Day 242 **C Tier 10-a-day: Model Solutions**

1 Cost of several items

A sticker costs 94p.
Work out the cost of 2 stickers.
Give your answer in pounds.

94p × 2 = 188p
188p = £1.88
Answer: £1.88

2 Reading a table

The table shows the number of books each day.
Work out the total number of books on Monday and Wednesday.

Monday: 36, Wednesday: 12
36 + 12 = 48
Answer: 48

3 Substitution

Work out the value of $\frac{b}{5}$ when b = 20.

$\frac{b}{5}$ means b ÷ 5
20 ÷ 5 = 4
Answer: 4

4 Negative numbers: temperature

The temperature is −8°C.
It rises by 5°C.
What is the new temperature?

−8 + 5 = −3
Answer: −3°C

5 Perimeter and area of a square

The perimeter of a square card is 20 mm.
Work out the length of one side.

A square has 4 equal sides
20 ÷ 4 = 5
Answer: 5 mm

6 Number puzzles

I think of a number.
I divide it by 5.
My answer is 11.
What number did I think of?

Work backwards: multiply by 5
11 × 5 = 55
Answer: 55

7 Missing side from area

A rectangular garden has an area of 35 cm^2.
Its width is 5 cm.
Work out its length.

Area = length × width
35 = length × 5
length = 35 ÷ 5 = 7
Answer: 7 cm

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8 Ratio, finding the other part

At a concert, the ratio of adults to children is 1 : 2.
There are 12 children.
Work out the number of adults.

12 ÷ 2 = 6 for each part
1 × 6 = 6
Answer: 6

9 Sequences

Here are the first four terms of a sequence.
8, 11, 14, 17
Is 31 a term in this sequence?
You must show your working.

The terms go up by 3 each time
Continue the sequence: 8, 11, 14, 17, 20, 23, 26, 29, 32
31 is not in the list
Answer: No

10 Probability of not getting a colour

A bag contains 7 white counters, 2 blue counters and 5 red counters.
One is taken at random.
Write down the probability that it is not blue.

Number that are not blue: 7 + 5 = 12
Total: 14
Probability = $\frac{12}{14} = \frac{6}{7}$
Answer: $\frac{6}{7}$