KS3 Geography. Maps and navigation.

Using maps to calculate distance.

JOE CROWLEY: Because maps are drawn to scale they're perfect for working out the exact distance between two features on the landscape. And there's a number of ways of doing this.

The first thing you need to establish is the scale of the map. The typical maps used by walkers are the Ordnance Survey Explorer maps. These are to the scale of 1:25 000, so every measurement on the ground is exactly 25 000 times larger than on the map.

You'll find the scale noted on the front of the map, with more details on the bottom of the map itself. An easy and very quick way of gauging distance is to look at how many blue lines your route covers. On a 1:25 000 scale map each of these blue lines - called *eastings* and *northings* - are a map equivalent of a kilometre apart. Count how many lines your route covers - and whether it's in a straight line or not - and you'll be able to make a rough estimate of the distance you'll be travelling.

However, you may want to be more precise. If a path is straight, you can measure it simply using a ruler. And on this map one centimetre is 250 metres, therefore four centimetres is a kilometre. And if you want to know how long that is in miles look at the key at the bottom of your map where you'll find details of how to work out the relevant figure.

But of course, in real life paths are rarely straight. So you can use a piece of string to trace your route...and then simply measure that length.