Day 253 **C Tier 10-a-day: Model Solutions**

1 Reading a table

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

Monday: 29, Tuesday: 33
29 + 33 = 62
Answer: 62

2 Finish time

A lesson starts at 10:25 am.
It lasts 35 minutes.
At what time does the lesson end?

Add the minutes: 10:25 am + 35 minutes = 11:00 am
Answer: 11:00 am

3 Money: wages

Harry earns £9 for each hour of work.
Harry works for 9 hours.
How much does Harry earn?

£9 × 9 = £81
Answer: £81

4 Angles in a triangle (words)

Two of the angles in a triangle are 30° and 90°.
Work out the size of the third angle.

Angles in a triangle add up to 180°
30 + 90 = 120
180 − 120 = 60
Answer: 60°

5 The median of an even number of values

Here are the times, in minutes, of some bus journeys.
9 13 22 19
Work out the median.

Put the numbers in order: 9 13 19 22
The middle two numbers are 13 and 19
Halfway between them: (13 + 19) ÷ 2 = 16
Answer: 16

6 Reading straight line graphs

The graph shows the cost of printing photos.
(a) Work out the cost of printing 4 photos.
(b) Ali spends £12 printing photos. How many photos does Ali print?

(a) Go up from 4 on the bottom axis to the line, then across: £10
(b) Go across from 12 on the cost axis to the line, then down: 5
Answer: (a) £10 (b) 5

7 Simplifying fractions

Write $\frac{3}{24}$ in its simplest form.

Divide the top and bottom by 3
$\frac{3}{24} = \frac{1}{8}$

Answer: $\mathbf{\frac{1}{8}}$

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8 Sampling

Aisha wants to find out whether people in a town want a new library.
Aisha asks people as they leave the library.
Give a reason why this sample may be biased.

People at the library are more likely to want a library

Answer: People at the library are more likely to want a library

9 Coordinates

(a) Write down the coordinates of point F.
(b) Which point has coordinates (−1, −3)?

(a) F is right 1 and up 3
(b) Go left 1 and down 3: this is point G

Answer: (a) (1, 3) (b) G

10 Circles with an approximate pi

A circle has a radius of 4 cm.
Use $\pi = 3$ to work out an estimate for its area.

Area = $\pi \times$ radius $\times$ radius
$3 \times 4 \times 4 = 3 \times 16 = 48$

Answer: 48 cm^2