

The blob

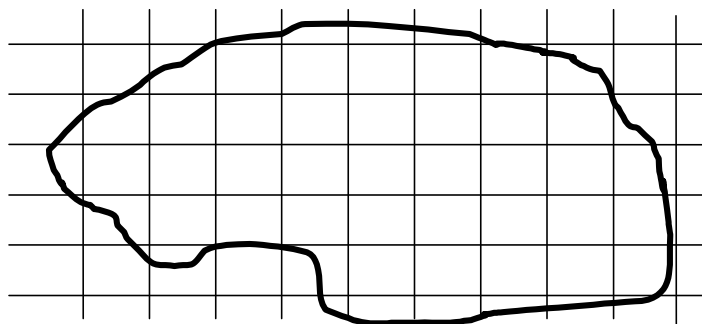
Shapes in the planned and designed world tend to be rectangles, circles, triangles, trapeziums and so on. In the natural world, the shapes you see tend to be complicated, with folds and no straight lines.

You can find a good estimate of the area of an irregular (natural?) shape using two methods

- Copying the shape onto graph paper and counting the squares
- Slicing the shape up into strips, and making each strip into a trapezium

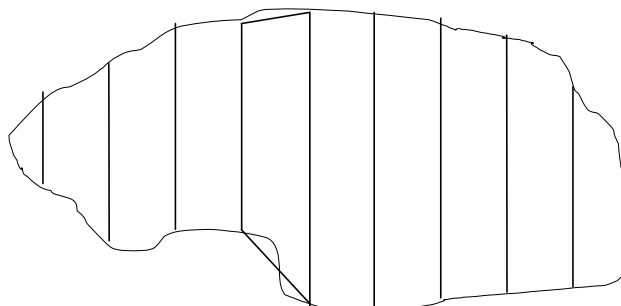
The second method means a lot less counting but some calculations.

Counting squares



Just copy the blob onto squared paper and count squares inside the shape. If you are clever, you can minimise the counting by using rectangles. On the edge of the blob, you have to decide if more than half the square is inside the shape (in which case you count the square). If you want an accurate result - just use smaller squares

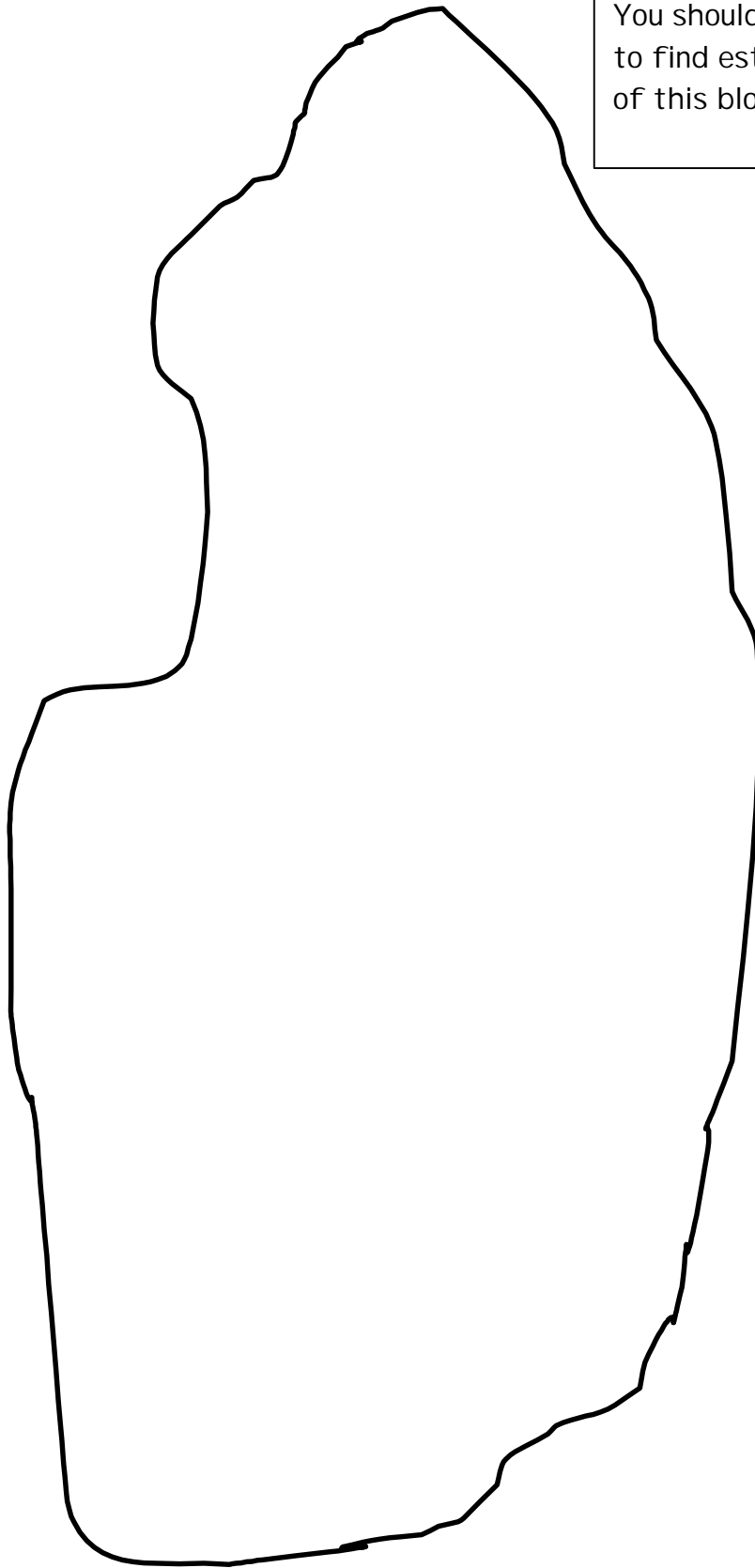
Trapezium method



Slice the shape up into equal slices. Make each slice a trapezium and calculate the area of the trapezium. Your answer gets more accurate as you take thinner slices - but watch the measurement accuracy.

The blob - investigation

You should use both methods to find estimates of the area of this blob.



Trace the blob onto graph paper for the counting squares method.

Also use graph paper for the trapezium method - why is 2cm a clever spacing to use?