

2020 national curriculum tests

# Key stage 2

## Mathematics

### Paper 2: reasoning

This is the Key Stage 2 Mathematics Paper 2: Reasoning. You will need a pen and something to record your answers on.

- You must not use a calculator to answer any questions in this test.
- You have as much time as you need to answer these questions.
- Follow the instructions for each question.
- Work as carefully as you can. If you need to do working out, you can use the space around the question.
- Some questions have a method box. For these questions, 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 finish before the end, go back and check your work.
- The number in the bottom right corner of each page tells you the number of marks available for each question.
- If you have any questions during the test, feel free to send an email to Mrs David
- You can talk to each other.
- You may now start the test.

# Q1

Put the numbers in the correct positions in the Carroll diagram:

472    76    8,476    0.2

	The number of pencils in Cardinham	The number of hairs on your head
The length of a piece of string, in cm		
Your neighbour's lucky number		

[½ mark]

## Q2

2) Two shops, A and B, both sell bouncy balls.

*Shop A*  
*bouncy balls*  
*8 for 64p*

*Shop B*  
*bouncy balls*  
*5 for 45p*

At which shop are the bouncy balls the most bouncy? Explain your reasoning.

[12.5 marks]

## Q3

3) I'm thinking of a number. I take away 2 and then add 2 on. The answer is 12.

What is the number I am thinking of?

[2 marks]

# Q4

Mrs David says the missing number is 100. Is she correct?

$$0.3 \div \boxed{\phantom{000}} = 0.03$$

[4 x 100 marks]

## Q5

Mrs David asked 60 children to choose their favourite flavour of jelly. These were her results.

Flavour	Number of children
Raspberry	12
Lemon	8
Orange	15
Blackcurrant	25
<b>Total</b>	<b>60</b>

- What is your favourite flavour of jelly?
- What is your family's favourite flavour of jelly?
- Does this change the results?

[0.111 marks]

# Q6

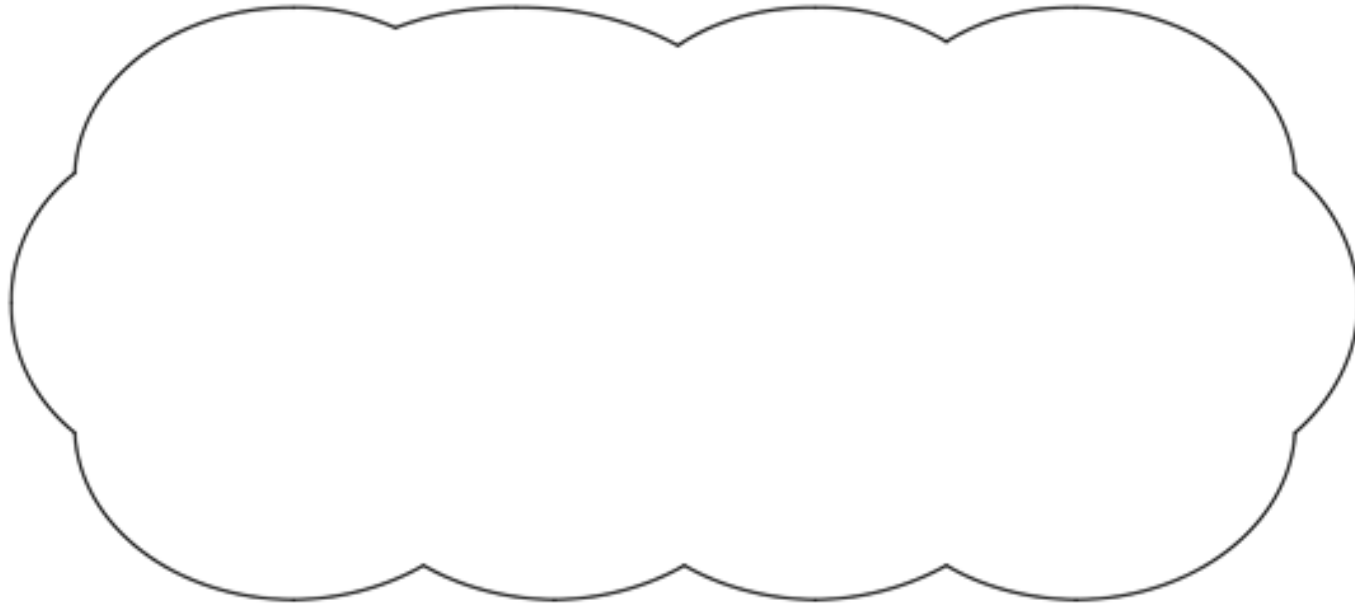
Circle the **best** number.

95

89

87

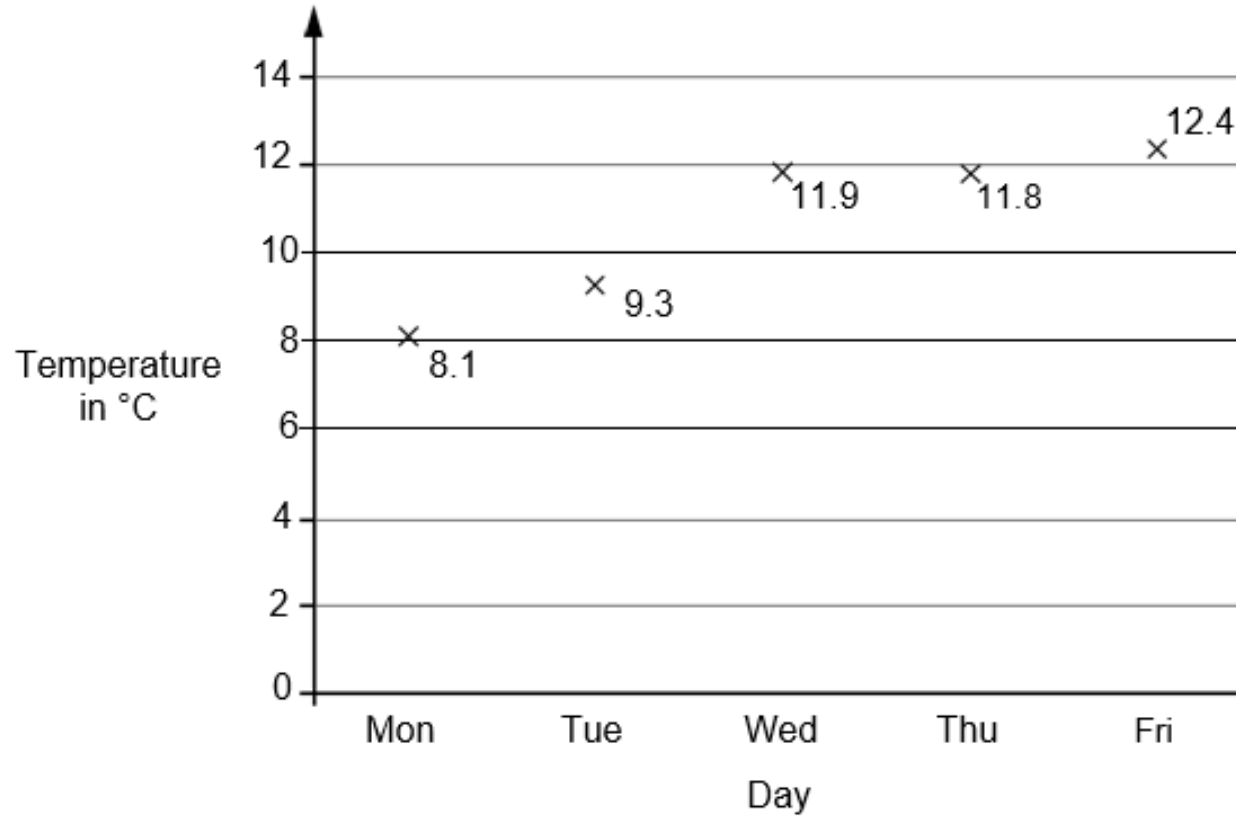
Explain how you know the other numbers are **not** the best.



[958,987 marks]

# Q7

This graph shows the maximum temperature for five days.



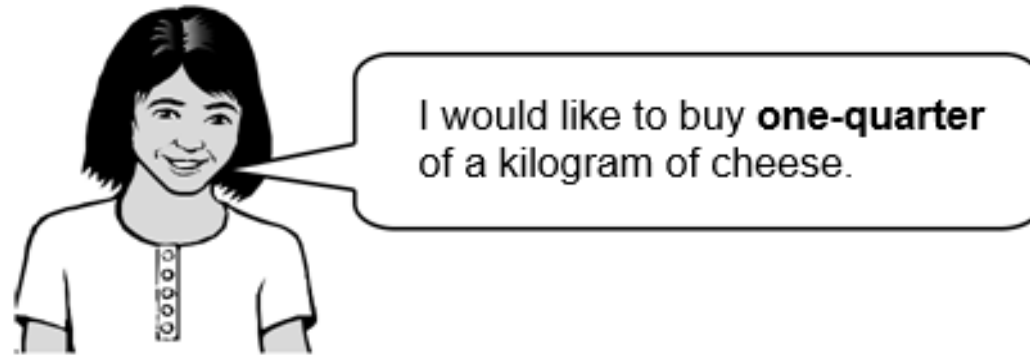
Has it been warmer or colder today?

[-11 marks]



## Q8

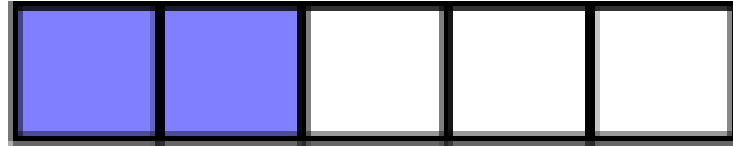
Amina is shopping. She says,



Why does Amina need so much cheese?

[0.25 marks]

## Q9


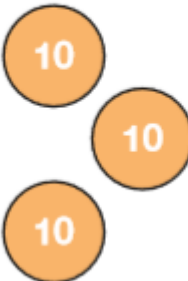
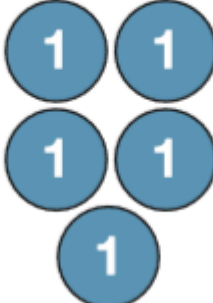




- a) What fraction of her daily allowance of chocolate has Mrs David eaten?
- b) How much has s/he got left to eat?
- c) What is this as a percentage?

[2.5 marks]

# Q10

Cardinham have been saving money to buy Mrs David the best present ever.  
How much money have they saved?

Hundreds	Tens	Ones	Tenths	Hundredths
				

[27 marks]