

# Knowledge Organiser – Mapping the Local Area

## What is Geography?

People who study geography are called geographers. Geographers are interested in Earth's physical features, such as mountains, deserts, rivers, and oceans. They are also interested in the ways that people affect and are affected by the natural world.

The study of Geography is split into:  
Physical                  Human

## Physical Geography:

This focuses on the study of the natural features of the world such as rivers, coasts, mountains, ecosystems, the weather and climate.

## Human Geography:

This focuses on the study of human interaction with the environment, its cultural, social and economic aspects.

## Map Skills

Maps can help us to find a place, or they provide information about a place. They show places from above and show things much smaller than in real life. There are many types of maps. You need to know how to use an OS Map and atlas'.

Research task: How many different types of map can you find? What do these look like? What do they show? How are they useful?

## The continents and oceans of the world.

Make sure you are able to label and name these



The world has seven continents and five oceans.

Europe is a **continent**. It is an area on the Earth that contains many different **countries**, including the UK. The United Kingdom of Great Britain and Northern Ireland is made up of England, Northern Ireland, Scotland and Wales. The countries are divided further into **regions**.

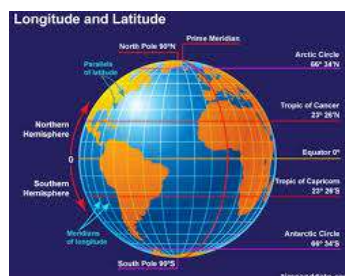
**Counties** are smaller areas. For example the counties of Staffordshire and Derbyshire



## Latitude and longitude

Lines of latitude and longitude are used to locate places accurately on the Earth's surface. Lines of latitude circle the Earth in an east-west direction. They are parallel. Lines of longitude run from the top of the Earth to the bottom. They are not parallel as lines of latitude are – they meet at a point at the north and south poles and are called meridians. They divide the Earth into segments, like an orange.

The index of an atlas gives shows where places can be found, eg Birmingham, UK - 52° north 1° west. This means that Birmingham is located at approximately latitude 52 north and longitude 1 west. Study the diagram below:



## Maps and symbols

A map is a two-dimensional drawing of an area. Maps help us to understand what places are like and how to plot routes.

Maps should have a: Title, scale, north arrow, and a key

Symbols help us to include lots of detail on maps that are drawn to scale. They include simple images, colours, letters and abbreviations. Here are some examples:

Research task: Can you find more examples of the different types of map symbol?


## Grid referencing

A grid of squares helps to locate a place. The horizontal lines crossing the map from one side to the other are called northings. They are numbered. The vertical lines crossing the map from top to bottom are called eastings as the numbers increase in an easterly direction.

### Things to remember:

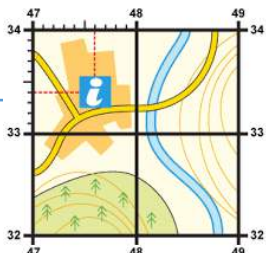
When you give a grid reference, always give the easting first... "**Along the corridor and up the stairs**".

**Four-figure grid references** can be used to pinpoint a location to within a square measuring 1 sq. km. To find the number of the square:

- Start at the left-hand side of the map and go east until you get to the easting crossing through the bottom-left-hand corner of the square you want. Write this number down.
- Move north until you get to the northing crossing the bottom-left-hand corner of the square you want. Look at the number of this grid line and add it to the two-digit number you already have. This is your four-figure grid reference. In this case, the tourist information office is in grid square 4733.

**Six-figure grid references** - Sometimes it is necessary to be even more accurate. In this case you can imagine that each grid is divided into tiny squares. The distance between one grid line and the next is divided into tenths.

- First, find the four-figure grid reference but leave a space after the first two digits. When you get to the easting at the left hand side of the grid square you want, keep moving east and estimate or measure how many tenths across your symbol lies. Write this number after the first two digits.
- Next, move north from the bottom-left-hand corner of your grid square and estimate how many tenths your symbol is from this point. Put them together to create a six figure grid reference. In this instance, the tourist information office is located at 476334

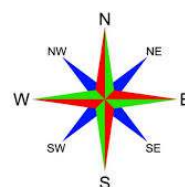
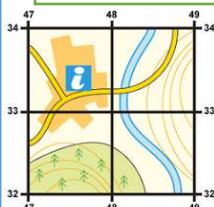


## Direction

Using a mnemonic helps to remember the order

**Naughty Elephants Squirt Water – North East South West**

The four main points of the compass are north, east, south and west. Half way between each of these there are four other points: north-east, south-east, south-west and northwest. This makes an eight-point compass. There are a further eight points between these... Remember the names of these are a mix of the two closest compass points but they always start with the main compass point, ie north, east, south or west. Ordnance Survey maps are always printed so that north is at the top of the map



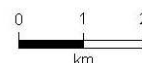
## Scale and Distance

Most maps have a scale. These help us to work out distances on maps. The scale shows how much bigger the real world is than the map.

This is given by the scale statement

**1:25,000**

(eg 1:25,000) and/or by showing a scale bar. One inch to one mile



## Height on maps

### Spot heights

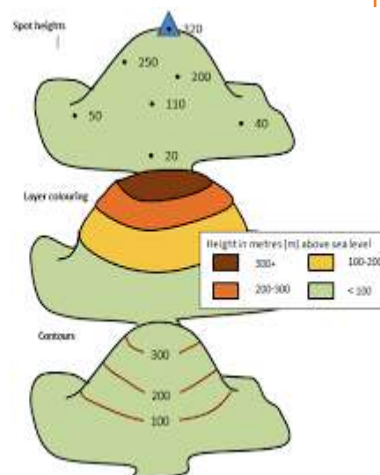
This map extract shows exact heights by a black dot with a number next to it. The number is the height above sea level in metres.

### Contours

These are lines drawn on maps that join places of the same height.

They are usually an orange or brown colour. Some contour lines have their height above or below sea level written on them. It is possible to use them to see the shape of the land – if contour lines are close together the slope is steep, if they are far apart the slope is gentle.

Contour lines are usually drawn at 10 metre intervals on a 1:50,000 scale map and at 5 metre intervals on a 1:25,000 scale map.



### Layer shading

Maps are sometimes shaded to show the height of land