Day 154 **C Tier 10-a-day: Model Solutions**

1 Money: wages

Max earns £10 for each hour of work.
Max works for 5 hours.
How much does Max earn?

£10 × 5 = £50
Answer: £50

2 Perimeter and area of a square

A square tile has sides of length 6 mm.
(a) Work out its perimeter.
(b) Work out its area.

(a) A square has 4 equal sides: 4 × 6 = 24
(b) Area = side × side: 6 × 6 = 36
Answer: (a) 24 mm (b) 36 mm^2

3 Ordering numbers

Write these numbers in order, starting with the smallest.
715, 524, 947, 503

Compare the hundreds digits first, then the tens
503, 524, 715, 947
Answer: 503, 524, 715, 947

4 Average speed

A car travels 72 miles in 6 hours.
Work out its average speed.

Speed = distance ÷ time
72 ÷ 6 = 12
Answer: 12 mph

5 Tables of values

The table shows some values of x and y.
(a) Write down the value of y when x = 2.
(b) Write down the value of x when y = 16.

(a) Find 2 in the top row; the number underneath is 7
(b) Find 16 in the bottom row; the number above is 5
Answer: (a) 7 (b) 5

6 Money: saving

Jack wants to buy a game for £48.
Jack has saved £33.
How much more does Jack need?

£48 − £33 = £15
Answer: £15

7 Reading a pie chart

64 students were asked about their ways of travelling to school.
The pie chart shows the results.
How many students chose Bus?

The Bus sector is a quarter of the pie chart
64 ÷ 4 = 16
Answer: 16

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8 Inequalities

n is a whole number.
Write down all the possible values of n when
$2 \leq n \leq 7$

n is at least 2 and at most 7
The smallest whole number is 2 and the largest is 7
Answer: 2, 3, 4, 5, 6, 7

9 Venn diagrams

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

Add all four numbers: 6 + 7 + 11 + 8 = 32
Answer: 32

10 Perimeter from area

A rectangular room has an area of 55 m^2.
Its width is 5 m.
Work out the perimeter of the room.

Length = area ÷ width = 55 ÷ 5 = 11
Perimeter = 11 + 5 + 11 + 5 = 32
Answer: 32 m