Day 4 **C Tier 10-a-day: Model Solutions**

1 Even and odd numbers

Write down all the odd numbers in this list.
33, 84, 21, 35, 55

Odd numbers end in 1, 3, 5, 7 or 9
Answer: 33, 21, 35, 55

2 Which expression

Which of these means n multiplied by itself?

n^2, 8n, $\frac{n}{8}$, n + 8

n × n is written n^2
Answer: n^2

3 Pictograms

The pictogram shows the number of books borrowed from a library.
How many books on Fri?

Fri has 1 symbols
1 × 10 = 10
Answer: 10

4 Formulae in words

Here is a rule to work out the cost of hiring a bike.
Cost (£) = 9 × number of hours + 20
Work out the cost of hiring a bike for 3 hours.

Cost (£) = 9 × 3 + 20
= 27 + 20 = 47
Answer: £47

5 Scatter graphs

Here is a scatter graph of test mark against hours of revision.
Describe the correlation.

As hours of revision increases, test mark also increases
This is positive correlation
Answer: Positive correlation

6 Powers

Work out 5^2.

$5^2 = 5 \times 5$
= 25
Answer: 25

7 Expected number

The probability that a seed grows is 0.5.
Mia plants 60 seeds.
How many seeds would you expect to grow?

Expected number = probability × number of trials
0.5 × 60 = 30
Answer: 30

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8 Enlargement

A rectangle is 5 cm long and 5 cm wide.
It is enlarged by scale factor 4.
Write down the length and the width of the enlarged rectangle.

Multiply each length by 4
5 × 4 = 20
5 × 4 = 20
Answer: length 20 cm, width 20 cm

9 Timetables

The table shows the times of two buses.
Jo gets on Bus 1 at School.
What time does Jo get to Hospital?

Read along the row for Hospital in the Bus 1 column
Answer: 10:45

10 Naming quadrilaterals

Write down the name of the quadrilateral that has four equal sides and four lines of symmetry.

The quadrilateral with four equal sides and four lines of symmetry is a square
Answer: square