

# Key stage 2

## Mathematics

### Paper 2: reasoning

<b>First Name</b>	
<b>Middle Name</b>	
<b>Last Name</b>	
<b>Date of Birth</b>	
<b>School Name</b>	

# Instructions

You **must not** use a calculator to answer any questions in this test.

## Questions and answers

You will have as long as you would like to complete this test  
Follow the instructions carefully for each question.  
Work as quickly and 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 like this:

Diagram illustrating a method box. The box is a grid of red lines. On the left side, there is a rounded rectangular box containing the text "Show your method". On the right side, there is a smaller, empty rectangular 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 have time.

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

## Marks

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

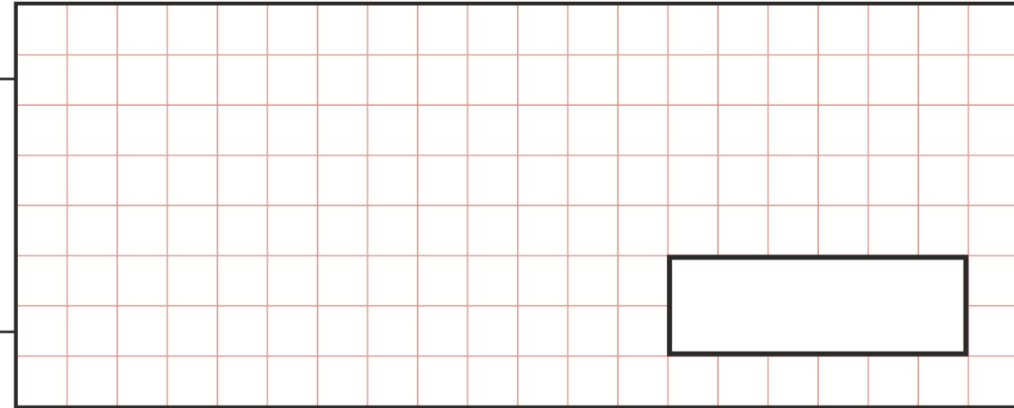
**Q1.** A theme park sells tickets online.

Each ticket costs £24

There is a £3 charge for buying tickets.

How much would it cost for all the members of your household to go to the theme park?

Show your method



1 mark

**Q2.** Amina is shopping.



I would like to buy **one-quarter** of a kilogram of cheese.

She says,

Why does Amina need so much cheese?

1 mark

**Q3.** The original price of this car is £8,999. The price has decreased by one thousand pounds.

What is the sale price of the car?

Show your method



1 mark

**Q4.**

potatoes  
£1.50 per kg

carrots  
£1.80 per kg

Jack buys 8kg of potatoes and 5kg of carrots.

How much money has he spent?

Show your method



2 marks

Why does Jack need so many potatoes and carrots?

1 mark

**Q5.** Layla makes jewellery to give to her best friends.

Each bracelet has 53 beads.

She makes 68 bracelets.

Each necklace has 105.

She makes 34 necklaces.

What qualities might Layla have that makes her such a good friend?

2 marks

**Q6.** Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates. Each small box has 24 chocolates.

How long before Ken feels poorly from eating too many chocolates?

1 mark

**Q7.** The length of an alligator can be estimated by:

- measuring the distance from its eyes to its nose
- then multiplying that distance by 12

How likely do you think it is that someone will be able to get that close to an alligator to measure from its eyes to its nose?

2 marks

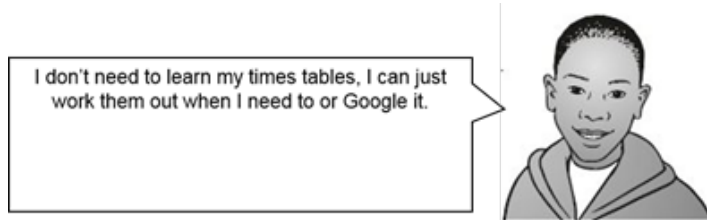
**Q8.** A packet contains 1.5 kg of oats.

Every day Maria uses 50 g of oats to make porridge.

How many days until Maria is bored of eating porridge?

2 marks

**Q9.** Adam says,



Explain why Adam is incorrect?

**Q10.** 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.