## 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.**

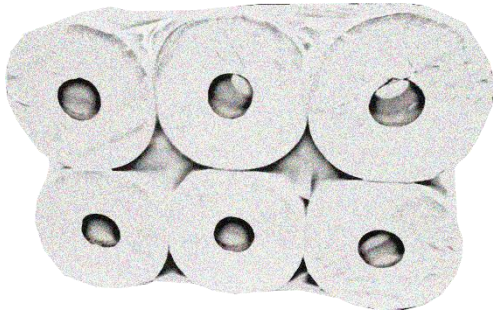You **may ~~not~~** speak to other people (why not involve your family too!)

**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** _____ is running out of toilet roll. _____ has 4 packs of toilet roll that have 6 toilet rolls in each pack. She begrudgingly gives 5 toilet rolls to _____
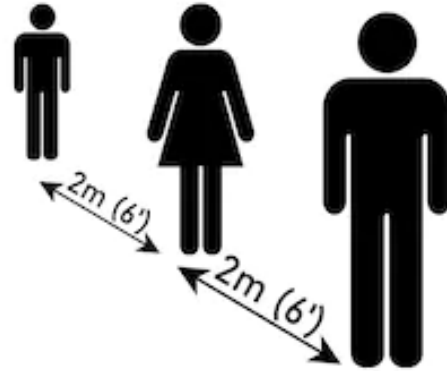


How many toilet rolls does _____ have left after giving some to _____

**2** _____is standing waiting in the rain in the queue at Tesco. There are 11 people in the queue, including _____, 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**?

2 marks

**3** _____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 brown) | £2.59 | £3.59 |
| Big Breakfast* | £2.39 | £3.39 |
| Sausage, Egg & Cheese Bagel | £2.09 | £3.49 |
| Bacon, Egg & Cheese Bagel | £2.09 | £3.49 |
| Sausage & Egg McMuffin* | £1.99 | £3.39 |

| | | |
|---|---|---|
| Quaker Oatso Simple Porridge | | 99p |
| | with Jam | 99p |
| | with Syrup | 99p |
| Bagel | with Philadelphia Light | 99p |
| | with Jam | 99p |
| | with Butter | 99p |
| | with Flora Original | 99p |
| Hash Brown | | 79p |

She decides that she would get a Sausage & Egg McMuffin™ 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 29th April.
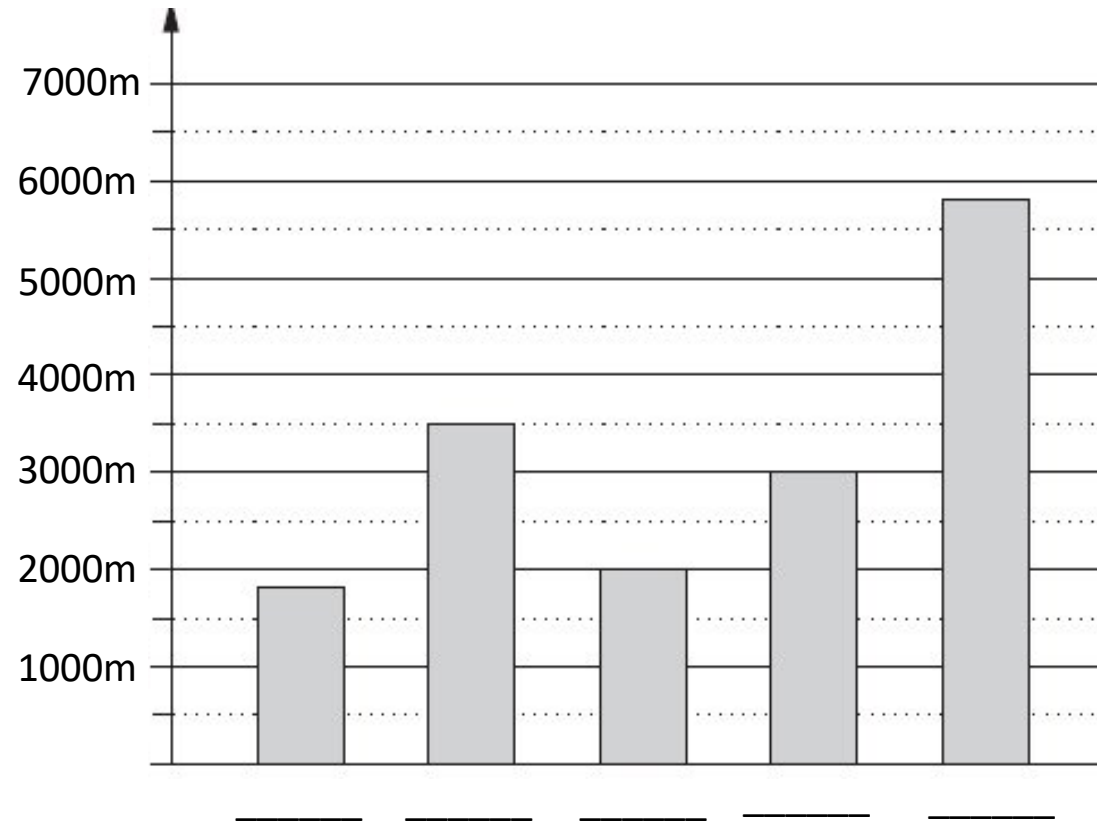


How many days old will he be on May 15th?

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** _____is baking for the first time (true story) 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.
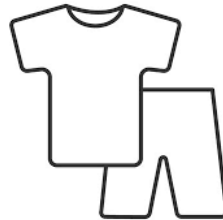
How much icing sugar should she use?

1 mark

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

**7** _____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 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 that a normal sized lasagne? Explain your thinking.

**10** _____ uses the following formula to decide how many coffees to drink each day whilst she is at home.

| Number of coffees = 16 – (number hours of sleep x 2 ) |
| --- |

If _____has 7 hours sleep, how many coffees does she have on that day?

Last Sunday, _____drank 4 coffees.

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