Day 209 **C Tier 10-a-day: Model Solutions**

1 Pay rates

Aisha is paid £11 for each hour of work.
Aisha works for 3 hours.
How much is Aisha paid?

£11 × 3 = £33
Answer: £33

2 Writing numbers in figures

Write five thousand nine hundred and fifty-four in figures.

Write each part: 5000 + 900 + 54
Add the parts together
Answer: 5954

3 Substitution

Work out the value of b + 8 when b = 6.

6 + 8 = 14
Answer: 14

4 Probability from a bag

A bag contains 6 green and 5 yellow sweets.
One is taken at random.
Write down the probability that it is yellow.

There are 11 in total, and 5 are yellow

Probability = $\frac{5}{11}$

Answer: $\frac{5}{11}$

5 Number puzzles

Nina thinks of a number.
Nina divides it by 8.
The answer is 3.
What number did Nina think of?

Multiply 3 by 8
3 × 8 = 24
Answer: 24

6 Duration of a journey

A film starts at 10:00 am and finishes at 1:05 pm.
How long is the film?

Count on from 10:00 am to 1:05 pm:
3 hours to 1:00 pm
5 minutes to 1:05 pm
Total: 3 hours 5 minutes
Answer: 3 hours 5 minutes

7 Relative frequency

A coin is flipped 50 times and lands on heads 7 times.
Estimate the probability that it lands on heads next time.
Give your answer as a decimal.

Relative frequency = $\frac{7}{50}$

7 ÷ 50 = 0.14
Answer: 0.14

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8 Timetables

The table shows the times of two buses.
How many minutes does Bus 2 take to go from Ashby to Brook?

11:05 − 10:40
Count on from 10:40 to 11:05
Answer: 25 minutes

9 Sequences

Here are the first four terms of a sequence.
3, 6, 9, 12
Is 28 a term in this sequence?
You must show your working.

The terms go up by 3 each time
Continue the sequence: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
28 is not in the list
Answer: No

10 Missing side from area

A rectangular wall has an area of 50 cm^2.
Its length is 10 cm.
Work out its width.

Area = length × width
50 = 10 × width
width = 50 ÷ 10 = 5
Answer: 5 cm