

## Finding the Area by counting squares

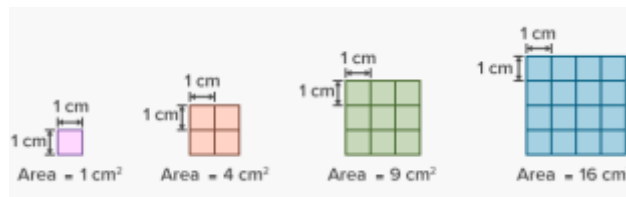
Area is the space inside a 2D (flat) shape. Area is worked out by splitting a shape into squares inside it.

Watch the video to help you to understand area more fully:

[youtube.com/watch?v= uKKl8R1xBM](https://www.youtube.com/watch?v=uKKl8R1xBM)

Can you remember how we write squared?

What small symbol is used?



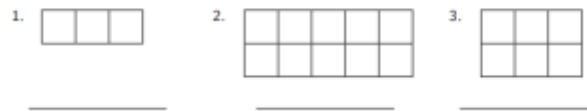
1 - A small number 2 is used to show the area of a shape after the measurement.

The small 2 shows it is a 2d shape.

To start with, we will look at finding the area by counting squares. This is to help us remember that the area is calculated in squares, for every shape.

Can you find the area of these shapes by counting their squares?

What is the area of these shapes in  $\text{cm}^2$ ?



2 - Find the areas of these 3 shapes by counting the squares.

Sometimes it can become more difficult if the shape is not rectilinear (shapes without straight lines). This is because the shape may go across the square unevenly. When this is the case you need to count the full squares, then try to make up full squares roughly (like an estimate) to calculate the area for these irregular shapes.

Watch this video to help you understand how to calculate the area of irregular shapes using the method of counting squares:

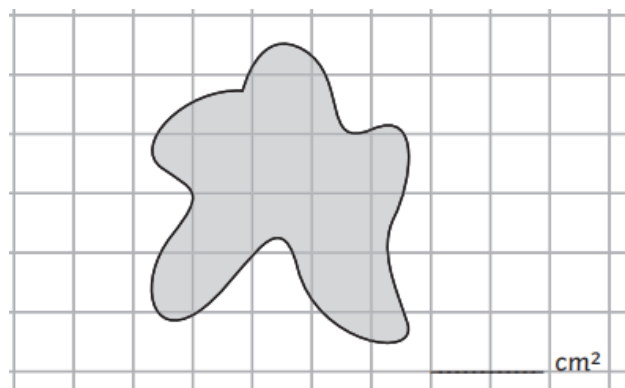
<https://www.youtube.com/watch?v=JoDDv3xqV7U>

So to calculate the area of an irregular shape you need to:

1. Count the full squares
2. Count the part squares, fitting 2 or 3 parts together to roughly create a full square.

The answer to questions with irregular shapes will be an estimate as you will need to think about which squares could make a whole *if* you put them together.

Notice that the area is still calculated using squares. It is important to remember that area is always calculated in squares, even when you cannot see the squares there.



3 - Have a go at working out the area of this irregular shape:

Now that you have learnt more about calculating the area of shapes by counting squares, look in your packs and complete the worksheets on area. You will notice there are more worksheets for today's lesson than usual. This is because the shapes take up more room on the paper, but this doesn't mean that there is lots more work than usual. Don't panic!