

2020 national curriculum tests

# Key stage 2

## Mathematics

### Paper 2: reasoning

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
Star sign						
Shoe size						

#### Instructions

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

You **may not** use a calculator to answer any questions in this test. (I mean no-one is checking....)

If you cannot do a question, **go on to the next one.**

You **may not** speak to other people (why not involve your family too!)

#### Marks

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

**Bonus questions** can earn between 1-3 marks depending on how good your explanation is. Ask your family to decide or email them to us.

1

Mr Ward is running out of toilet roll. Mrs Romain has 4 packs of toilet roll that have 6 toilet rolls in each pack. She begrudgingly gives 5 toilet rolls to Mr Ward.

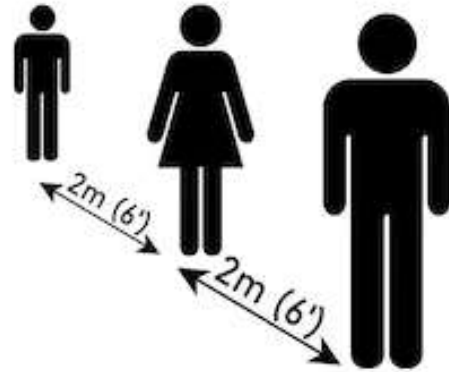


How many toilet rolls does Mrs Romain have left after giving some to Mr Ward?

1 mark

2

Mrs Dowdall is standing waiting in the rain in the queue at Tesco. There are 11 people in the queue, including Mrs Trott, and each person has to stand 2m apart.



Approximately, how long is the queue in **metres**?

2m is approximately equal to 6 feet (6').

Approximately, how long is the queue in **feet**?

3

Mrs Romain really misses eating McDonalds breakfasts so she is planning what she will order when it reopens.

Breakfast	Individual Price	Meal Price			
Breakfast Wrap (meal excludes hash browns)	£2.59	£3.59	Quaker Oatso Simple <sup>®</sup> Porridge	99p	
Big Breakfast*	£2.39	£3.39	with Jam	99p	
Sausage, Egg & Cheese Bagel	£2.09	£3.49	with Syrup	99p	
Bacon, Egg & Cheese Bagel	£2.09	£3.49	Bagel	with Philadelphia <sup>®</sup> Light	99p
Sausage & Egg McMuffin <sup>®</sup>	£1.99	£3.39	with Jam	99p	
			with Butter	99p	
			with Flora <sup>®</sup> Original	99p	
			Hash Brown	79p	

She decides that she would get a Sausage & Egg McMuffin<sup>™</sup> meal with two extra hash browns.

How much **change** would she get from £10.00?

2 marks

4

Boris Johnson's new baby Wilfred (aww) was born on 29<sup>th</sup> April.



How many days old will he be on May 15<sup>th</sup>?

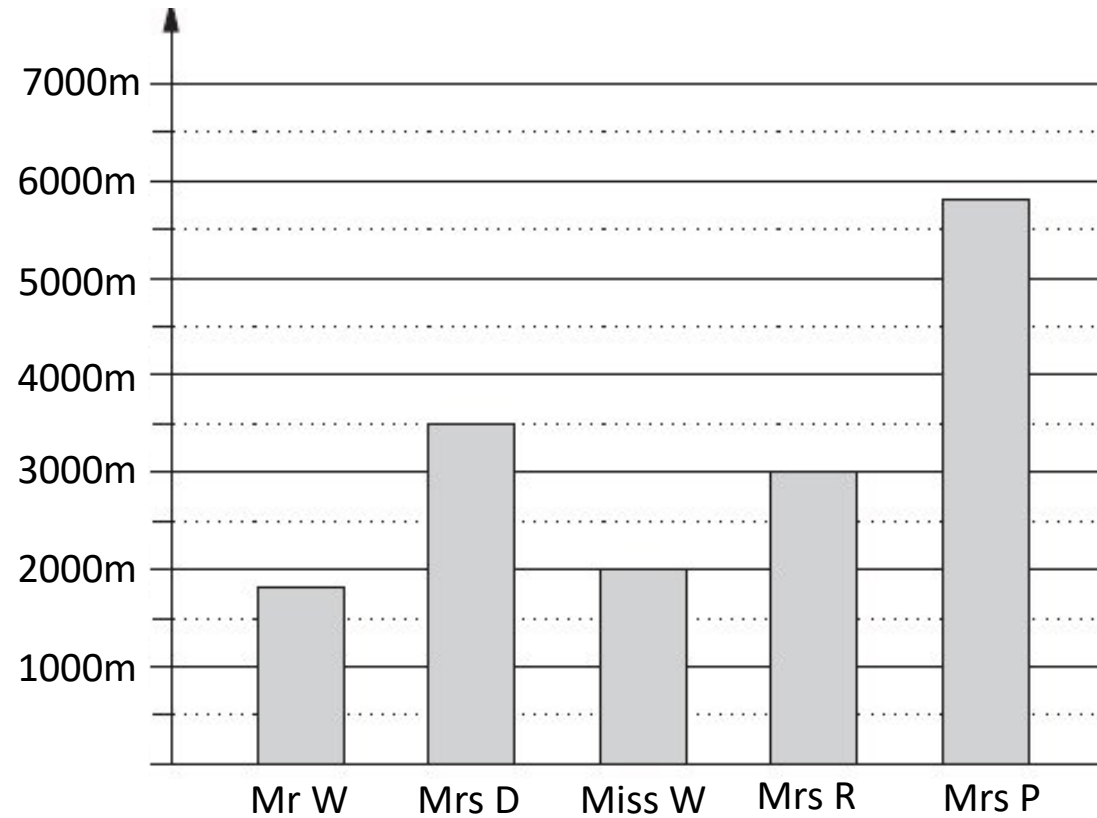
1 mark

**BONUS**

If you could pick a middle name for baby Wilfred, what would you choose? Why? Explain your answer.

5

This graph shows the average distance each teacher travels on their daily walk.



Who walks on average between **3km** and **4km** each day?

6

Miss Webster is baking for the first time and she wants to make banana bread using the following recipe.

140g butter, softened, plus extra for the tin

140g caster sugar

2 large eggs, beaten

140g self-raising flour

1 tsp baking powder

2 very ripe bananas, mashed

50g icing sugar

She only has 1 egg left in her fridge so adjusts the recipe.

How much icing sugar should she use?

1 mark

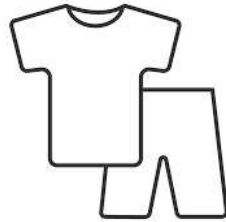
**BONUS**

How successful do you think Miss Webster's first attempt at baking will be? Give reasons for your answer.

**7** Mrs Romain has barely been getting dressed properly and has mostly been wearing pyjamas at home. She has three different pairs, each with a t-shirt and shorts: a blue pair, a pink pair and a pair with dogs on. She mixes these up and doesn't care if they match.

Write the two missing pyjama combinations.

- blue top and blue shorts
- blue top and pink shorts
- blue top and dog shorts
- pink top and blue shorts
- pink top and dog shorts
- dog top and dog shorts
- dog top and pink shorts



\_\_\_\_\_ and \_\_\_\_\_

\_\_\_\_\_ and \_\_\_\_\_

2 marks



8

Each Thursday, the 'clap for our carers' takes place at 8.00pm.



What does 8.00pm look like on a 24 hour clock?

1 mark

- 9 It was rumoured that the government were going to build a giant lasagne inside Wembley Stadium to help feed everybody (this was fake news). This would be approximately 805,000,000 portions of lasagne!



In the number 805,000,000 which **digit** is in the **millions** place?

1 mark

**BONUS**

Do you think a giant lasagne would be more tasty or less tasty than a normal sized lasagne? Explain your thinking.

10

Mrs La Frenais uses the following formula to decide how many coffees to drink each day whilst she is at home.

$$\text{Number of coffees} = 16 - (\text{number hours of sleep} \times 2)$$

If Mrs La Frenais has 7 hours sleep, how many coffees does she have on that day?



Last Sunday, Mrs La Frenais drank 4 coffees.

How many hours sleep do you think she had the night before?