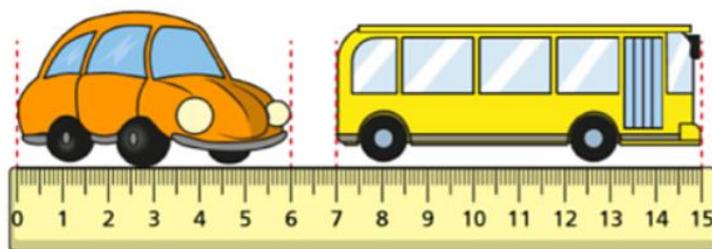# Family Challenge
Friday 26th June
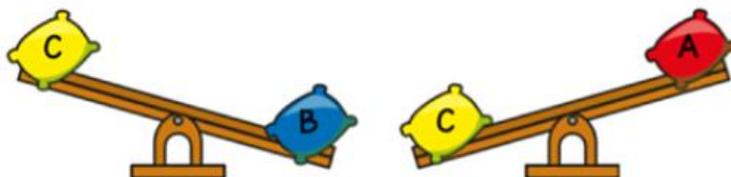
Challenge 1

Here is a toy car and bus.

How much longer is the bus than the car?

Challenge 2

Here are 3 beanbags.

They are placed on a seesaw.

Which beanbag is the heaviest?

White Rose Maths

Challenge 3

Amir is dividing a 2-digit number by 3.

His answer is a whole number.

$$2\boxed{} \div 3$$

What could the missing digit be?

Challenge 4
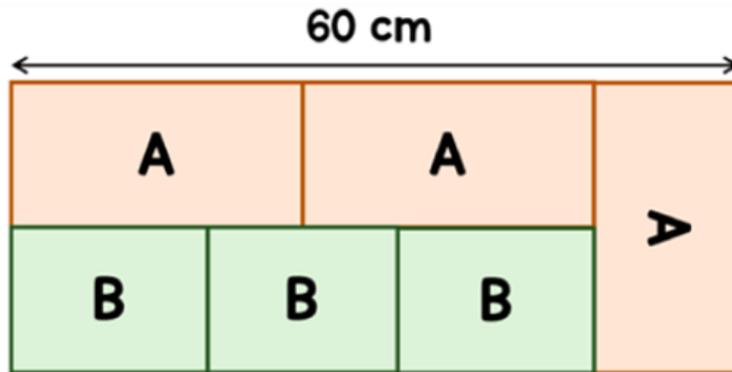
Lewis makes a repeating pattern with some shapes.

Lewis repeats the pattern.

What is the shape in the **50ᵗʰ** position?

Challenge 5

A large rectangle is made up of smaller rectangles, labelled A and B.
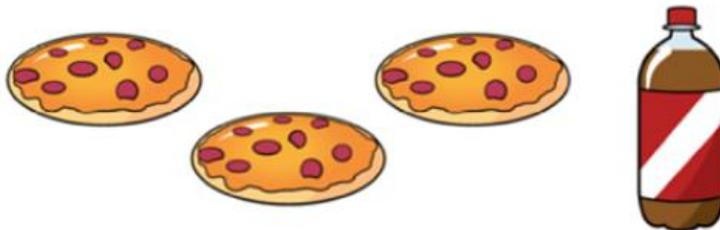

60 cm

The length of A is double the width of A.

Find the area of one of the rectangles labelled B.

Challenge 6

Mina buys 3 pizzas and a bottle of cola.

A pizza costs £3.20 more than a bottle of cola.

The total cost of the items is £19.40

How much does a pizza cost?

Challenge 7

A barrel is half full with water.

12 litres of water are poured out.

The barrel is now $\frac{1}{5}$ full.

How much water does the barrel hold when full?

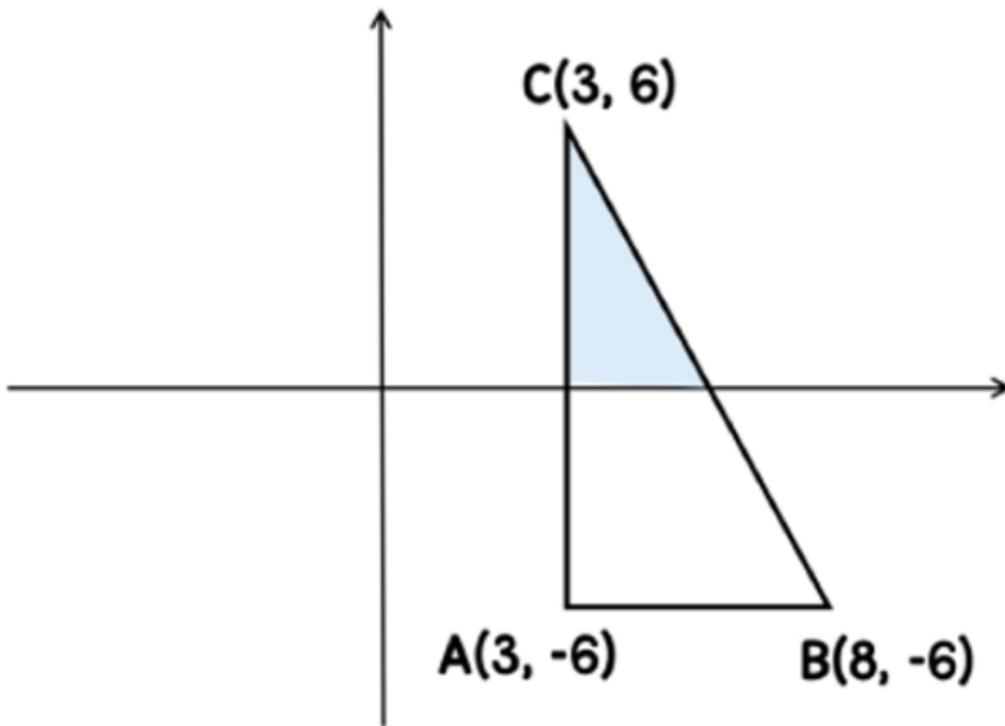## Challenge 8

Work out the following without a calculator.

$$\frac{10 + 20 + 40 + 80 + 160 + 320 + 640}{2 + 4 + 8 + 16 + 32 + 64 + 128}$$

Explain your method.

Challenge 9

ABC is a right-angled triangle.

Part of the triangle has been shaded.

What fraction of the triangle is shaded?

Challenge 10

In a test Freya scores 25% more marks than Eva.

Eva scores 50% more marks than Dominic.

In total the three children score 140 marks.

The test is out of 80.

What percentage does Dominic score in the test?

As a rough guide of difficulty level:

- **Challenge 1 and 2** are suitable for ages 5 to 7.

- **Challenge 3 to 6** are suitable for ages 7 to 11.

- **Challenge 7 to 10** are suitable for ages 11 to 15.

We want everyone to get involved with challenge day, so work together to solve as many as you can and share your solutions!