Area

Tuesday 16th

Measurement – Area – Lesson 4

LO: To be able to calculate the area of a compound shape

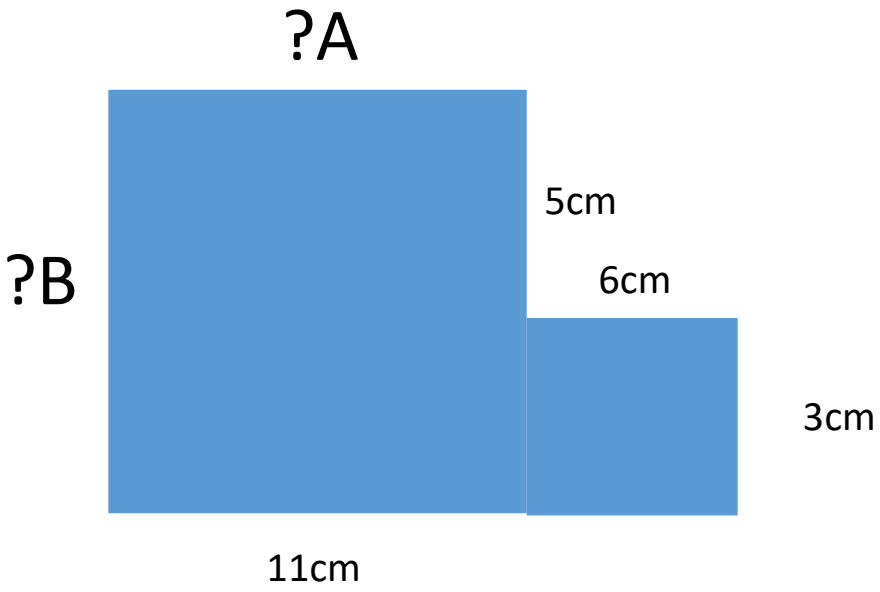
Yesterday, we began to calculate the area of compound rectilinear shapes.

The shapes we looked at were fairly straightforward and we had all of the measurements we needed to calculate the area.

Today, we are going to look at compound rectilinear shapes which have missing measurements. Calculating these measurements is essential to finding the area.

In this compound rectilinear shape you will notice that a few of the measurements are missing and we need these measurement to be able to calculate the area.

To find these missing measurements we need to think back to a previous lesson where we learnt how to calculate missing perimeter lengths.



Here we see that two lengths are missing.

We need to use the information we already have to find the missing values.

We use our previous knowledge that opposite sides have a total equal length.

So,

?A = 11 – 6 = 5cm
?B = 3 + 5 = 8cm

The completed shape is on the next page.

We have now calculated the missing values and we can now find the area:

$8 \times 5 = 40cm^2$
$6 \times 3 = 18cm^2$
$40 + 18 = 58cm^2$