Key stage 2

Mathematics
Reasoning: Set 1 Paper B

Name	
Date	

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35
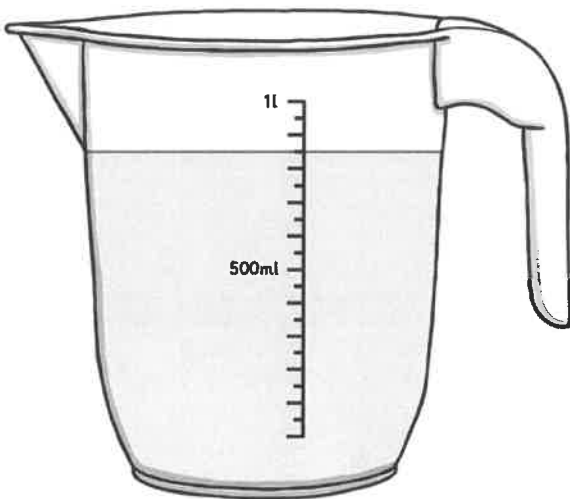total marks
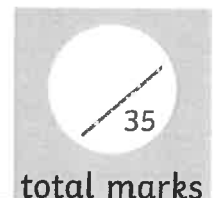
Year 5 Maths Reasoning Test Set 1: Paper B

1. A farmer has 1045 sheep. He sells 100 of the sheep. How many does he have left?

2. Here is a jug containing some juice.

a) Half of the juice is used. On the jug below mark on the scale the new level of the juice.

b) A further 150 ml of juice is used. How much juice is left in the jug in litres?

litres

35
total marks

twinkl

1 mark

1 mark

1 mark

Total for this page

3. Freya and Owen each have a handful of coins. Here are their coins:

Freya	Owen

How much more does Freya have than Owen?

4. A group of Year 1 children research the number of children who have visited some of the places of interest around their city.

Number of Children Who Have Visited Local Places of Interest

Bishop's House
Millennium Galleries
Magna
Kelham Island Museum
Weston Park Museum

0   10   20   30   40   50

Number of children

a) How many places have had 25 or more children visit?

b) Two weeks after the survey, the children find out if anyone else has visited any of these places of interest. They record these extra children in this table.

Place of interest	Number of children
Bishop's House	8
Millennium Galleries	4
Kelham Island Museum	4

Add these children to the bar graph below.

Number of children
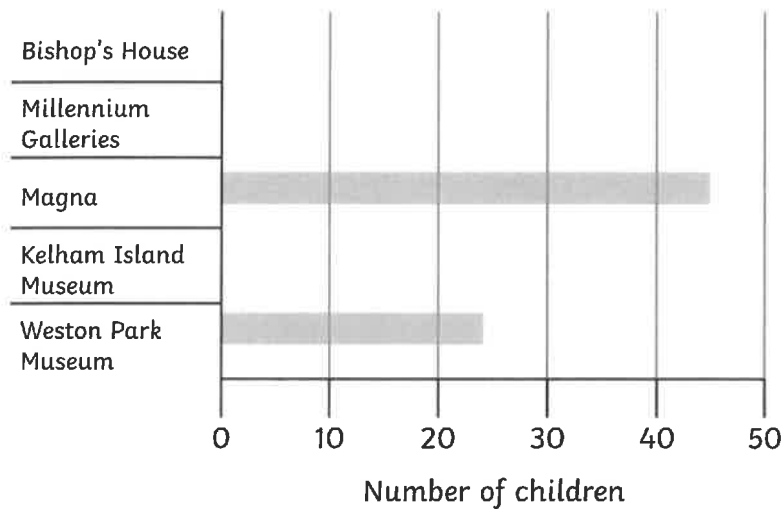
5. Fill in the missing digits to complete this calculation:

$$
\begin{array}{r}
7\ \boxed{}\ 6 \\
\times\qquad \boxed{} \\
\hline
2\ \ 9\ \ 0\ \ 4
\end{array}
$$

6. Some children from two Year 5 classes collect some money for Sport Relief by running around the playground and getting their parents to sponsor them. The amounts collected by each class are £36.27 and £42.89.

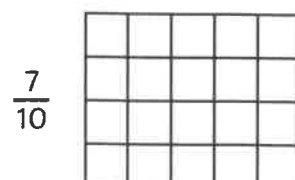Their teachers offer to make the money up to £100. How much will the teachers donate?
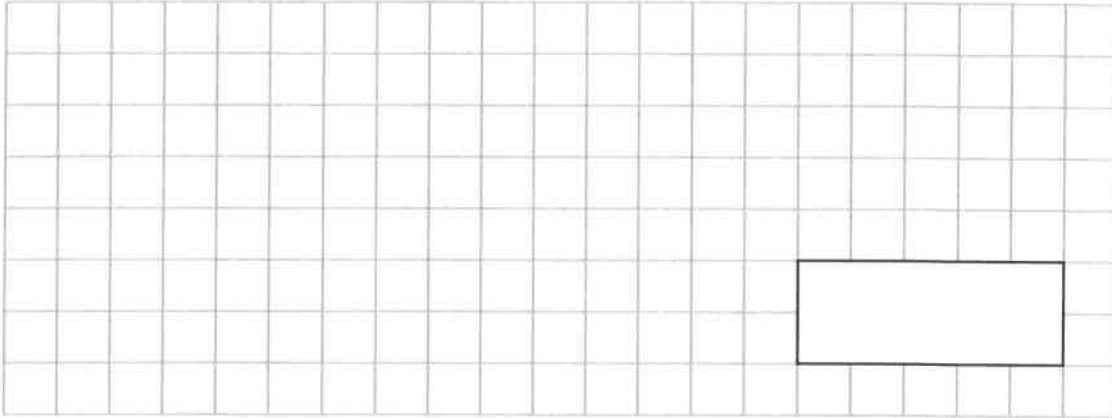
7. Here are the coordinates for a shape drawn on a coordinates grid: (1,2) (9,2) (7,8) (3,8)

Draw the shape on this grid.
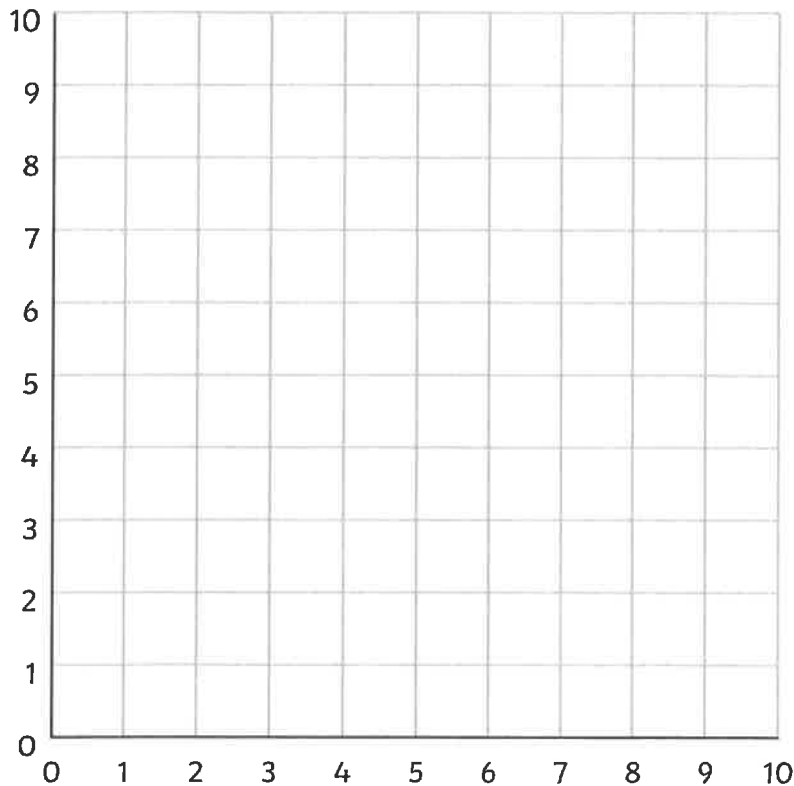
8. Shade the following shapes so that the amount shaded is equivalent to the fraction shown.

$\frac{3}{4}$ $\frac{2}{3}$ $\frac{7}{10}$

9. Write a number between one million and two million with a digit 5 in the hundred thousands place and a digit 8 in the tens place.

10. Here are some angles:

Complete the table below:

Name given to the angle	Angle
Acute	
Obtuse	
	d, e

11. Which 2 square numbers add together to make 10^2?
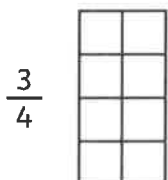
12. £2960 is shared among 1000 people. How much money does each person receive?

13. Some children record the temperature in the playground every hour during the school day.

Here is the line graph they used to record their results.
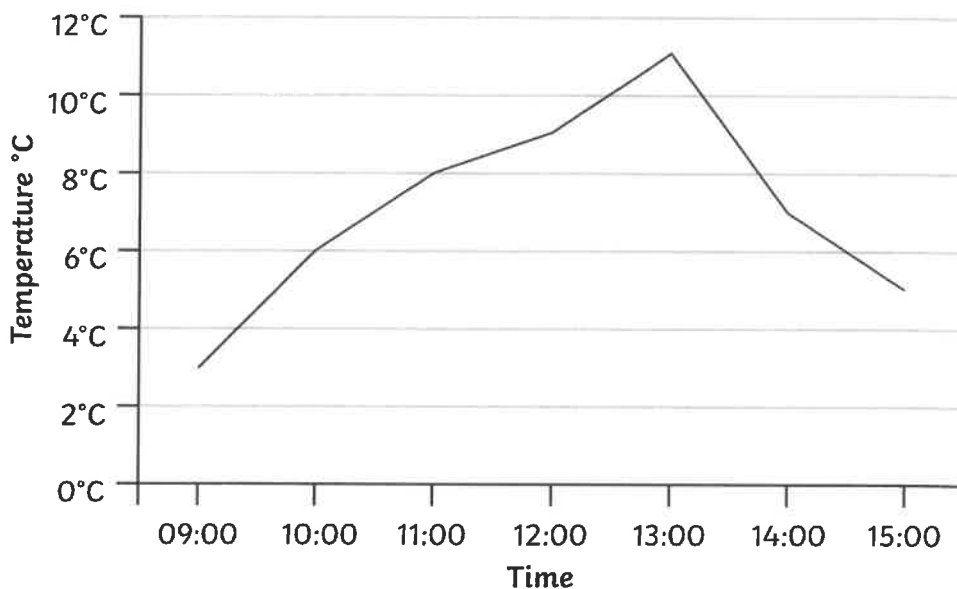
a) How much did the temperature change between and 10:00 and 13:00?

b) Estimate the temperature at 13:30.

c) The temperature falls by 7°C between 15:00 and 23:00.

What is the temperature at 23:00?

14. A year 5 class have a maths lesson each day of the week. Each lesson last 70 minutes. In a five-day week, how much time is spent on maths? Give your answer in hours and minutes.

15. A teaspoon measure is 5ml. A dessert spoon is twice a teaspoon, and a tablespoon is three times a teaspoon.

Complete the following table.

Measure	In ml	in litres
Teaspoon	5ml	
Dessert Spoon		
TableSpoon		

16. Compare the numbers 'three million and fourteen thousand, three hundred and four', and 'three million four hundred and three thousand, four hundred and thirteen', writing your answer in digits, using either the <, > or = sign.

17. A group of children have to choose an activity for golden time, a school reward system. 30% of a group of children choose football, $\frac{2}{10}$ choose dance, and a quarter choose art. Order the popularity of the activities from most to least.

Most
popular

Least
popular

18. A steam locomotive railway is running a special weekend to celebrate the film 'The Railway Children." Here is the timetable.

Service	001	002	003
Haworth Forecourt	10:30	12:55	15:20
Bronte Parsonage Car Park	10:45	13:05	15:35
Marsh Top	10:50	13:10	15:40
Oxenhope Station	11:05	13:25	15:55
Hebden Road	11:08	13:28	16:05
Ingrow Station	11:30	13:50	16:20
Oakworth Park	11:40	14:00	16:30
Providence Lane	11:55	14:05	16:35

a) Which train travels from Haworth Forecourt to Marsh Top the fastest?

b) Calculate the length of time the longest journey takes.

19. Order the following numbers from smallest to largest.

$$\frac{765}{1000} \qquad 0.7 \qquad \frac{75}{100} \qquad \frac{8}{10}$$

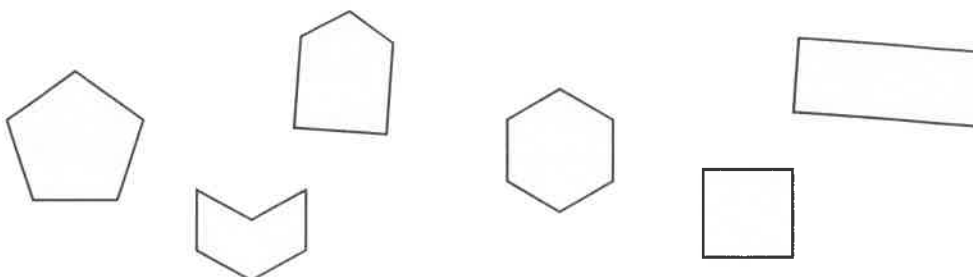smallest   largest

20. Circle the regular shapes.