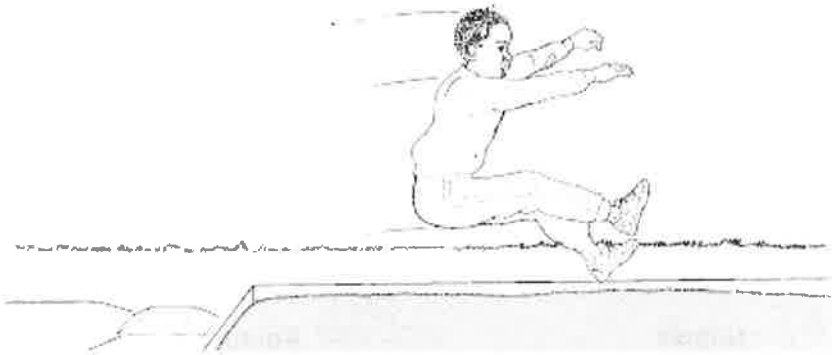
.....

.....

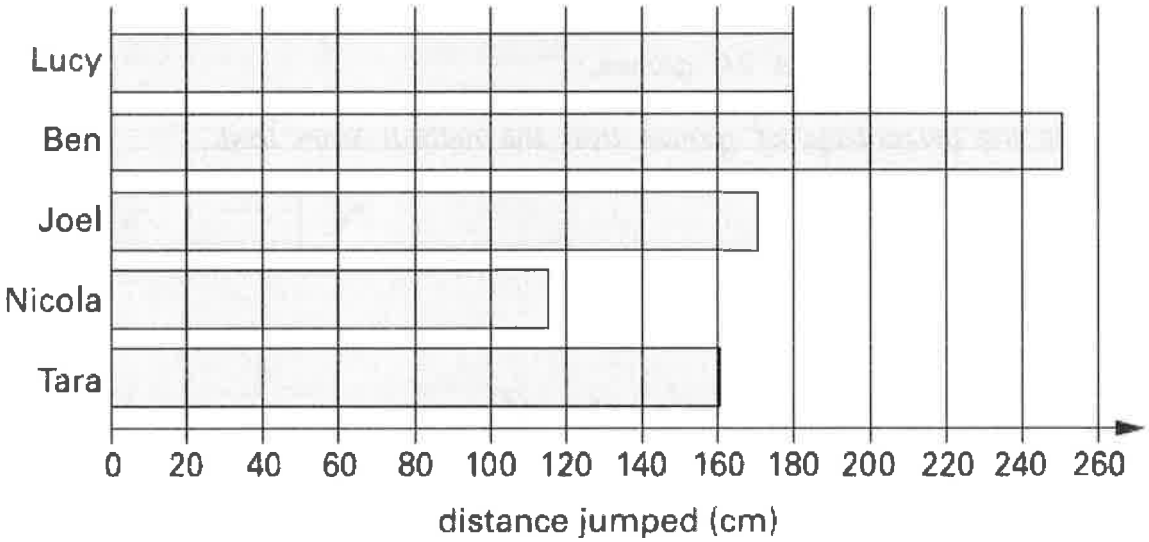
1 mark

2 marks

7. Some children take part in the long jump.



The graph shows the distances the children jumped.



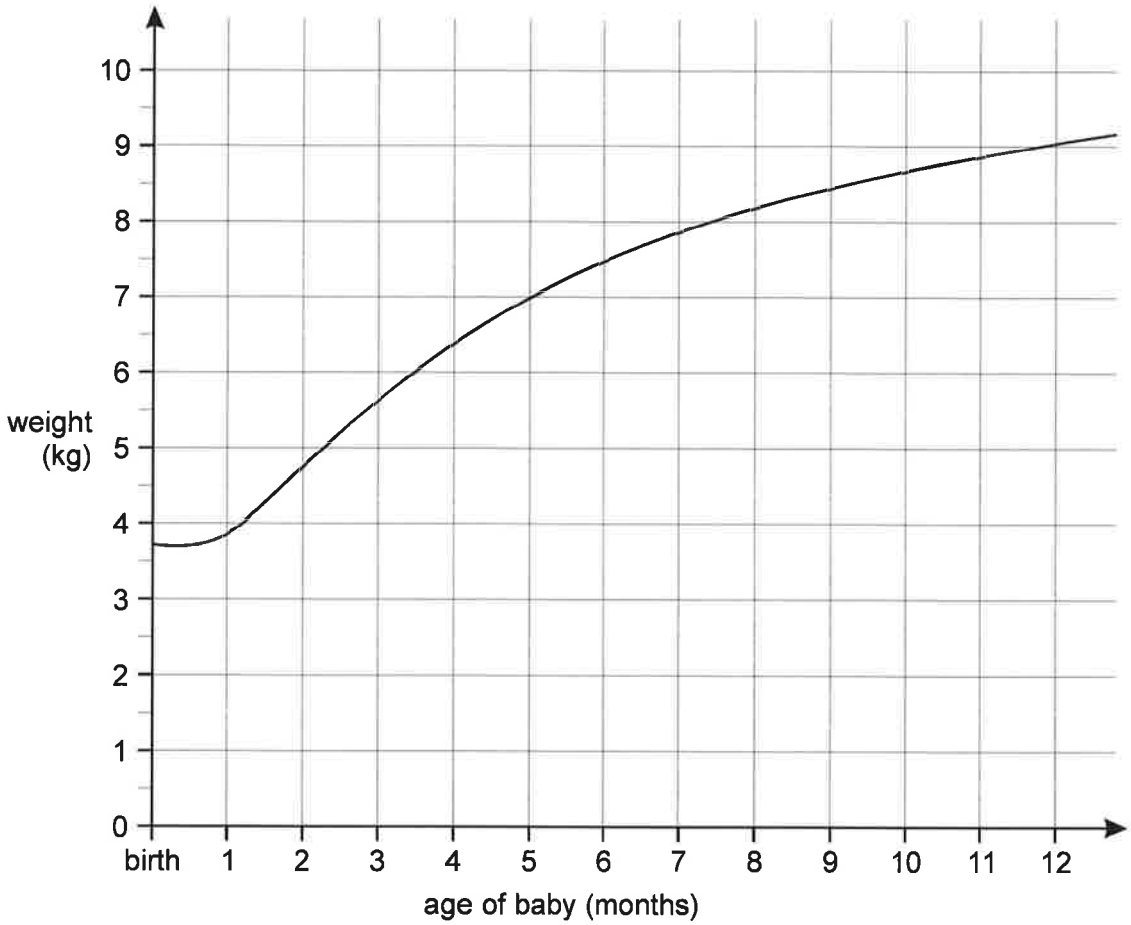
Estimate how much further Lucy jumped than Nicola.

cm

1 mark

2 marks

9. This graph shows how the weight of a baby changed over twelve months.



From the graph, what was the weight of the baby at 10 **months**?

kg

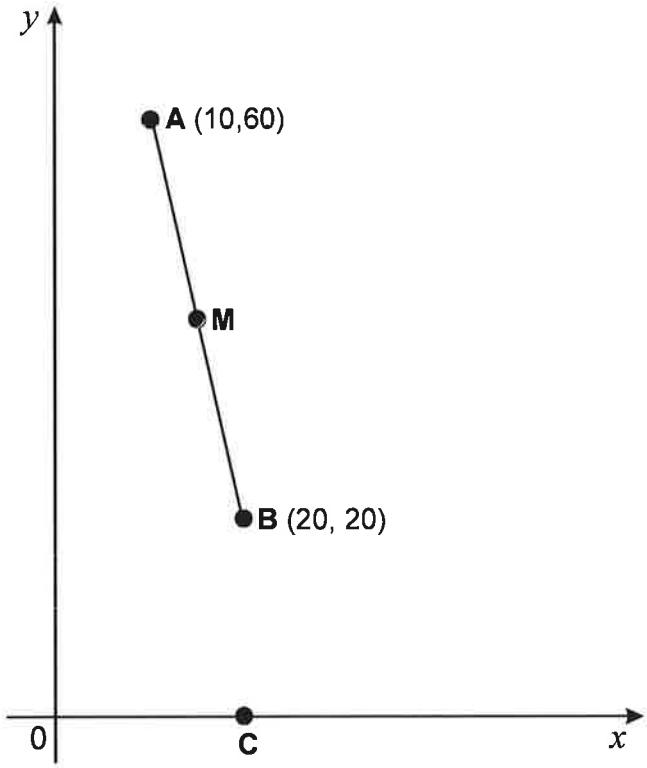
1 mark

How much **more** did the baby weigh at 5 months than at birth?

kg

1 mark

10.



A is the point (10, 60)

B is the point (20, 20)

M is the midpoint of line AB.

Write the coordinates of M.

(,)

1 mark

C is on the x-axis, directly **below** B.

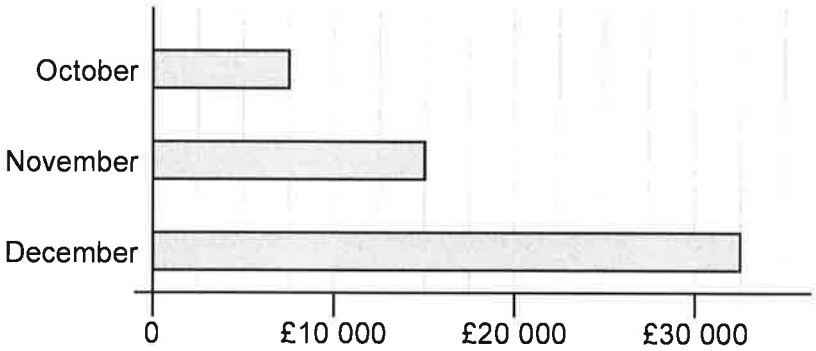
Write the coordinates of C.

(,)

1 mark

11.

This chart shows the amount of money spent in a toy shop in three months.



How much **more** money was spent in the shop in **December** than in **November**?

£

1 mark

Stepan says,

> *'In November there was a 100% increase on the money spent in October'.*

Is he correct?

Circle Yes or No. Yes / No

Explain how you can tell from the chart.

.....

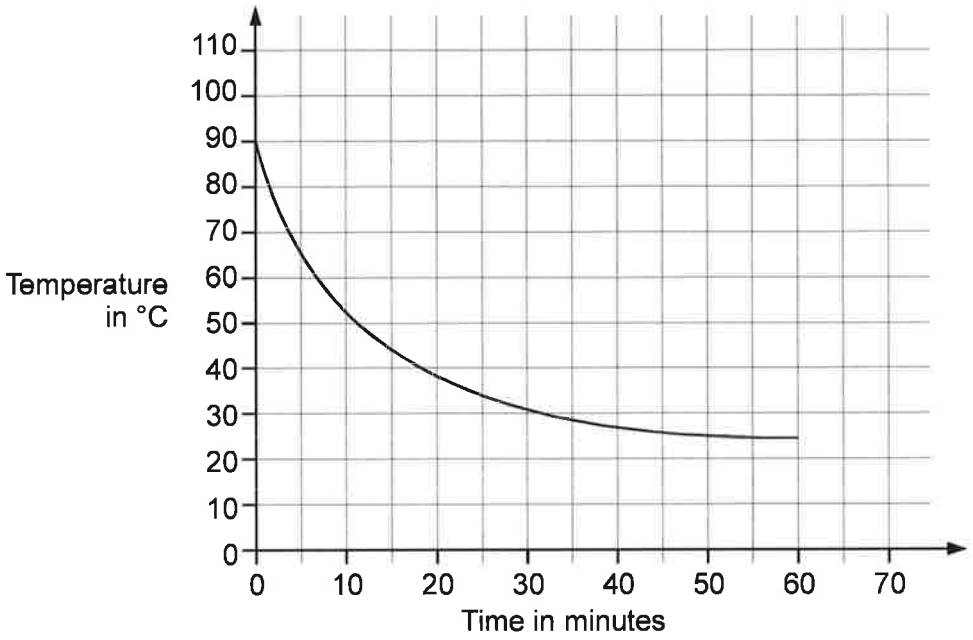
.....

.....

1 mark

12. A hot liquid is left to cool in a science experiment.

This graph shows how the temperature of the liquid changes as it cools.



Read from the graph **how many minutes** it takes for the temperature to
reach 40°C

minutes

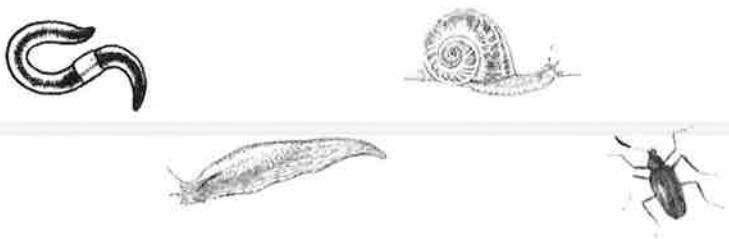
1 mark

Read from the graph **how many minutes** the temperature is **above** 60°C

minutes

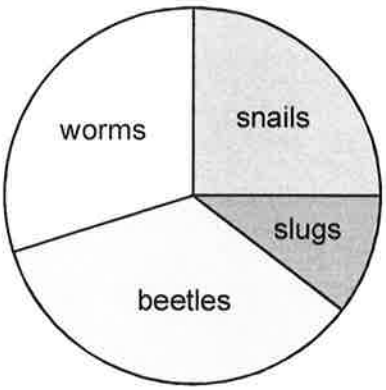
1 mark

13. Tony and Gemma looked for snails, worms, slugs and beetles in their gardens.



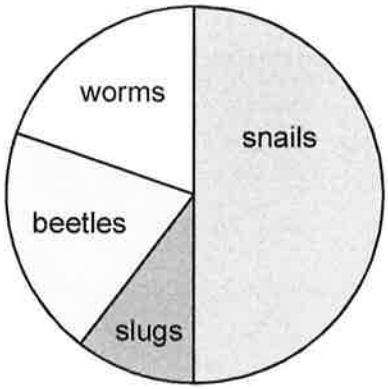
They each made a pie chart of what they found.

Tony's pie chart



Total 80

Gemma's pie chart



Total 36

Estimate the number of worms that Tony found.

1 mark

Who found more snails?
Circle Tony or Gemma.

Tony / Gemma

Explain how you know.

.....

.....

.....

1 mark

14. n stands for a number.

Complete this table of values.

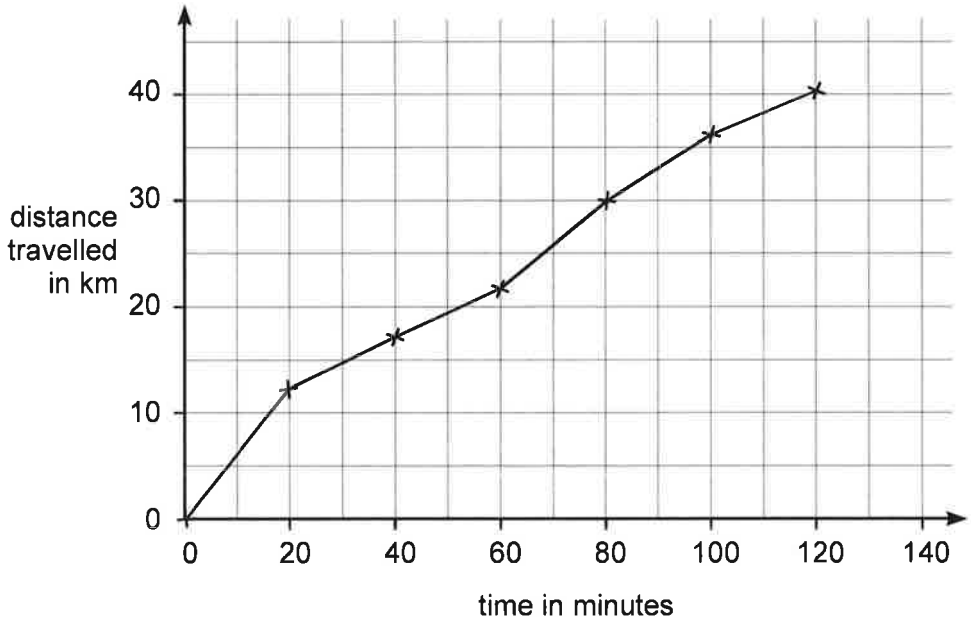
1 mark

n	$5n - 2$
20	
	38

1 mark

15. Carol went on a 40-kilometre cycle ride.

This is a graph of how far she had gone at different times.



How many minutes did Carol take to travel the **last** 10 **kilometres** of the ride?

minutes

1 mark

Use the graph to estimate the distance travelled in the **first** 20 **minutes** of the ride.

km

1 mark

Carol says,

'I travelled further in the first hour then in the second hour'.

Explain how the graph shows this.

.....

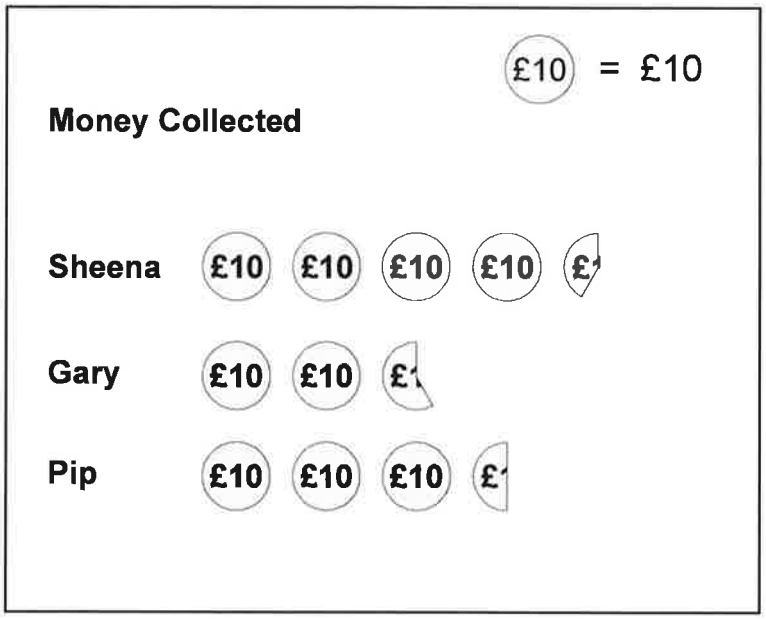
.....

.....

1 mark

23. Three children do a sponsored silence.

This is a chart of the money they collected.



Estimate how much Sheena collected.

£

1 mark

Together Gary and Pip collected more than £60.

Explain how the chart shows this.

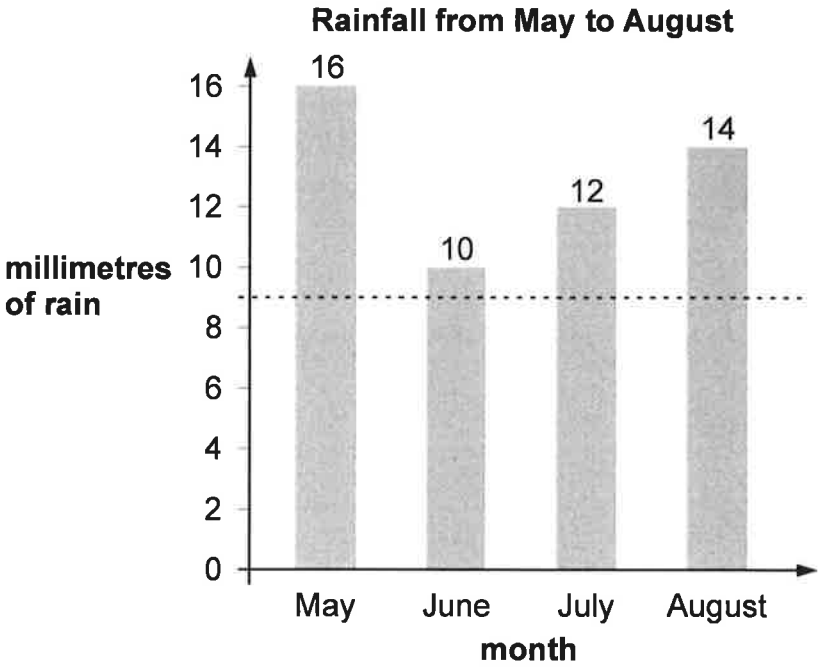
.....

.....

.....

1 mark

24. Here is a bar chart showing rainfall.



Kim draws a dotted line on the bar chart.

She says,

'The dotted line on the chart shows the mean rainfall for the four months.'

Use the chart to explain why Kim **cannot** be correct.

.....

.....

.....

.....

1 mark

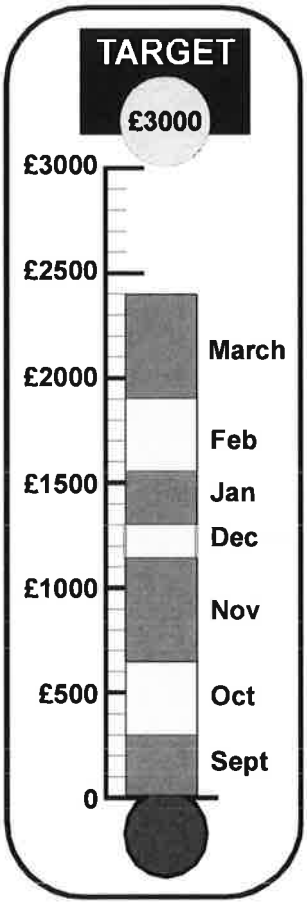
What is the **mean** rainfall for the four months?

mm

1 mark

27. A school collects money for charity.

This chart shows how much has been collected.



The target is £3000.

Estimate how much **more** money the school needs to reach the target.

£

1 mark

Anil says,

The chart shows that we will reach the target in two months.

Use the chart to explain why Anil may be wrong.

.....

.....

.....

1 mark

28. Write a **different** number in **each** of these boxes so that the **mean** of the **three** numbers is 9.

1 mark

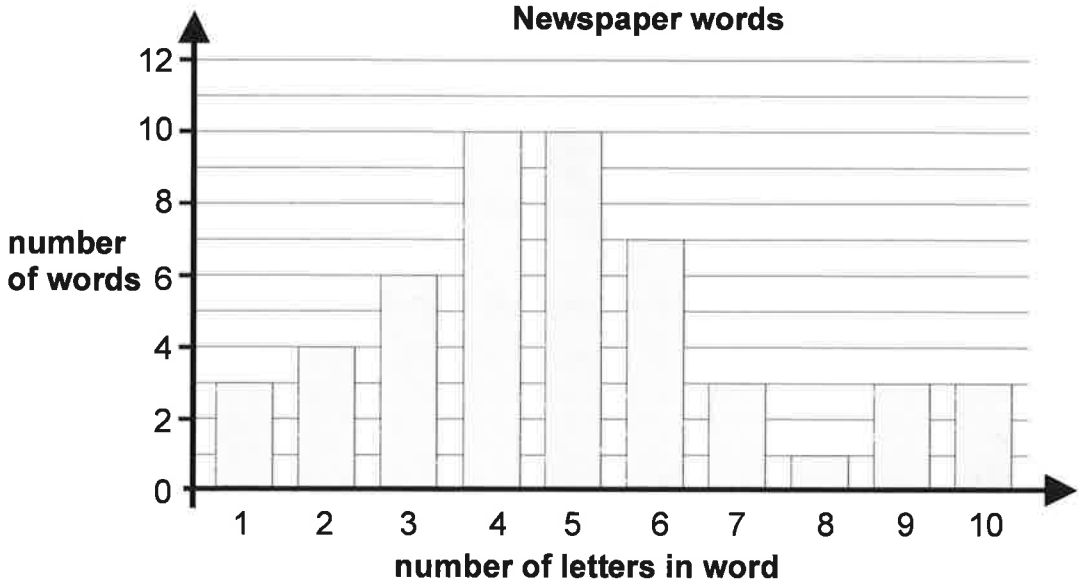
Write a number in **each** of these boxes so that the **mode** of the **five** numbers is 11.

1 mark

29. Kelly chooses a **section** of a newspaper.

It has 50 **words** in it.

She draws a bar chart of the number of letters in each word.



What **fraction** of the 50 words have **more than** 6 **letters**?

1 mark

Kelly says,

> *23 of the 50 words have less than 5 letters.*
> *This shows that nearly half of all the words used in the newspaper have less than 5 letters in them.*

Explain why she could be wrong.

.....

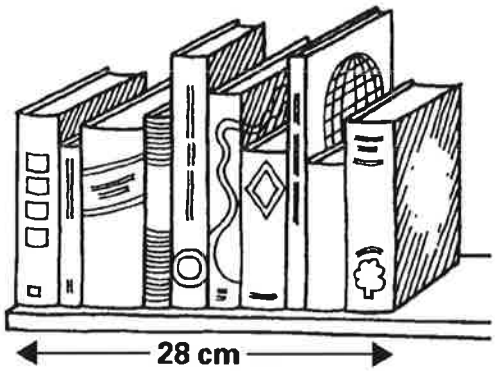
.....

.....

1 mark

30. Vicki puts 10 books on a shelf.

The 10 **books** take up 28 **centimetres**.



What is the **mean (average)** thickness of her books?

Show your **working.** You may get a mark.

cm

2 marks

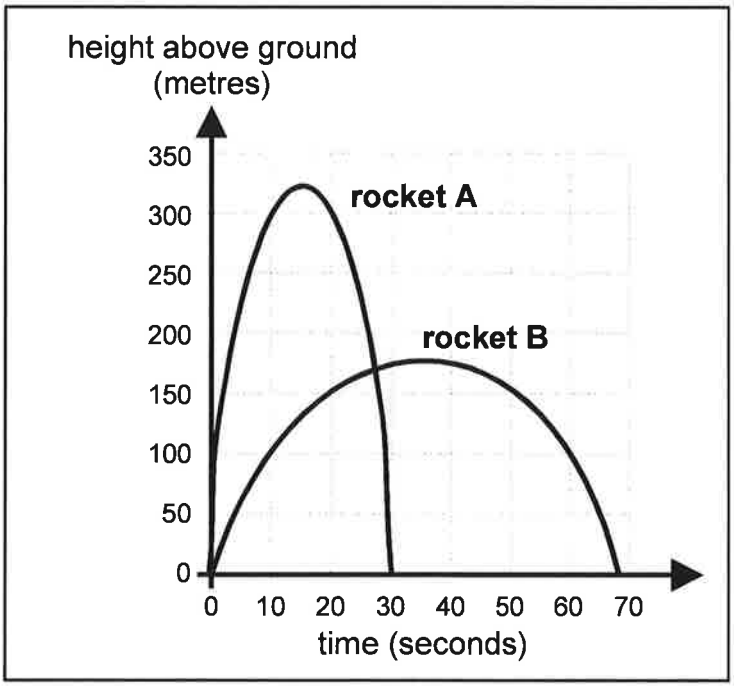
The shelf is 120 **centimetres** long.
Vicki fills the shelf with a mixture of books like the **first ten books**.

Estimate how many books she can get on the 120 cm shelf.

Show your **working.** You may get a mark.

2 marks

31. Jim draws a graph to show how high two rockets go during their flight.



Estimate **how much higher** rocket A reaches than rocket B.

metres

1 mark

Estimate the **time** after the start when the two rockets are at the **same height**.

seconds

1 mark

Jim says,

> *"The graph shows that rocket A was more than 200 m above the ground for about 23 seconds."*

Explain how the graph shows this.

.....

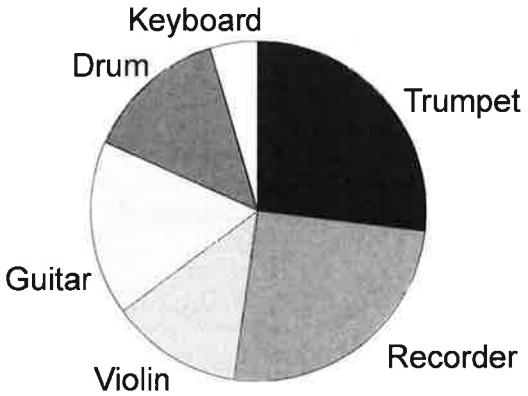
.....

.....

.....

1 mark

33. The Year 6 children in a school were asked to choose a musical instrument. This is a pie chart of their choices.



Estimate what **fraction** of the children chose a **drum**.

1 mark

There are 80 children in Year 6.

Estimate the number of children who chose a **violin**.

1 mark

Explain how you decided.

.....

.....

.....

1 mark

15% of the 80 children chose a **guitar**.

How many children is this?

2 marks

35. Rob runs 100 metres ten times.
These are his times in seconds.

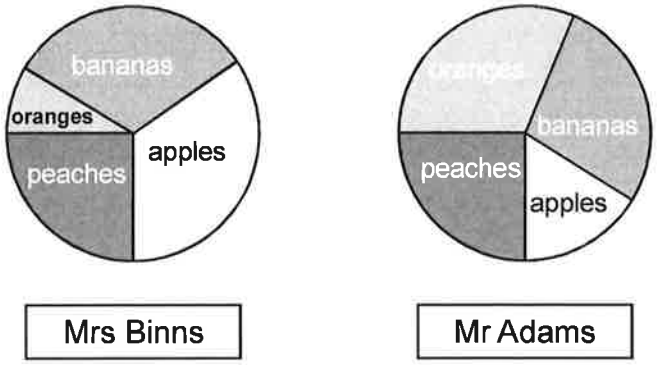
13.4	**13.0**	**13.9**	**13.7**	**13.3**
13.5	**14.0**	**14.4**	**13.8**	**14.0**

What is his **mean** (average) time?

seconds

1 mark

36. Some children work out how much money two shopkeepers get from selling fruit. They use pie charts to show this.



Mrs Binns gets £350 selling **bananas**.

Estimate how much she gets selling **oranges**.

£

1 mark

Mrs Binns gets a total of £1000 and Mr Adams gets a total of £800.

Estimate how much **more** Mrs Binns gets than Mr Adams for selling **peaches**.

£

1 mark

Q1.

The Giant Panda Bear

Panda bears are very popular animals, partly because of their unusual appearance and partly because there is something mysterious and fascinating about them. However, their numbers are falling. It is thought that only around 1600 giant pandas still survive in the wild.

Appearance

Giant pandas have the same type of body shape as other bears. They have thick black and white fur, which some scientists think may be to disguise them in the snowy and rocky surroundings where they live. An adult can grow up to 1.5 metres and weigh up to 150 kilograms. They might look cute but they have razor-like claws. They also have powerful jaws for crushing and grinding bamboo!

Habitat

Giant pandas in the wild live on mountainous slopes in western China. Their habitat is densely populated with fir trees and bamboo. It is the forests in these mountains that attract the panda as bamboo is their favourite food.

Diet

In the wild, their main diet is bamboo. To survive, they need to eat for most of the day. In fact, they eat 15 to 30 kilograms of food every day and spend 10 to 16 hours feeding. In zoos, they have a specially prepared diet of bamboo, eggs, fish and honey.

Cubs

Newborn cubs weigh around 150 grams (about the weight of an apple) and are all white at birth. The black spots develop after about a month. They begin eating bamboo at six months and weigh 31 to 36 kilograms at the end of the first year. Cubs stay with their mother for two to three years, reach maturity at five to seven years and live in the wild for about 25 years.

Other interesting facts

- Giant panda bears have to eat every day which means, unlike other bears, they cannot hibernate in the winter.
- Giant pandas' bodies are able to digest meat but they rarely eat it.
- Until recently, scientists thought that pandas spent most of their lives alone, but new studies show that small groups of pandas can share a large territory.

Why are people concerned about the giant panda?

Many people fear that giant pandas will become extinct as only a few are born in the wild each year and they do not always survive. Bamboo supplies are diminishing in panda habitats, cutting off a vital food supply. In addition, poaching and humans moving into the pandas' territory have also reduced their numbers.

There are very few pandas in zoos, although this is changing. Where there are pandas in captivity, important programmes are in place to try to increase their numbers and find out more about these puzzling creatures.

How can people help?

There are projects where people are invited to 'adopt a panda'. The money goes towards researching, protecting and monitoring them. It also goes towards supporting them in the wild.

What about the future?

In two of China's main research centres, 19 cubs have been born. There are now over 300 pandas in captivity and the next challenge is to return them to the wild. The Chinese government has created 50 panda reserves to continue the work.

Did you know?

In China, the panda is a symbol of peace.

The Chinese word for panda is 'Xiongmao' (giant cat bear) because a panda's eyes are shaped like a cat's. Over the centuries, pandas have also been called 'spotted bear' and 'black and white bear'.

Q2.

1. According to the text, approximately how many giant pandas currently live in the wild?

   _____

   1 mark

2. According to some scientists, how does giant pandas' fur help them to survive in the wild?

   _____

   1 mark

3. Look at page 1.

   Pandas *can grow up to 1.5 metres and weigh up to 150 kilograms.*

   What else in the text tells us that giant pandas could be dangerous animals?

   _____

   1 mark

4. Look at page 1.

According to the text, what do pandas spend the majority of their time doing?

_____

1 mark

5. Number these facts about the life of the giant panda cub from 1-5 in the order in which they happen.

The first one has been done for you.

A cub eats bamboo for the first time.	
A cub leaves its mother.	
A cub develops black spots.	
A cub weighs 31 to 36 kilograms.	
A cub weighs about the same as an apple.	1

1 mark

6. Look at page 1.

According to the text, give **one** way that giant pandas are...

(a) similar to other bears.

_____

1 mark

(b) different from other bears.

_____

1 mark

7. Look at the section headed: ***Other interesting facts***.

Complete the sentence below.

Recent studies show that...

Tick **one**.

giant pandas always spend most of their lives alone.	
most giant pandas live in captivity.	

giant pandas only live in the wild in China. ☐

some giant pandas live in the same area. ☐

1 mark

8. Look at the section headed: ***Why are people concerned about the giant panda?***

Find and **copy one** word which shows that there are lots of things we do not yet know about giant pandas.

_____

1 mark

9. ... *cutting off a **vital** food supply.*

What does the word *vital* mean in this sentence?

Tick **one**.

essential ☐

available ☐

useful ☐

healthy ☐

1 mark

10. According to the text, why are giant pandas under threat of extinction?

Give **two** reasons.

1. _____

2. _____

2 marks

11. According to the text, how are people trying to help giant pandas survive?

_____

1 mark

12. Look at the section headed: ***What about the future?***

Find and **copy one** word that shows that helping the giant panda is not easy.

_____

1 mark

13. Look at page 2.

What is **one** name that pandas have been called in the past because of their fur?

_____

1 mark

14. Which statement is the **best** summary for the whole of page 2?

Tick **one**.

How the giant panda first got its name.	☐
How charities raise money for giant pandas.	☐
How people are working to save giant pandas.	☐
How giant pandas' territory is changing.	☐

1 mark

15. Using information from the text, tick one box in each row to show whether each statement is a **fact** or an **opinion**.

	Fact	**Opinion**
Giant pandas are fascinating animals.		
Giant pandas' main food in the wild is bamboo.		
Giant panda cubs weigh about 150g when born.		

1 mark

Q1.

The Lost Queen

Maria and Oliver are attending a party in the garden of a house that used to belong to Maria's family. They sneak away to explore the grounds.

Maria and Oliver were quite a distance from the party when they found the little rowing boat in the grassy shallows of a small lake beyond the garden.

Glancing nervously behind her, Maria suggested that they row out to the island in the middle of the lake. Oliver looked at her

questioningly. Maria explained that there was a secret monument on the island to one of her ancestors. This was a woman who had married a prince at the time when there was a struggle for the throne. The struggle had been between two rival families – one had a lion as its symbol, the winner had a bear.

“Come on,” Maria said impatiently.

Oliver rowed while Maria stood barefoot in the boat, staring straight ahead. The oars made a click-clack sound in the hush and haze of the summer afternoon. Ripples of water fanned out behind them as they crossed the glassy surface of the lake.

The tiny island, thick with creeping vines and roots, looked as if it floated. At its centre, an ancient oak tree towered over it. The tree's branches were like bent fingers, twisting and stretching outwards, until the tips of its leaves touched the still water. Oliver carefully steered the boat through a narrow opening in the branches. Then they stepped out of the boat, and into a murky green space under an umbrella of leaves. The air was cool and damp.

Maria led Oliver across the tangled ground to the hidden monument. It was a column of marble, weathered and mossy with age. A delicate crown sat at the top, and an inscription was carved into a flat slab at the base. Oliver used his thumbnail to scrape out the letters that were cut into it.

It was a name.

Maria's family name.

“You could have been a queen?” said Oliver, whispering.

Maria laughed gently in the gloom.

“We were the family of the lion,” she said.

Oliver could still hear the shouts and laughter of the party, up on the sunny lawn near the big house. But now the noise seemed to be getting further and further away.

Q2.

1. Look at the paragraph beginning: *Glancing nervously...*

Find and **copy one** word meaning relatives from long ago.

_____

1 mark

2. *The struggle had been between two **rival** families...*

Which word most closely matches the meaning of the word *rival*?

Tick **one.**

equal	☐
neighbouring	☐
important	☐
competing	☐

1 mark

3. Look at page 2.

How can you tell that Maria was very keen to get to the island?

_____

_____

1 mark

4. Look at the paragraph beginning: *Oliver rowed...*

Find and **copy one** word that suggests that the summer afternoon was quiet.

_____

1 mark

5. *...they crossed the glassy surface of the lake.*

Give **two** impressions this gives you of the water.

1. _____

2. _____

2 marks

6. Look at the paragraph beginning: *The tiny island...* to the paragraph ending: *...were cut into it.*

What impressions of the island do you get from these two paragraphs?

Give **two**.

1. _____

2. _____

2 marks

7. Write down **three** things that you are told about the oak tree on the island.

1. _____

2. _____

3. _____

3 marks

8. Which of these drawings best represents the monument?

Tick **one**.

☐ ☐ ☐ ☐

1 mark

9. Look at the paragraph beginning: *Maria led Oliver...*

(a) Why did Oliver find it difficult to read the inscription on the monument?

_____

1 mark

(b) What did he have to do in order to read the inscription?

_____

1 mark

10. What was revealed at the end of the story?

Tick **one.**

Oliver was keeping a secret.	☐
The monument was damaged.	☐
The two families were still enemies.	☐
Maria's family did not win the throne.	☐

1 mark

11. Using information from the text, tick one box in each row to show whether each statement is **true** or **false**.

	True	False
Two families fought for the throne.		
Maria's family symbol was the lion.		
The monument was for a prince.		
It was hot on the island.		

1 mark

SHARK ATTACK!

It was a boiling hot day; the sun relentless in the sky above, staring down upon us as though determined to scorch the entire Earth. As I ran down the soft, sandy beach, my spirits were high as the colourful kites being flown. The beautiful board I carried had been given to me for Christmas by my brother – a stylish, short board with a concave bottom for speed over the water; the design a sleek, silver shark on the pale-blue background.

Paddling the board hard out to sea, I was helped by the wind which was whipping up waves and promising an exciting day's surfing. Jason, who was a champion surfer and good friend, passed me whooping loudly as he rode a large roller. I felt good – King of the Ocean! What could possibly go wrong? A massive wave was approaching and I held my board in position – poised to leap on and ride the crest. My whole body was concentrated and ready, so it was with something like annoyance that I was distracted by a thump on the leg.

"Driftwood," I told myself and gave it not a second thought.

The wave was close. I crouched in the water. Tensed. Then I heard Jason's shout,

"Behind you!"

He sounded urgent. I flashed a look. A fin. Moving at speed. Towards me!

With a huge leap, I left the water, just as the enormous creature rose below me, its jaws wide open.

The wave whipped me away but what had happened to my balance? At first, I thought it was panic that was making me fall. I was an expert surfer. Furious with myself (and terrified as I needed to get to the safety of the beach), I went to crouch and toppled into the water. I had no leg. Blood was pouring out of where my calf should have been. Shock and adrenalin was making me oblivious to pain, but not fear ... and I knew the shark would be back for more.

"Get on! NOW!"

Suddenly, Jason was there, pulling me onto his long, slim board and while holding on - lying full length - I was surfed by him back to shore, where arms carried me up the beach. As I lost consciousness, snippets of conversation made it to my brain:

"Tiger shark . . . four metres at least . . . not a chance . . "

" . . . below the knee . . . lucky to be alive!"

I thought of my brother, my board, my arrogance. What had gone wrong? King of the Ocean? What had happened to my respect for the sea - its power and unpredictability? It would never happen again!

Tiger Sharks

Named for the dark stripes found on juvenile sharks, which fade as they grow to maturity, the Tiger shark is second only to the Great White in the number of attacks on humans.

Size

Tiger sharks can grow up to 6 or 7 metres in length and weigh up to 900 kilograms – that is four times the length of a man and ten times his weight! They take a long time to grow and have low reproduction rates.

Habitat

Tropical or sub-tropical seas

Diet

A carnivore, the Tiger shark, which will eat anything, has been found to have a huge variety of fish in their stomachs and even metal licence plates and tyres!

Their sharp, serrated teeth and powerful jaws allow them to crack shells - allowing them to eat such foods as turtles.

Humans hunt Tiger sharks in order to use their meat, skin and fins. Their livers, which are high in Vitamin a are often used in Vitamin supplements. Finning is when a shark's fins are removed and the

body (often still alive) is thrown back into the sea. A shark cannot swim without its fins so will suffocate or be eaten.

Due to humans, the Tiger shark is on the vulnerable list.

SHARK ATTACK QUESTIONS

1. Who had given him the board? Father? Mother? Friend? Brother? (1)

2. Three figures of speech are used in the first paragraph of the story. Copy them into your books and write what they are called. (3)

3. What does the surfer mean when he says "King of the Ocean." (2)

4. What is meant when it says Jason was riding "a large roller"? (1) machine for rolling? wave? kind of surfboard?

5. What did the boy think he had been hit by? (1)

6. He sounded urgent. I flashed a look. A fin. Moving at speed. Towards me! These are not all proper sentences with subject and verb. Why has the author punctuated it like this? What effect does it have on the reader? (2)

7. How did he become aware of his injuries? (2)

8. Why has the author used ellipsis in the conversation the boy heard before he lost consciousness? (1)

9. What is meant by 'juvenile sharks'? (1)

10. Why are there text boxes in the non-fiction piece about Tiger sharks? (2)

11. How are sharks able to eat turtles?
(2)

12. Should 'finning' be illegal? Explain what it is and why you think yes or no. (3)

Q1.

The Way of the Dodo

This is an article about the dodo, a bird that is now extinct.

An artist's impression of the dodo from 300 years ago.

The dodo was first sighted around 1600 on an island in the Indian Ocean. It was extinct by 1680. Since then the phrase 'dead as a dodo' has been used to describe something which is lifeless or has disappeared from the world completely. Because of its rapid disappearance, a number of myths developed about the dodo, for example that it was a fat, silly creature that brought its fate upon itself.

But what is the **truth** about the dodo?

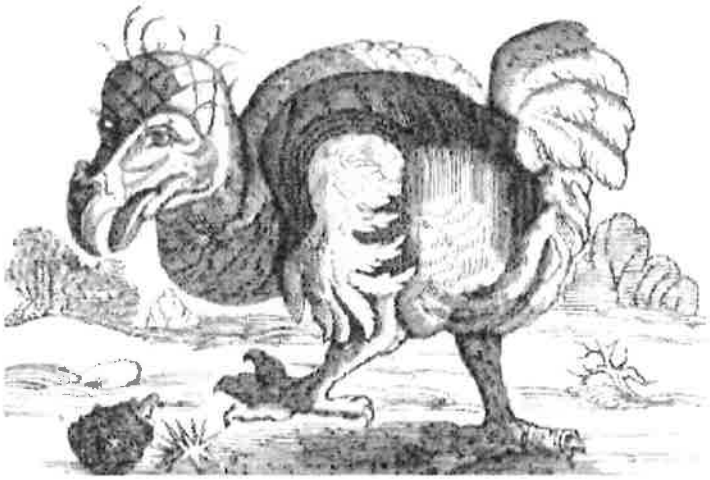
For thousands of years the island of Mauritius was a paradise. It was spat out of the ocean floor by an underwater volcano 8 million years ago. With warm sun, plentiful food and no predators to speak of, the isolated island became a haven for a variety of unusual species, including reptiles and flightless birds.

Then, in 1598, humans descended on this paradise, accompanied by their own animals – dogs, goats, cats (and a fair number of rats!). Curious and unafraid, the animals of Mauritius offered themselves up for slaughter and, within just a few decades, much of the island's unique wildlife had been wiped out forever.

One of the victims was a large, flightless relative of the pigeon. The island invaders started to call the bird a 'dodo', which meant 'silly bird'.

Although the dodo was hunted for food, this was not the main reason it died out. It is more likely that having never faced predators before, and unable to fly away, the adult birds fell prey to dogs and cats. Meanwhile, their eggs and chicks, defenceless in their nests on the ground, were easy pickings for rats.

Less than 100 years after man's arrival, the dodo, which had once numbered in the hundreds of thousands, slipped into the pages of folklore.



A drawing of a dodo from around 1646.

Until a few years ago, all knowledge of the dodo came from secondary reports from the time that were not always reliable, a handful of remains and just one complete skeleton. Nobody knew what the dodo really looked like. Before cameras, newly discovered animals could only be drawn or painted. However, many of the artists had no knowledge of natural history and were more interested in producing colourful paintings of animals than recording their true likeness.

Then, in 2005, a team of scientists unearthed thousands of dodo bones in some mud flats in Mauritius. The remains date back to over 4,000 years ago, when the island was suffering from a lengthy drought. The mud flats would have formed a freshwater oasis in an otherwise parched environment. It is thought that most of the animals, while trying to reach the slowly receding waters of the lake, became stuck and died of thirst or suffocation. However, clearly some dodos survived as they did not become extinct until much later.

This discovery is helping to rehabilitate the image of this much-ridiculed bird. The very fact that the dodo was still alive and well on Mauritius 4,000 years after a drought that claimed the lives of thousands of animals is an indication of the bird's ability to survive. The remains are also helping scientists to find out more about the

anatomy of the dodo, for example that it was a much slimmer bird than any pictures suggest.

As scientists learn more about the dodo, and begin to see the bird in a new light, we are reminded that the dodo was badly misjudged. Maybe it is humans who should be judged, as we can have a devastating impact on the natural world. No other creature should be allowed to go the way of the dodo.

A modern reconstruction of a dodo.

Q2.

1. Look at the paragraph beginning: *For thousands of years...*

   What does the word *spat* suggest about how the island of Mauritius was formed?

   _____

   _____

   _____

1 mark

2. *Curious and unafraid, the animals of Mauritius offered themselves up for slaughter...* (Page 1)

Why were the dodos *curious and unafraid?*

_____

_____

1 mark

3. **Find** and **copy one** word from page 1 that tells you that some of the animals on Mauritius were only found there.

_____

1 mark

4. (a) Give **two** reasons why Mauritius was a *paradise* for animals before humans arrived.

1. _____

2. _____

1 mark

Look at the paragraph beginning: *One of the victims...* to the bottom of page 1.

(b) Give **two** reasons why the dodo became extinct after humans arrived.

1. _____

2. _____

1 mark

5. Look at the paragraph beginning: *One of the victims...*

What does the word *invaders* suggest about the humans arriving on Mauritius?

_____

_____

1 mark

6. Why were artists' drawings from the time of the dodo not always accurate?

_____

_____

1 mark

7. *The mud flats would have formed a freshwater oasis in an otherwise* ***parched*** *environment.*

Give the meaning of the word *parched* in this sentence.

_____

1 mark

8. Look at the paragraph beginning: *Then, in 2005...*

Find and **copy one** word or group of words that shows that scientists were not sure what happened to most of the animals during the drought on Mauritius.

_____

1 mark

9. What does *rehabilitate the image* of the dodo mean?

Tick **one.**

restore a painting of the dodo	☐
rebuild the reputation of the dodo	☐
repair a model of the dodo	☐
review accounts of the dodo	☐

1 mark

10. According to the text, how did the discovery of the dodos' bones help to change the image of the dodo?

_____

_____

1 mark

11. Below are some summaries of different paragraphs from this text.

Number them 1 – 6 to show the order in which they appear in the text.

The first one has been done for you.

An important lesson is learnt.	☐
Reasons for the extinction of the dodo.	☐
Summary of the plight of the dodos.	1

New information is discovered about the dodo. ☐

An explanation for the unreliable evidence. ☐

Humans arrived on Mauritius. ☐

1 mark