

Maths Challenges Years 5 and 6 – Resource 2

1 Which of these is closest to the height of an adult elephant?

- A 1 cm B 2 feet C 3 m D 4 mm E 5 km



2 The number of letters in the word FOUR is equal to its numerical value. For how many **other** single-digit numbers is this true?

- A 0 B 1 C 2 D 3 E 4

3 In the UK it is now 11 am. The time in San Francisco is 8 hours behind the UK. What time do the clocks now show in San Francisco?

- A 3 am B 4 am C 5 am D 11 am E 7 pm

4 I have 100 socks for my octopuses. How many octopuses can have all their tentacles in socks?

- A 4 B 8 C 9 D 10 E 12



5 Rabbit Owt buys 10 bendy pencils at 99p each and pays with a £10 note. How much change should Rabbit Owt receive?

- A 1p B 9p C 10p D 90p E 91p

6 Speedy Samuel is running up the Eiffel Tower in Paris. There are 669 steps from ground level to the second stage of the tower. If he runs from ground level to the second stage and back, how many steps does he run?

- A 669 B 1238 C 1328 D 1338 E 13218



7 Which of the following calculations gives the smallest number that is exactly divisible by 2, 3 and 4?

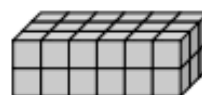
- A 2×3 B 2×4 C 3×4 D $2 \times 3 \times 4$ E $1 \times 2 \times 3 \times 4$

8 How many cuboids like X would you need to make cuboid Y, shown on the right?



X

Y



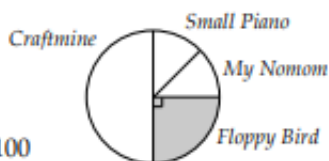
- A 8 B 9 C 10 D 11 E 12

9 If Pythagoras' height is approximately three times the circumference of his head and the circumference of his head is 63 cm, how tall could he be?

- A 20 cm B 2.1 m C 125 cm D 190 mm E 1.9 m

- 10 In a survey 200 children were asked to choose their favourite smartphone game. How many chose *Floppy Bird*?

A 10 B 20 C 25 D 50 E 100



- 11 If today is Wednesday, what day of the week will it be in 20 days' time?

A Monday B Tuesday C Wednesday D Thursday E Friday

- 12 Pat and Qwong are delivering leaflets to flats numbered from 250 to 300 inclusive. Pat is delivering only to the flats that have even numbers. How many leaflets will she need?

A 24 B 25 C 26 D 50 E 51

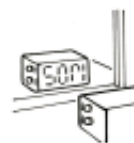


- 13 A square piece of paper is folded in half to make a rectangle. The rectangle has a perimeter of 24 cm. What was the area of the original square?

A 25 cm² B 36 cm² C 49 cm² D 64 cm² E 81 cm²

- 14 Marco could only see his digital clock as a reflection in the window. When he looked at it the first time, it read 5:07. A while later it read 8:07. How many minutes passed in between?

A 33 B 34 C 35 D 36 E 37

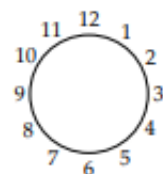


- 15 In Roman numerals, 2015 is written using 4 letters: MMXV. In how many years' time will the year next be written with only 4 letters?

A 4 B 5 C 6 D 9 E 10

- 16 The diagram shows the numbers 1 to 12 placed around a circle. Robin crosses out 1, and then 4 and then 7, going in a clockwise direction and crossing out every third number that has not yet been crossed out, until two numbers are left. What is the sum of these two numbers?

A 11 B 12 C 13 D 14 E 15



- 17 I am threading blue and purple beads onto a necklace in the ratio 2 : 5. I use 98 beads in total. How many more purple beads than blue do I use?

A 7 B 35 C 42 D 14 E 49