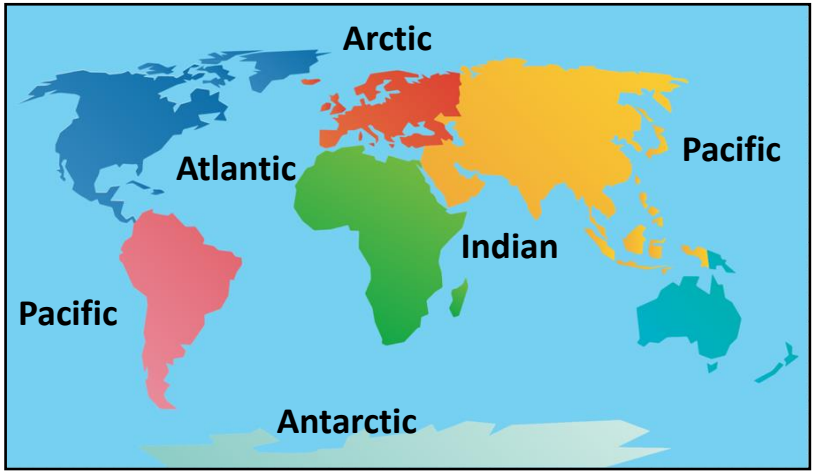
Year 7 - Topic 1 - How to explore like a Geographer?

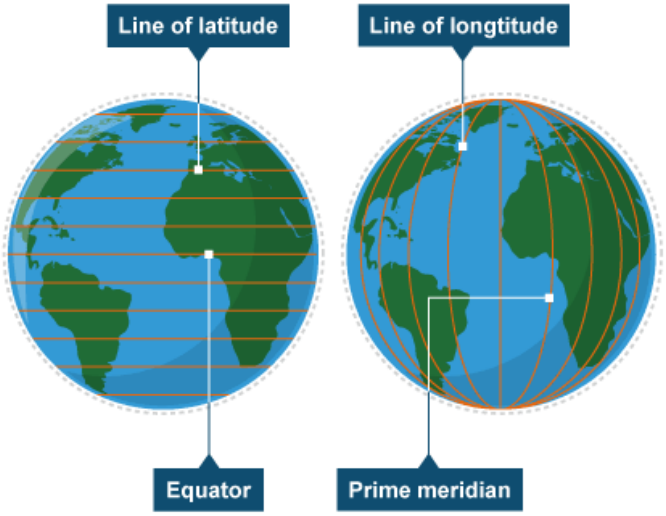
Credit: *https://www.internetgeography.net/ for resources used here*

Continents

Oceans



Using an Atlas



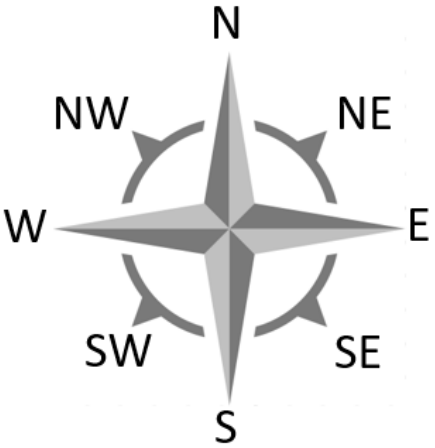
Latitudes are horizontal lines that measure distance north or south of the equator.
Longitudes are vertical lines that measure east or west of the meridian in Greenwich, England.

Together, latitude and longitude enable cartographers, geographers and others to locate points or places on the globe

- The equator is 0° latitude.
- Prime Meridian is 0° longitude
- The tropic of Cancer is 23° north of the equator
- The tropic of Capricorn is 23° south of the equator

Compass Directions

Cardinal directions are the four main points of a compass: north, south, east, and west.
Ordinal directions refer to the direction found at the point equally between each cardinal direction. Ordinal directions are: northeast (NE), southeast (SE), southwest (SW), and northwest (NW).



OS (Ordnance Survey) maps

The Ordnance Survey (OS) is the mapping agency for Great Britain. It creates up-to-date paper and **digital maps** for individuals and businesses to use. OS maps show **physical** and **human features** as symbols. This makes the maps easier to read. Each OS map has a key to show what the symbols mean.

OS map symbols can be seen in full here: https://www.ordnancesurvey.co.uk/mapzone/assets/doc/Explorer-25k-Legend-en.pdf

Scale and distance

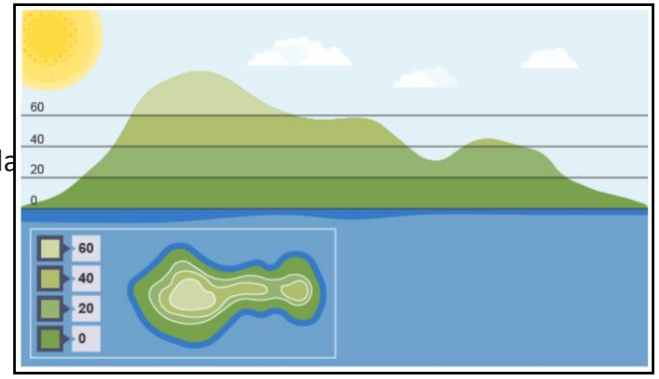
Maps show objects as being much smaller than they are in real life. The relationship between the features on the map to the real size on the ground is called the **scale**. Scale is shown as a ratio, eg 1:25,000 means that 1 cm on a map represents 25,000 cm or 250 m in real life.

Contours 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.

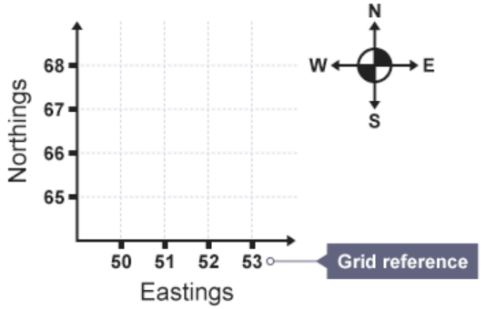
Contour lines are added to a map to show height and gradient. On OS maps they are shown as thin orange or brown lines, some of which have the land height written on them. The lines join areas of equal height:

- Contour lines that are close together show land that increases or decreases in height quickly. This is steep la
- Contour lines that are far apart show land that increases or decreases in height slowly. This land is gently sloping.



Grid references

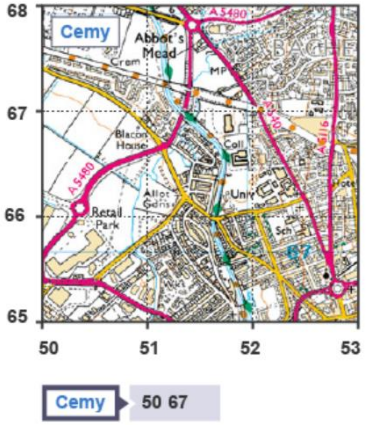
Grid references accurately locate places on a map. Every OS map has a grid, which is shown using faint blue lines. The lines across the bottom of the map are called **eastings** as they travel towards the east. The lines up the side of the map are called **northings** as they travel towards the north.



Four-figure grid references locate a place or object within a grid square. Four-figure grid references are found as follows:

- First, write the eastings number of the bottom left corner of the square (eastings are found along the bottom of the map). The number will have two digits
- Then, write the northings number of the bottom left corner of the square (northings are found along the side of the map). The number will consist of another two digits giving a total of four, hence the name four figure grid reference.

4-figure grid reference



Six-figure grid references locate a place or object within a specific part of a grid square. Six-figure grid references are found as follows:

- Write the four figure eastings number, but then add a third number to show how many tenths of the way across the grid square the place or object lies.
- Write the four figure northings number, but then add a third number to show how many tenths of the way up the grid square the place or object lies.

6-figure grid reference