Day 190 **C Tier 10-a-day: Model Solutions**

1 Solving equations

Solve w − 5 = 4

Add 5 to both sides
w = 4 + 5 = 9
Answer: w = 9

2 Angles round a point

The diagram shows 4 angles round a point.
Work out the size of angle p.
The diagram is not drawn accurately.

Angles round a point add up to 360°
125 + 120 + 65 = 310
360 − 310 = 50
Answer: p = 50°

3 Pictograms

The pictogram shows the number of students absent from school.
How many students were absent on Tue?

Tue has 5 symbols
5 × 4 = 20
Answer: 20

4 Lines of symmetry

Write down the number of lines of symmetry of
(a) an isosceles triangle
(b) a regular hexagon

(a) An isosceles triangle has 1 line of symmetry
(b) A regular hexagon has 6 lines of symmetry
Answer: (a) 1 (b) 6

5 Time

A party starts at 5:15 pm.
It finishes at 8:05 pm.
How long does it last?

5:15 pm to 6:00 pm is 45 minutes
6:00 pm to 8:00 pm is 2 hours
8:00 pm to 8:05 pm is 5 minutes
Add the parts together
Answer: 2 hours 50 minutes

6 The median of an even number of values

Here are the marks in a test.
3 9 13 14 9 18
Work out the median.

Put the numbers in order: 3 9 9 13 14 18
The middle two numbers are 9 and 13
Halfway between them: (9 + 13) ÷ 2 = 11
Answer: 11

Day 190 **C Tier 10-a-day: Model Solutions**

7 Division in context

Each coach holds 40 people.
107 people need a lift.
How many coaches are needed?

107 ÷ 40 = 2 remainder 27
The extra people need another coach
Answer: 3

8 Sampling

Beth wants to find out the favourite sport of students at a school.
Beth asks only boys in Year 9.
Give a reason why this sample may be biased.

Girls and other year groups are not included
Answer: Girls and other year groups are not included

9 Reading a clock

Write down the time shown on the clock.

The minute hand points to 2, which is 2 × 5 = 10 minutes past, and the hour hand has passed the 12
The time is 12:10
Answer: 12:10

10 Sequences

Here are the first four terms of a sequence.
7, 10, 13, 16
Is 31 a term in this sequence?
You must show your working.

The terms go up by 3 each time
Continue the sequence: 7, 10, 13, 16, 19, 22, 25, 28, 31, 34
31 is in the list
Answer: Yes