

**What is Ordnance Survey?** They help governments make smarter decisions that ensure our safety and security, they show businesses how to gain a location data edge and they help everyone experience the benefits of the world outside.

### Landranger Maps

1:50 000 scale means 2cm on the map means 1km on the ground.

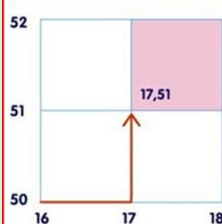
### Explorer Maps

1:25 000 scale means 4cm on the map means 1km on the ground.

It covers a smaller area, but shows more detail e.g. footpaths.

## Map Skills

### Grid References

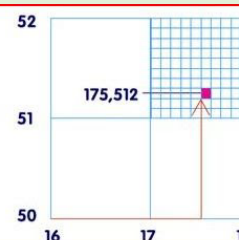


#### **Four-figure grid references**

Each square has a grid reference which you get by putting together the numbers of the easting and northing that cross in its bottom left hand corner.

#### **Six-figure grid references**

In your head, you should be able to divide all sides of the square into ten equal sections. By doing this, you can pinpoint locations within the square – these are called six-figure grid references.



### Contour Lines and Spot Heights

On a map, height is shown in metres above sea level. Spot heights show the height of a particular point on the map.

- Contour lines are added to a map to show height and gradient. On OS maps they are shown as thin orange or brown lines, some of which have the land height written on them. The lines join areas of equal height:
- Contour lines that are close together show land that increases or decreases in height quickly. This is steep land.
- Contour lines that are far apart show land that increases or decreases in height slowly. This land is gently sloping.

### Thematic Maps

Choropleth maps show interval data (data that is linked, rather than data from different categories) as colours. They are shaded in using one colour, where the darker shades represent high numbers and the lighter shades represent low numbers. A choropleth map needs a key to explain what the different shades mean.

### Measures of Central Tendency

**Mean** - Add up all the numbers, then divide by how many numbers there are.

**Mode** - The mode is simply the number, which appears most often.

**Median** - The Median is the "middle" of a sorted list of numbers.

**Range** - The Range is the difference between the lowest and highest values.

### Bivariate Data

Bivariate data is usually plotted as a scattergraph. The dependent variable is plotted along the side (y axis) and the independent variable is plotted along the bottom (x axis). A scatter graph shows the relationship between two variables by the distribution of dots. The arrangement of dots can then be examined to see if there is a positive relationship (as one variable increases so does the other), a negative relationship (as one variable increases the other decreases) or no relationship (there is no recognisable pattern to the distribution of dots).