Day 204 **C Tier 10-a-day: Model Solutions**

1 Length conversions

Change
(a) 0.5 m into cm
(b) 450 cm into m

(a) 1 m = 100 cm, so multiply by 100: 0.5 × 100 = 50
(b) 100 cm = 1 m, so divide by 100: 450 ÷ 100 = 4.5
Answer: (a) 50 cm (b) 4.5 m

2 Missing numbers

Find the missing number.
6 + ? = 11

11 − 6 = 5
Answer: 5

3 Rounding

Write 891 to the nearest ten.

Look at the units digit, which is 1
1 is less than 5, so round down
Answer: 890

4 Line graphs

The line graph shows the depth of water in a tank at different times.
Write down the depth of water at 9 am.

Go up from 9 am to the line, then across to the scale: 18 cm
Answer: 18 cm

5 Solving equations

Solve $\frac{n}{3} = 3$

$\frac{n}{3}$ means n ÷ 3, so multiply both sides by 3
n = 3 × 3 = 9
Answer: n = 9

6 Bearings from compass points

Bearings are measured clockwise from north.
Write down the three-figure bearing of
(a) south
(b) north

North is 000°. Each compass point to the right (clockwise) is a further 45°.
(a) south is 180°
(b) north is 000°
Answer: (a) 180° (b) 000°

7 Substitution

Work out the value of n + 7 when n = −2.

−2 + 7 = 5
Answer: 5

8 Venn diagrams

Some students were asked whether they like pizza or pasta.
The Venn diagram shows the results.
How many students were asked altogether?

Add all four numbers: 7 + 3 + 3 + 5 = 18
Answer: 18

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9 24-hour clock

Write 7:50 am using the 24-hour clock.

am times stay the same, with a zero in front if needed
07:50
Answer: 07:50

10 Finish time

A swimming session starts at 5:15 pm.
It lasts 1 hour 55 minutes.
At what time does it end?

Add the hours: 5:15 pm + 1 hour = 6:15 pm
Add the minutes: 6:15 pm + 55 minutes = 7:10 pm
Answer: 7:10 pm