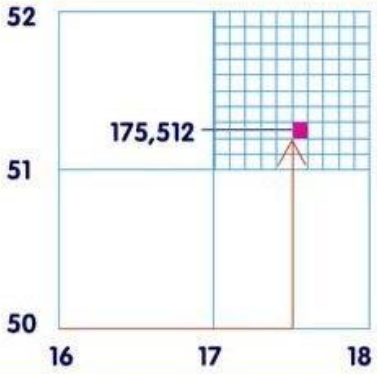
Grid references allow you to find 1Km2 areas **(4 figure references)** or pinpoint spots **(6 figure references)** on a map. When working out **grid references** you use the bottom numbers first then the side numbers second.

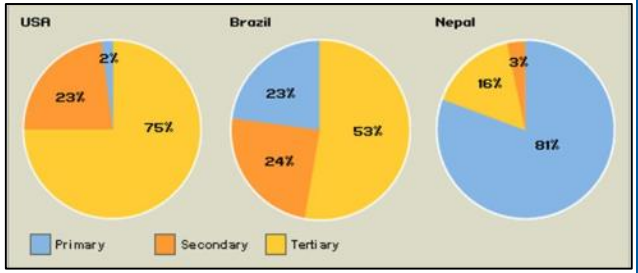
Six-figure grid references

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.

If a point is on one of the main lines e.g. 17 then the line counts as an extra 0 so becomes 170



Each segment in a **pie chart** shows you the **proportion** (percentage) of a total. All segments add up to 100% of the total. They are useful for comparing different places.



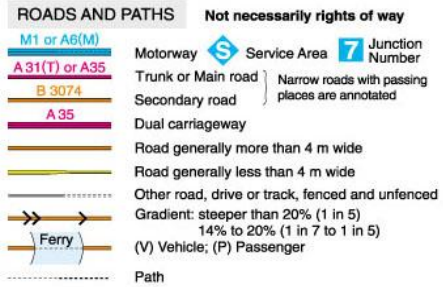
Statistics can be used to find **averages** within a set of data. This is called **central tendency**.

Mean	Median	Mode
the average of the numbers	the middle number of a sequence	the number that occurs most often
1. Add the numbers together. 2. Divide by how many numbers were added. 3+5+5+6+8+10+12=49 49 ÷ 7 = 7	The median is the middle number when numbers are arranged in order by size. For an even number of numbers, the median is the average of the two numbers in the middle. The middle number is 6.	Find the number(s) that occurs most often in the sequence (there may be more than one). There are two 5s and one of each of the other numbers.
The mean is 7.	The median is 6.	The mode is 5.

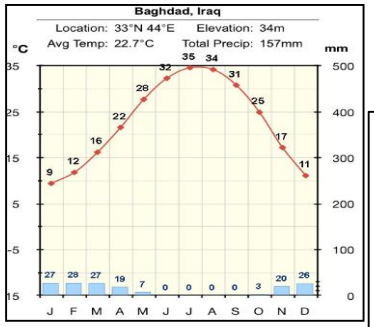
Contour lines are thin brown or orange lines found on OS maps. They allow you to work out the **height** and **relief** (shape) of the land. They are usually at **10m intervals** above sea level. Some are **numbered** so that you can work out whether a slope goes up or down.

Contour line features.

Lines close together = steep relief
Lines far apart = gentle relief
No contours = Flat land
Lines in a V shape = A V shaped valley
Lines parallel = A straight valley side
Circular lines = A hilltop

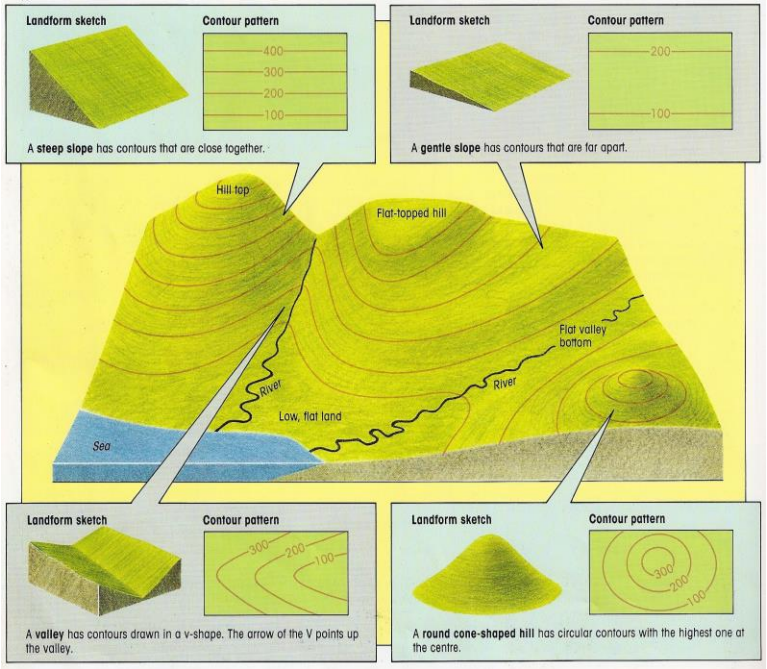


OS maps are useful for **planning routes** as they show you the types of roads, footpaths and other transport routes in an area

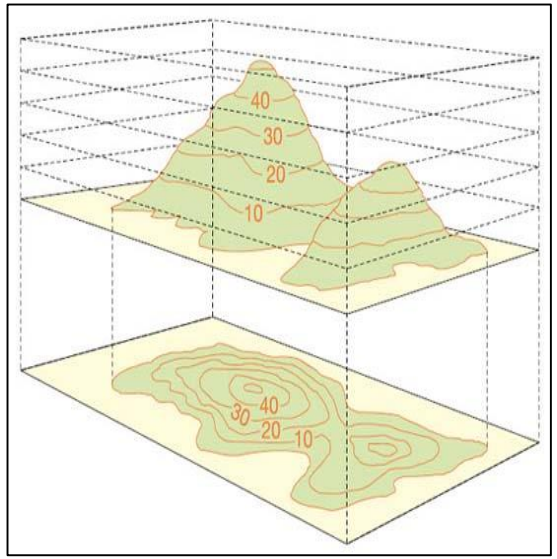


The **range of data** is the difference between the highest and lowest value. This tells you the spread of data. It is useful for describing climate over a year.

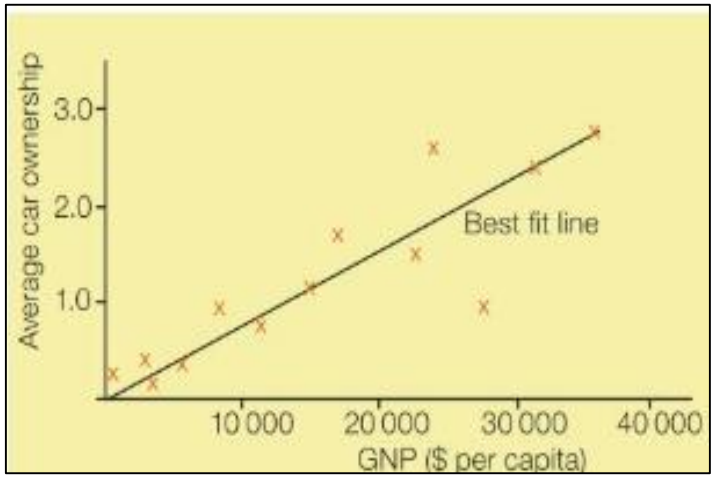
The temperature range in the climate graph is 35°C-9°C=26°C
The rainfall range is 28mm-0mm=28mm



You can use contour lines to plot the **cross profile** and **relief** of the landscape



Scatter graphs are used to show how well one set of data is **related** to another. **(correlation)** In this case, as wealth increases so does the number of cars people own. This is a **positive correlation**. A **line of best fit** is drawn through the data to show the correlation.



In a **bi-polar survey** you give different features of areas a score from +2 to -2 depending on what you observe. +2 is very positive and -2 is very negative.

Environmental Perception Survey

Date: _____ Time: _____

Location: _____

POSITIVE ASPECTS	+2	+1	0	-1	-2	NEGATIVE ASPECTS
High pedestrian count						Low pedestrian count
Low traffic count						High traffic count
Well tended and cared for buildings						Buildings in poor state of repair
Pleasant surroundings						Unpleasant surroundings
All buildings used						Boarded up or empty buildings
Little litter						Much litter