Day 182 **C Tier 10-a-day: Model Solutions**

1 Halves, quarters and thirds

Write down half of 64.

64 ÷ 2 = 32

Answer: 32

2 Missing numbers

Find the missing number.

6 + ? = 16

16 − 6 = 10

Answer: 10

3 Perimeter of a rectangle

A rectangular photo frame is 5 cm long and 4 cm wide.

Work out the perimeter.

Add up all four sides

5 + 4 + 5 + 4 = 18

Answer: 18 cm

4 Currency conversion

£1 = $1.50

Change $90 into pounds.

90 ÷ 1.50 = 60

Answer: £60

5 Rounding money

Round £2.62 to the nearest pound.

Look at the pence: 62 p

50p or more, so round up

Answer: £3

6 Completing a table

The table shows the ways 40 students travel to school.

Work out the number of students for Bike.

Add the known numbers: 16 + 9 + 2 = 27

40 − 27 = 13

Answer: 13

7 Timetables

The table shows the times of two buses.

How many minutes does Bus 2 take to go from Park Road to Library?

09:25 − 09:10

Count on from 09:10 to 09:25

Answer: 15 minutes

8 Substitution

d = 3 and m = 9

Work out the value of

(a) d + 3m

(b) d + m

(a) 3 + 3 × 9 = 30

(b) 3 + 9 = 12

Answer: (a) 30 (b) 12

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9 Sampling

Tom wants to find out how many students at a school like swimming.
Tom asks only students in the school swimming club.
Give a reason why this sample may be biased.

Swimming club members are more likely to like swimming than other students
Answer: Swimming club members are more likely to like swimming than other students

10 Circles with an approximate pi

A circle has a diameter of 19 cm.
Use $\pi = 3$ to work out an estimate for its circumference.

Circumference = $\pi \times$ diameter
$3 \times 19 = 57$
Answer: 57 cm