National Curriculum Practice Test

Key Stage 2

Reasoning

First name	
Middle name	
Last name	
Date of Birth	Day Month Year
School name	

Total Marks	

Key Stage 2 Test Practice Paper - Reasoning

Questions and answers

You have **40 minutes** to complete this test.

Work as quickly and as carefully as you can.

Put your answer in the box for each question.

If you are asked to, show your working. You you may get a mark for showing your method.

If you cannot do a question, **go on to the next one**. You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

Marks

The number under each line at the side of the page tells you the number of marks available for each question.

1 The numbers in this sequence increase by the same amount each time. Write in the missing numbers.
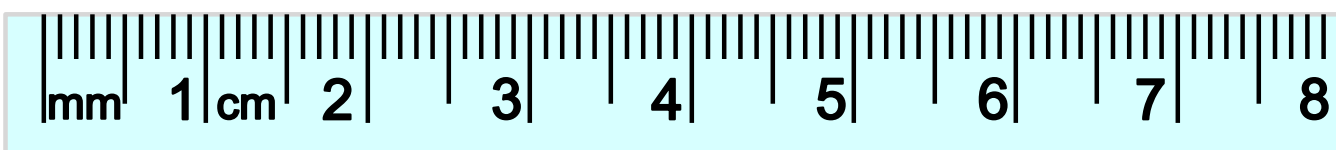
| | 23 | 30 | | | 51 |

2 A tin contains 50 sweets. If each of 4 children eat 5 of these, how many sweets will left?

1 mark

3 Which length is halfway between 2.4 cm and 5.6 cm?
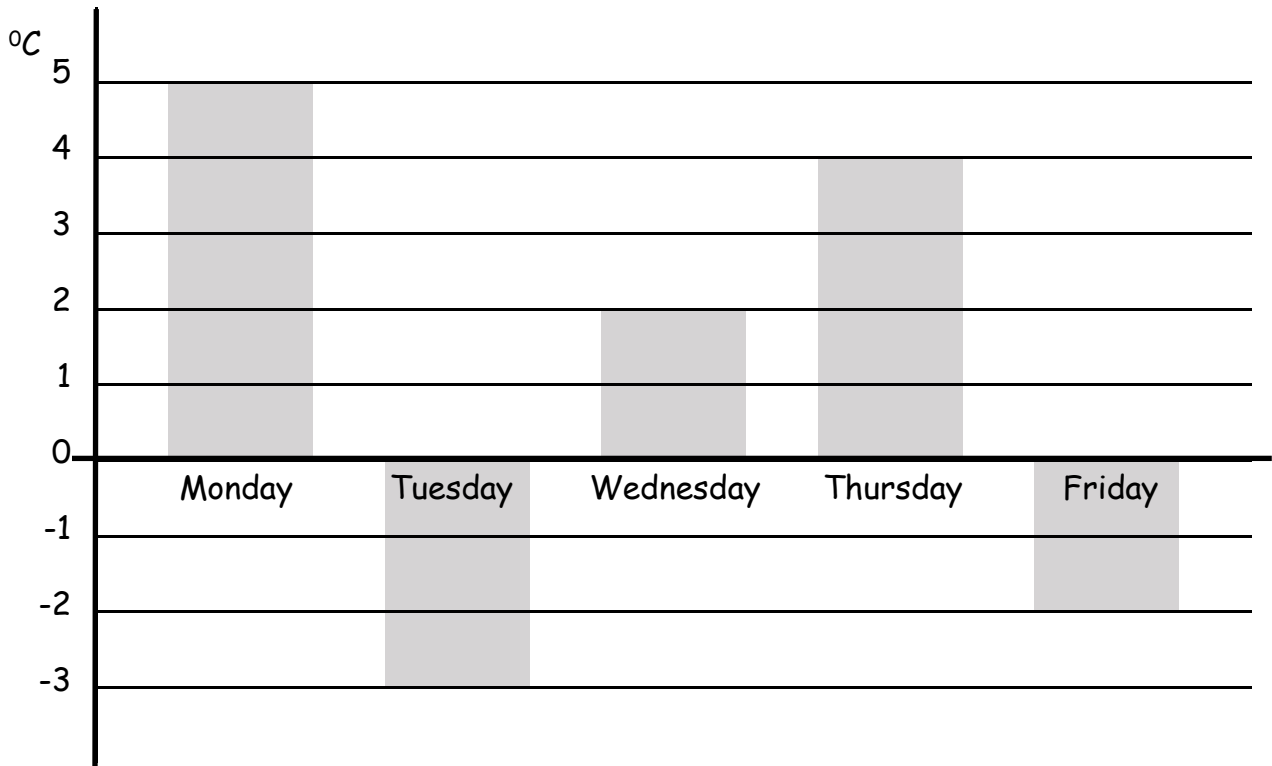
mm 1 cm 2 3 4 5 6 7 8

Not to scale

1 mark

4 As part of a science lesson, pupils record the lowest overnight temperature during one week in January. These are shown on the bar chart below:

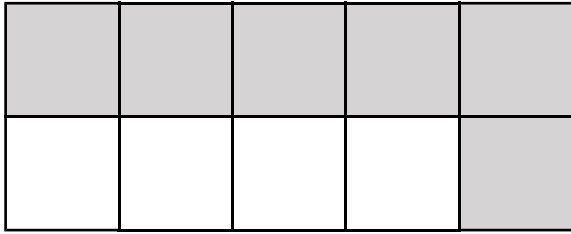a. On which night was it $5^0 C$ colder than Wednesday night?

1 mark

a. How many degrees difference was their between the coldest and warmest nights?
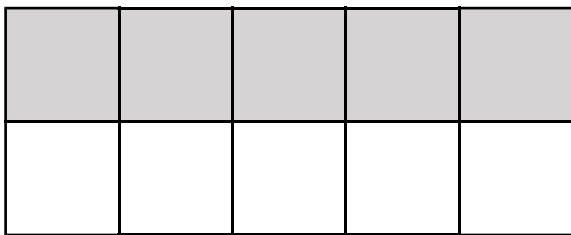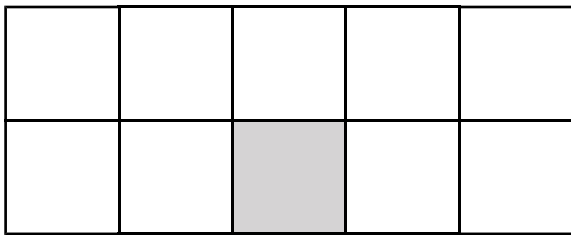
$^0 C$

1 mark

5 Draw lines from each of the rectangles to show the fraction that is shaded. One has been done for you to give you the idea.
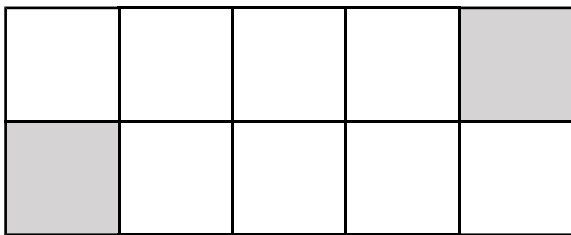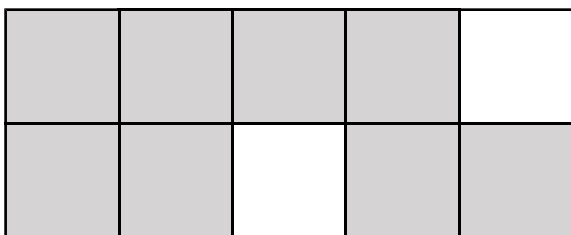
$$\frac{1}{2}$$

$$\frac{1}{10}$$

$$\frac{1}{5}$$

$$\frac{4}{5}$$

$$\frac{3}{5}$$

2 mark

6 In the box, write a number that is a multiple of each set of numbers. The first one has been done for you to give you the idea.

Numbers from 12 to 30	Multiple of 5	15
Numbers from 25 to 90	Multiple of 10	
Numbers from 72 to 150	Multiple of 20	
Numbers from 112 to 200	Multiple of 30	
Numbers from 123 to 281	Multiple of 40	

2 mark

7 Tick the two numbers that are equivalent to $\dfrac{3}{4}$

Tick 2

0.25 ☐

$\dfrac{8}{10}$ ☐

0.75 ☐

0.34 ☐

$\dfrac{75}{100}$ ☐   ☐

1 mark

8 Simon buys 3 large and 4 small boxes of chocolates. How many chocolates did Simon buy altogether?

Large
32 chocolates

Small
16 chocolates

Show your working

Chocolates

2 mark

9 Circle the improper fraction that is equal to $2\frac{3}{8}$

$\dfrac{23}{8}$ $\qquad$ $\dfrac{19}{8}$ $\qquad$ $\dfrac{14}{8}$ $\qquad$ $\dfrac{28}{8}$ $\qquad$ $\dfrac{21}{8}$

1 mark

10    $\dfrac{3}{5}$ $\dfrac{3}{2}$ $\dfrac{4}{5}$

Write these fractions in the order smallest to largest.

Smallest		

1 mark

11   Write the correct symbol in each box to make the statements correct.

<	=	>

11 x 12 ☐ 14 x 10

80 ÷ 20 ☐ 120 ÷ 30

120 ÷ 3 ☐ 150 ÷ 5

60 x 3 ☐ 40 x 4

2 mark

12 Complete the table below for the the drawing of this 3-D shape.
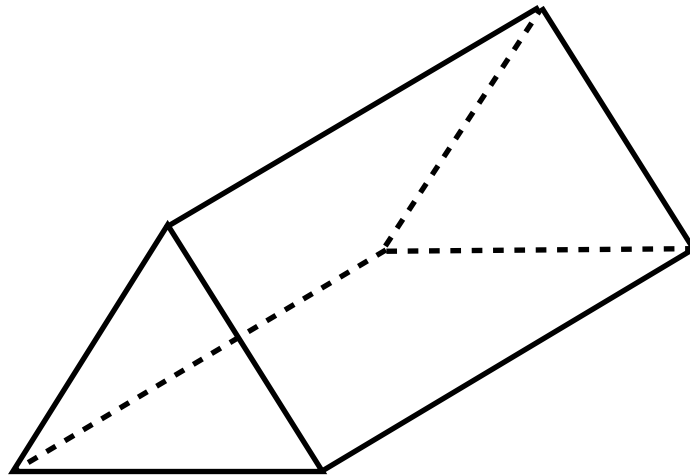
Number of faces	Number of vertices	Number of edges

13 This watch shows the time as 12 minutes to 2. If the watch is 20 minutes slow, write in the the two numbers needed in the box to describe the correct time.

minutes past

14 Tick the mental method below which **starting with 143** will give the correct answer for the calculation

143 - 98

Add 3 then subtract 90 ☐

Subtract 3 then subtract 90 ☐
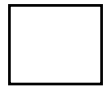
Subtract 3 then subtract 100 ☐

Add 2 then subtract 100 ☐

☐

2 marks

15 What is the mean average of £2, £4, £7 and £11?

Show you working

£

2 marks

16 Tick the method below which gives the best estimate for the calculation:

$$3\frac{7}{8} \ + \ 1\frac{1}{5} \ + \ 3\frac{3}{4}$$

4 + 2 + 3   ☐

3 + 1 + 3   ☐

4 + 1 + 4   ☐

4 + 2 + 4   ☐

1 mark

17 An estimate of the distance away of a thunder storm may be found by dividing the number of seconds between the lightning and the thunder by 5.

a. If there is 15 seconds between the thunder and the lightning, how far away is the storm?

miles

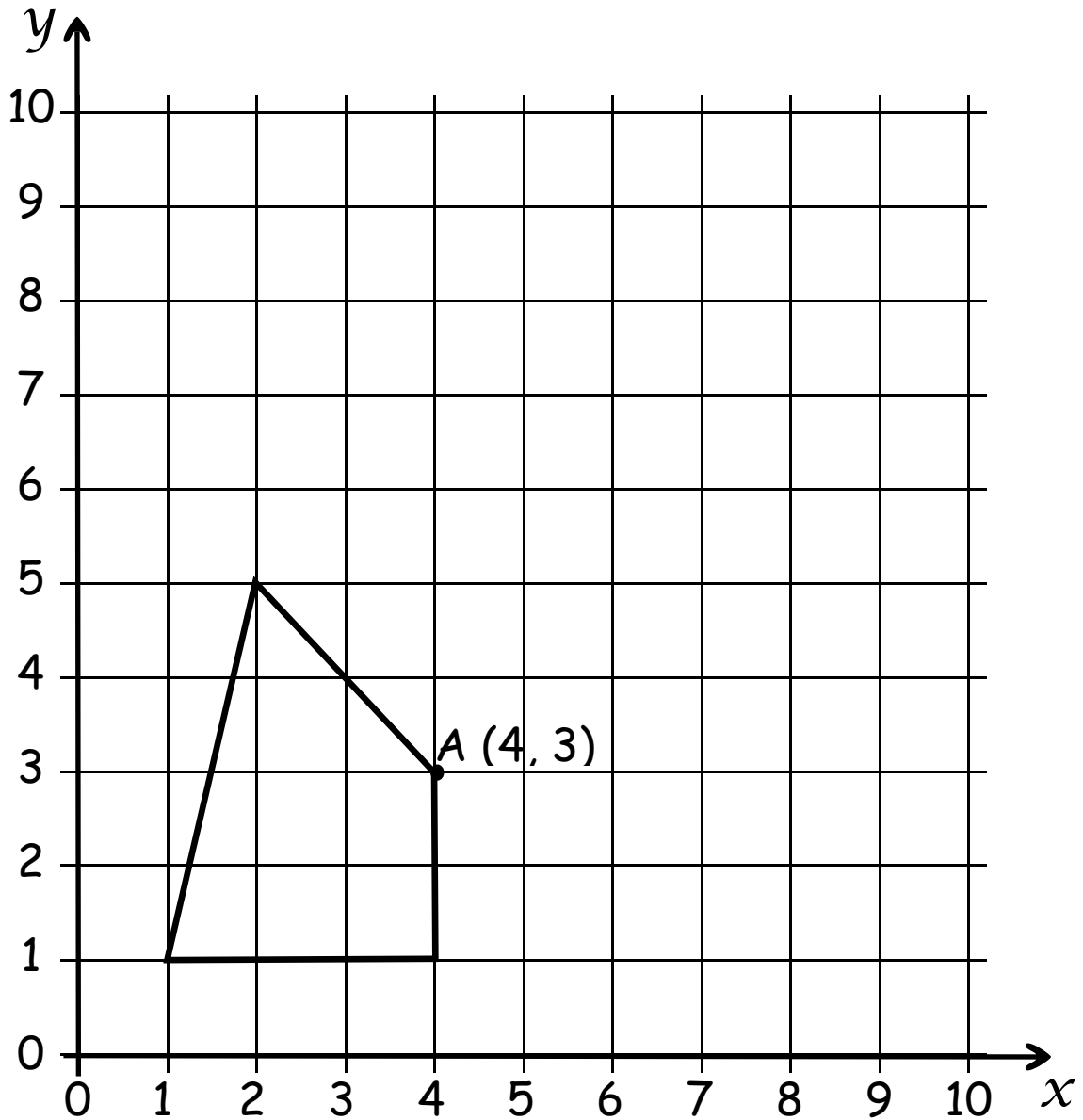b. How many seconds would there be between the lightning and the thunder for a storm which was 2 miles away?
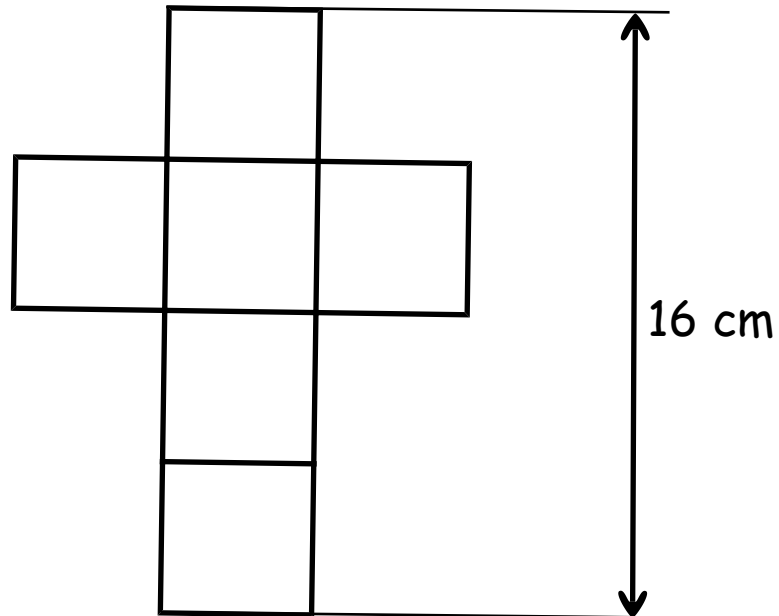
miles

18 Draw the shape after the translation that the moves the point A to (9, 7).

A (4, 3)

1 mark

19 What would be the volume of the cube which the net below could be used to make?
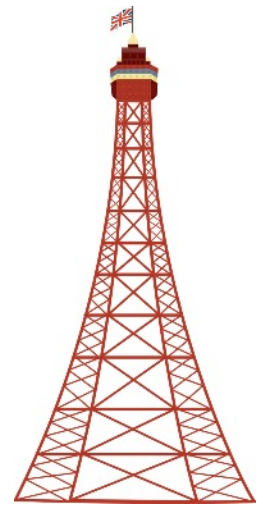
16 cm

cm³

20 Blackpool Tower is approximately 160 metres high.
The Eiffel Tower in Paris is approximately $1\frac{9}{10}$ times higher.

What is the approximate height of the Eiffel Tower?

Show your working

metres high

2 mark

End of test