Day 318 **C Tier 10-a-day: Model Solutions**

1 Sequences

Here is a sequence with one number missing.
16, ?, 34, 43, 52
Work out the missing number.

The terms go up by 9 each time
16 + 9 = 25
Answer: 25

2 Squares and roots

Work out 3^2.

$3^2 = 3 \times 3$
$= 9$
Answer: 9

3 Cost of one item

3 apples cost £2.55.
Work out the cost of one apple.

255p ÷ 3 = 85p
Answer: 85p

4 Estimating measurements

Which is the best estimate for the mass of an adult?
70 g 700 kg 70 kg 7 g

Adults weigh tens of kilograms
The best estimate is 70 kg
Answer: 70 kg

5 Adding fractions

Work out $\frac{3}{5} - \frac{1}{5}$.

The denominators are the same, so subtract the numerators
3 − 1 = 2
Answer: $\frac{2}{5}$

6 Frequency tables

The table shows the number of goals scored by a team in each match.
Write down the mode.

The mode has the highest frequency, which is 12
This is for 0 goals
Answer: 0

7 Perimeter of an L-shape

The diagram shows an L-shape.
All the corners are right angles.
Work out the perimeter of the shape.
The diagram is not drawn accurately.

Find the two missing sides.
Missing horizontal side: 8 − 5 = 3
Missing vertical side: 12 − 2 = 10
Add all six sides: 8 + 2 + 3 + 10 + 5 + 12 = 40
Answer: 40 cm

Day 318 **C Tier 10-a-day: Model Solutions**

8 Substitution

Work out the value of 3b when b = −5.

3 × (−5) = −15

Answer: −15

9 Counting outcomes

A café has 2 flavours of ice cream and 3 types of cone.
An ice cream is one flavour in one type of cone.
How many different choices are there?

2 × 3 = 6

Answer: 6

10 Estimation

Estimate the value of 97 + 73 by rounding each number to the nearest 10.

97 rounds to 100 and 73 rounds to 70
100 + 70 = 170

Answer: 170