

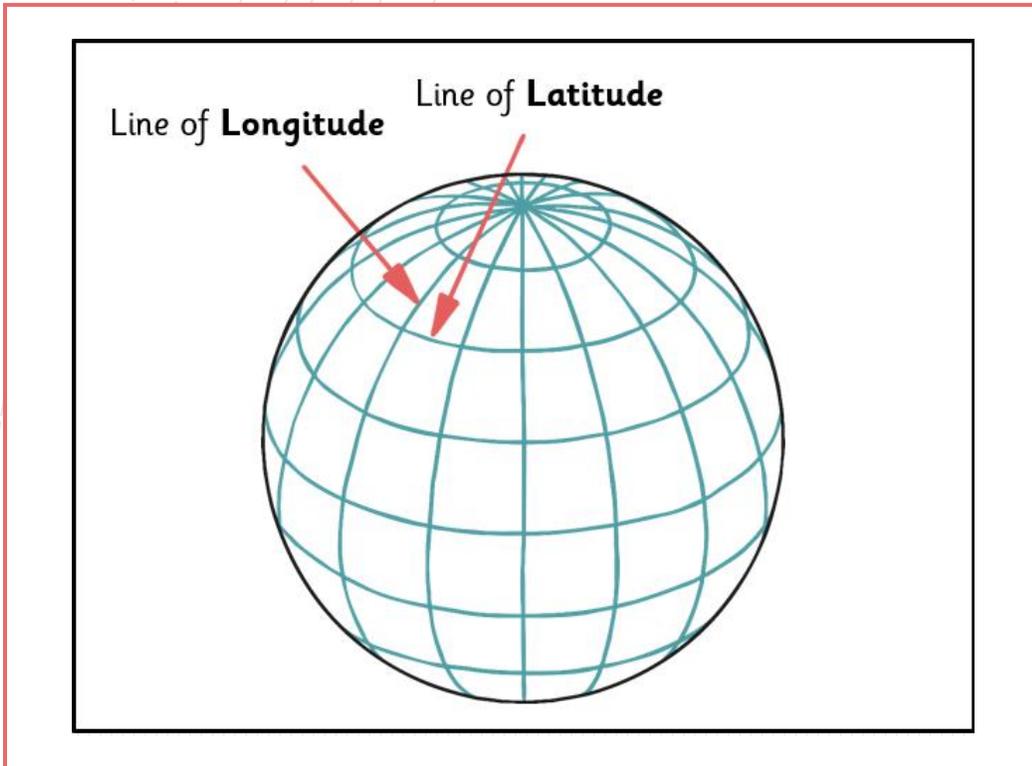
Geography

Lesson 2: WB 29.6.20

I understand lines of longitude and latitude.

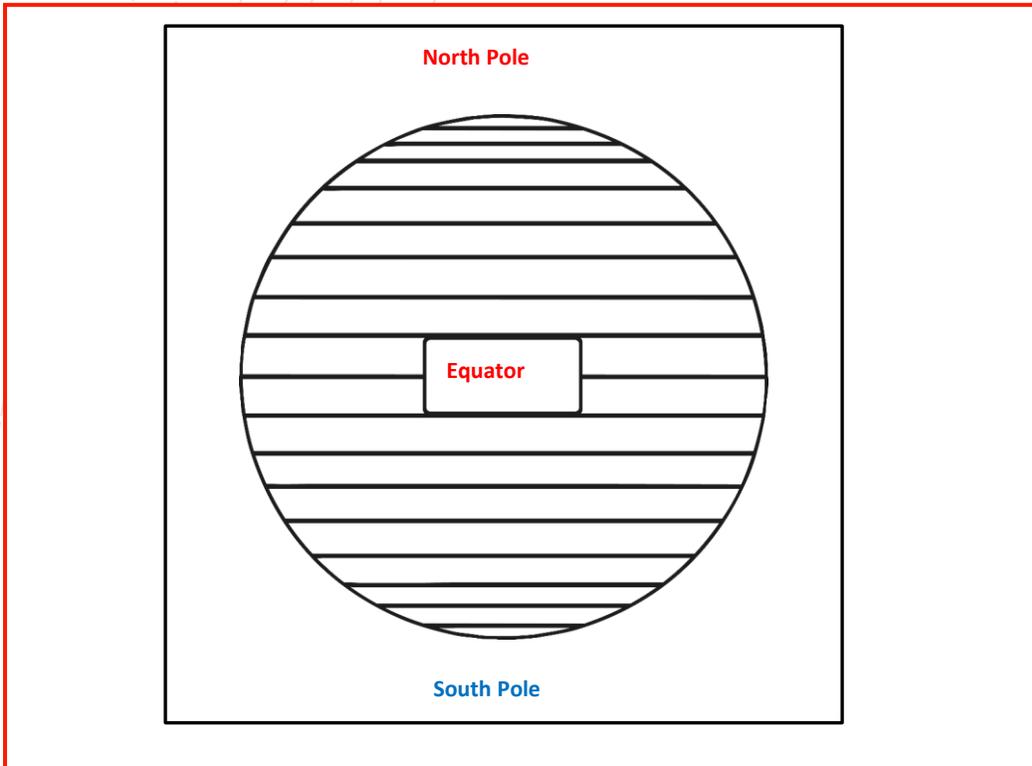
I can identify and explain the different symbols used on maps.

How is it possible to find the exact location of a place on Earth?



- **Latitude and Longitude**
- Invisible lines of latitude and longitude form a grid over the Earth.
- These lines help to create a co-ordinate to locate a place accurately
- These lin

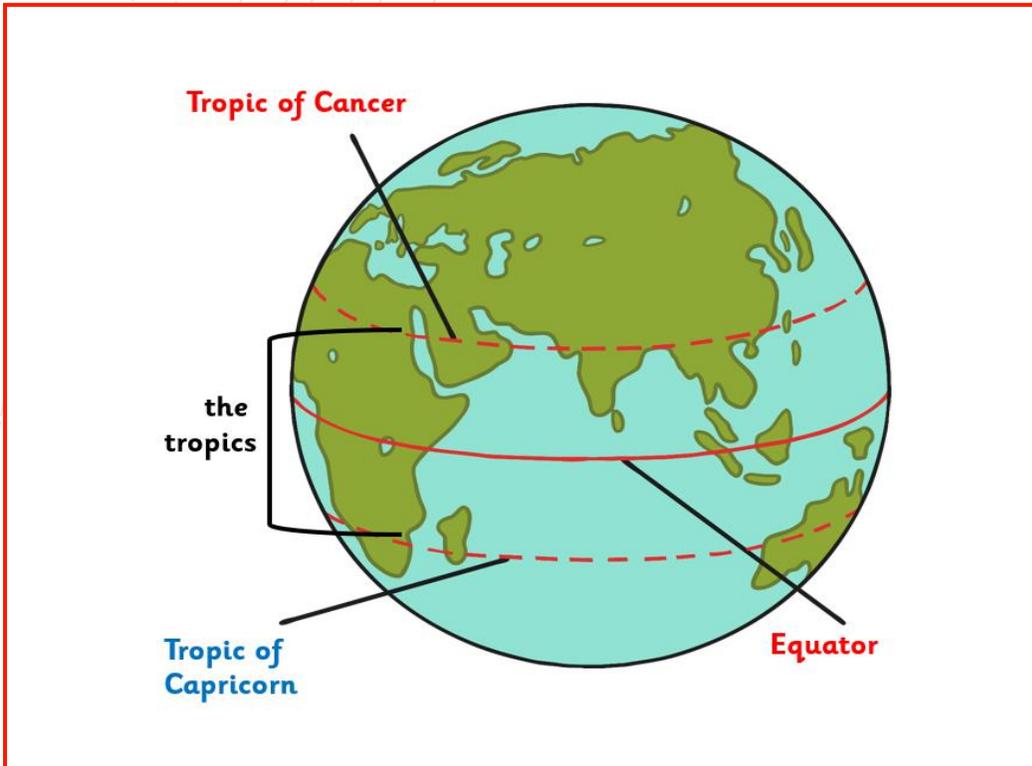
Latitude



- Lines of latitude (also known as **parallels**) circle the Earth from east to west.
- These invisible lines are all the same distance apart. One line to the next is known as 1 degree.
- Each degree of latitude is separated into smaller divisions called minutes.
- There are 60 minutes in 1 degree.
- Each minute is divided into 60 seconds (not always included within the co-ordinate).
- As you can see from the diagram, the Equator lies at 0 degrees.

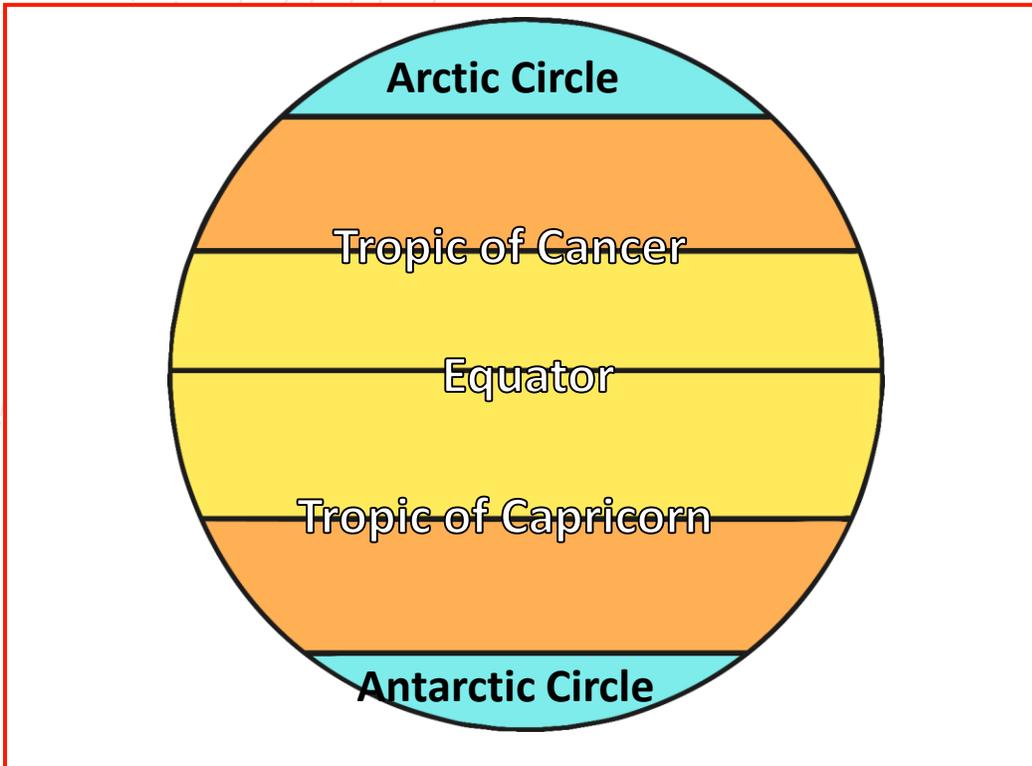
The Equator is an important line of latitude. It is an imaginary line half way between the North and South Poles. Countries near to the Equator are very hot as this is the Earth's closest point to the Sun.

Other Important Lines of Latitude



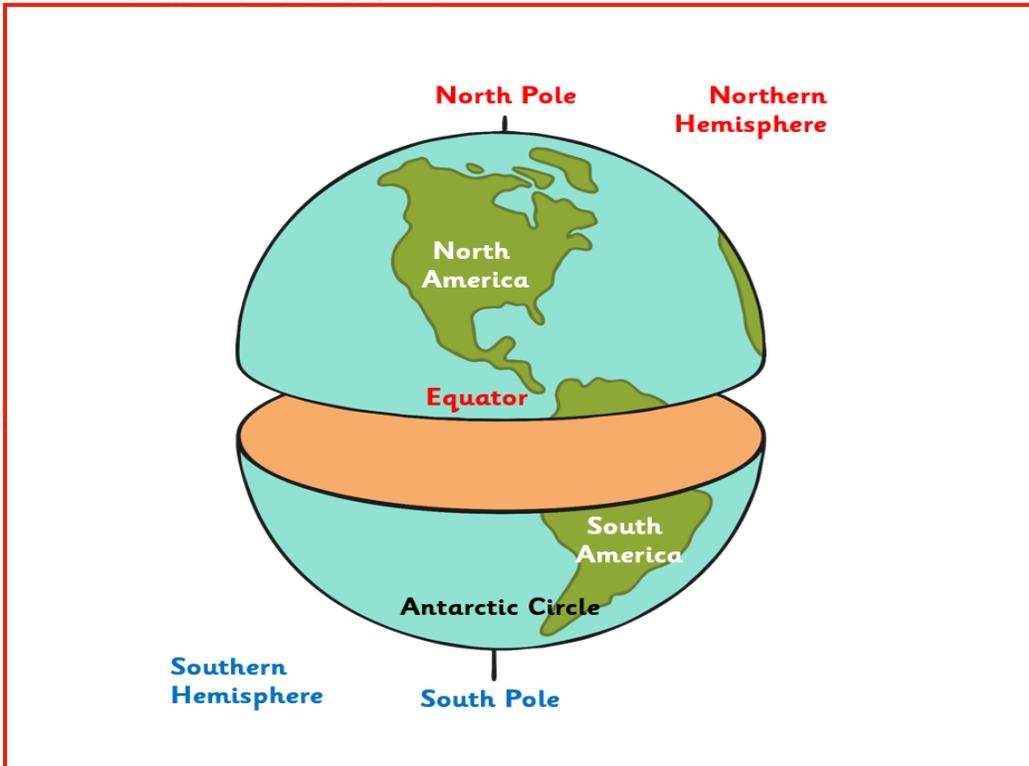
- The Tropic of Cancer lies at **23.5 degrees north** and the Tropic of Capricorn lies at **23.5 degrees south** of the Equator.
- The area of the Earth which lies between both of these lines is called **the tropics**.

Other Important Lines of Latitude



- The **Arctic Circle** lies at **66.5 degrees north** whilst the **Antarctic Circle** lies at **66.5 degrees south**.
- The areas in blue and orange are those which have 4 distinct seasons.

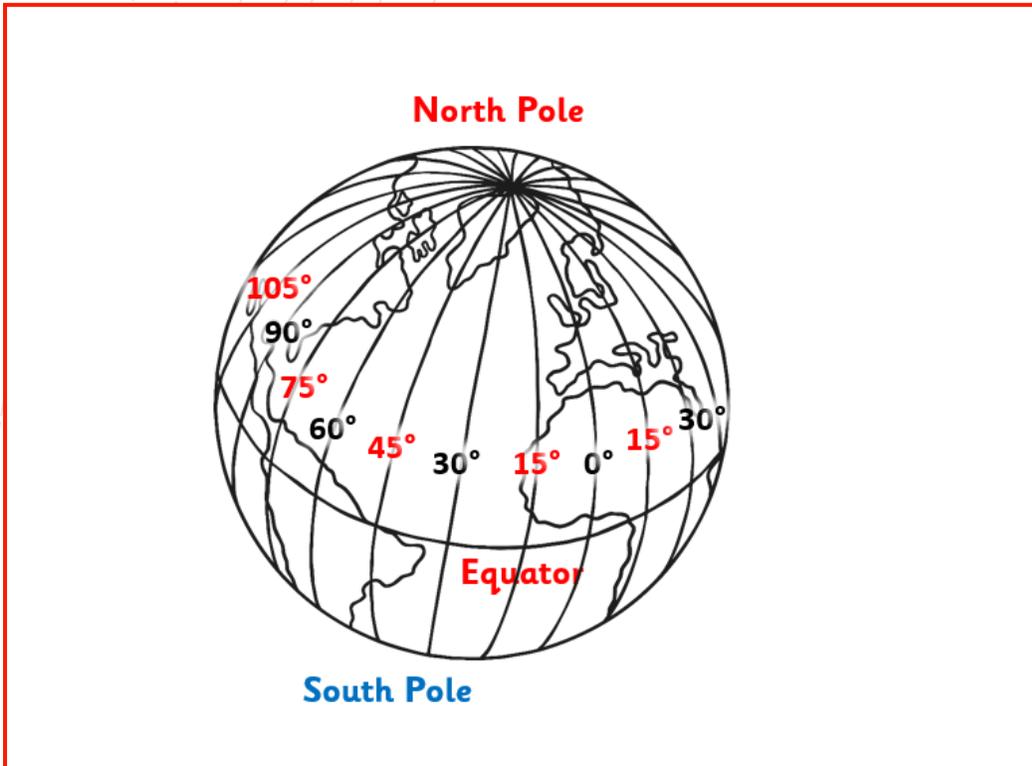
Imagine the Earth cut in half...



- The **Northern Hemisphere** is anywhere north of the Equator whilst the **Southern Hemisphere** is anywhere south of the Equator.

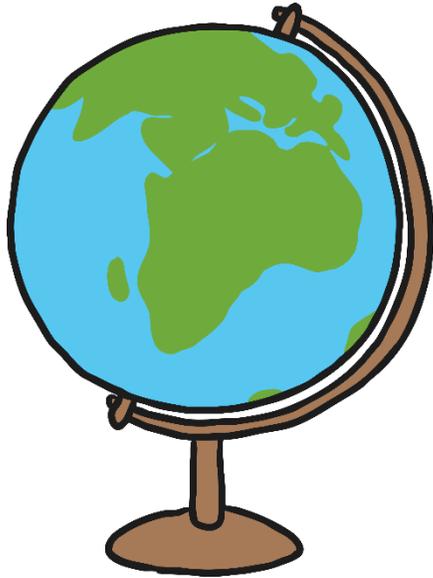
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Longitude



- These are the lines which run north and south and are known as lines of longitude or meridians of longitude. These lines are measured in the same way as the lines of latitude.
- Lines of longitude are not equal distances (equidistant) from each other.
- The Prime Meridian or Greenwich Meridian line is a line of longitude at 0 degrees.
- It passes right through Greenwich in London.

How do we use this information to locate a place?

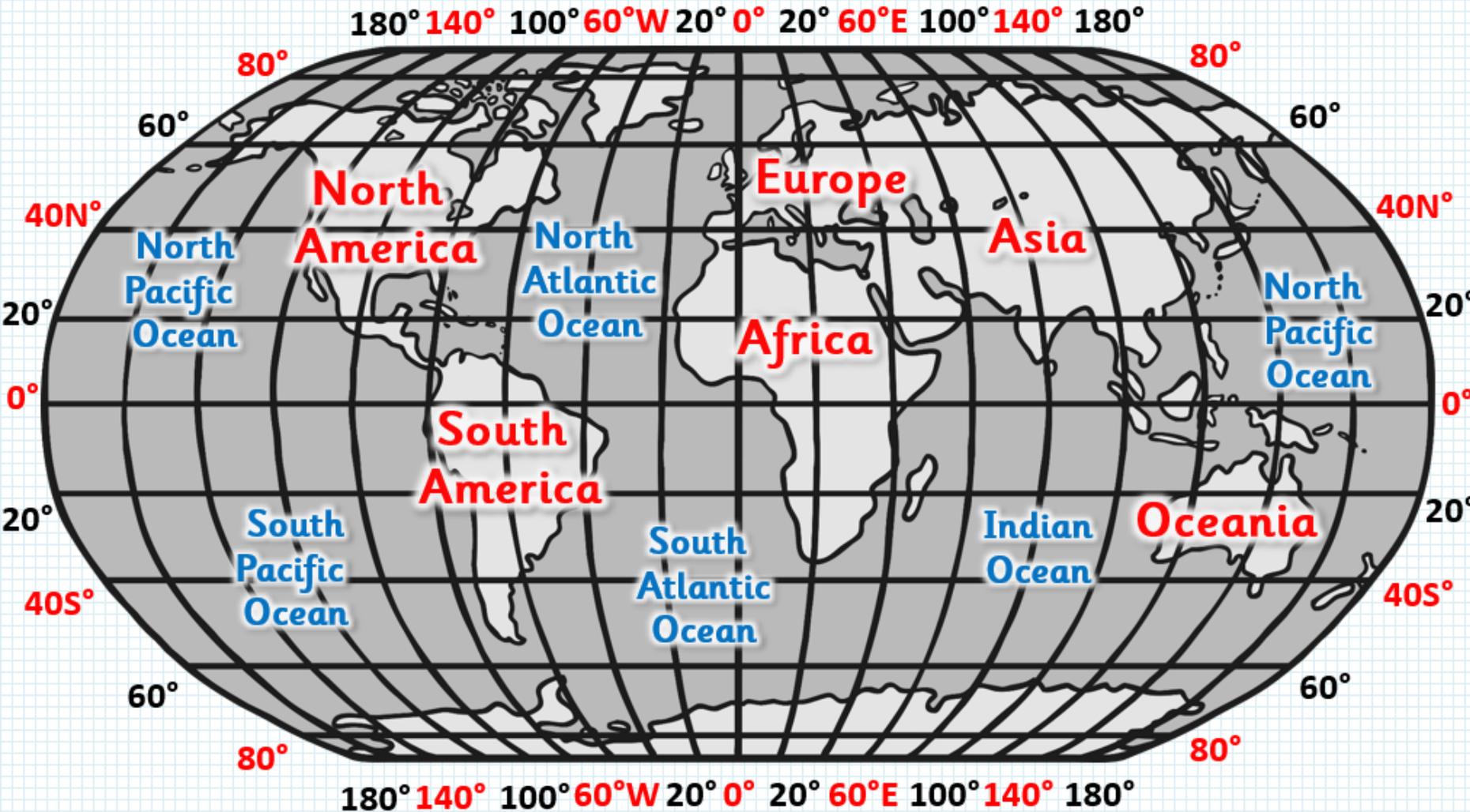


- We use numbers and letters to create a co-ordinate.
- Within the co-ordinate, the ° stands for degrees and the ' stands for minutes.
- The letters relate to north, south, east or west and are shown as capitals.
- The latitude is always given first.
- To locate Florida, USA using this principle we would say it has the following
co-ordinates: 28°00'N 82°00'W.

Look at the map on the next slide, to see if you can find these places:

- Edinburgh - 55° 57 ' N 03° 17' W
- Canberra - 35° 15' S 149° 8' E
- Yamoussoukro - 6° 49' N 5° 17' W
- Madrid - 40°25'N 03°45'W

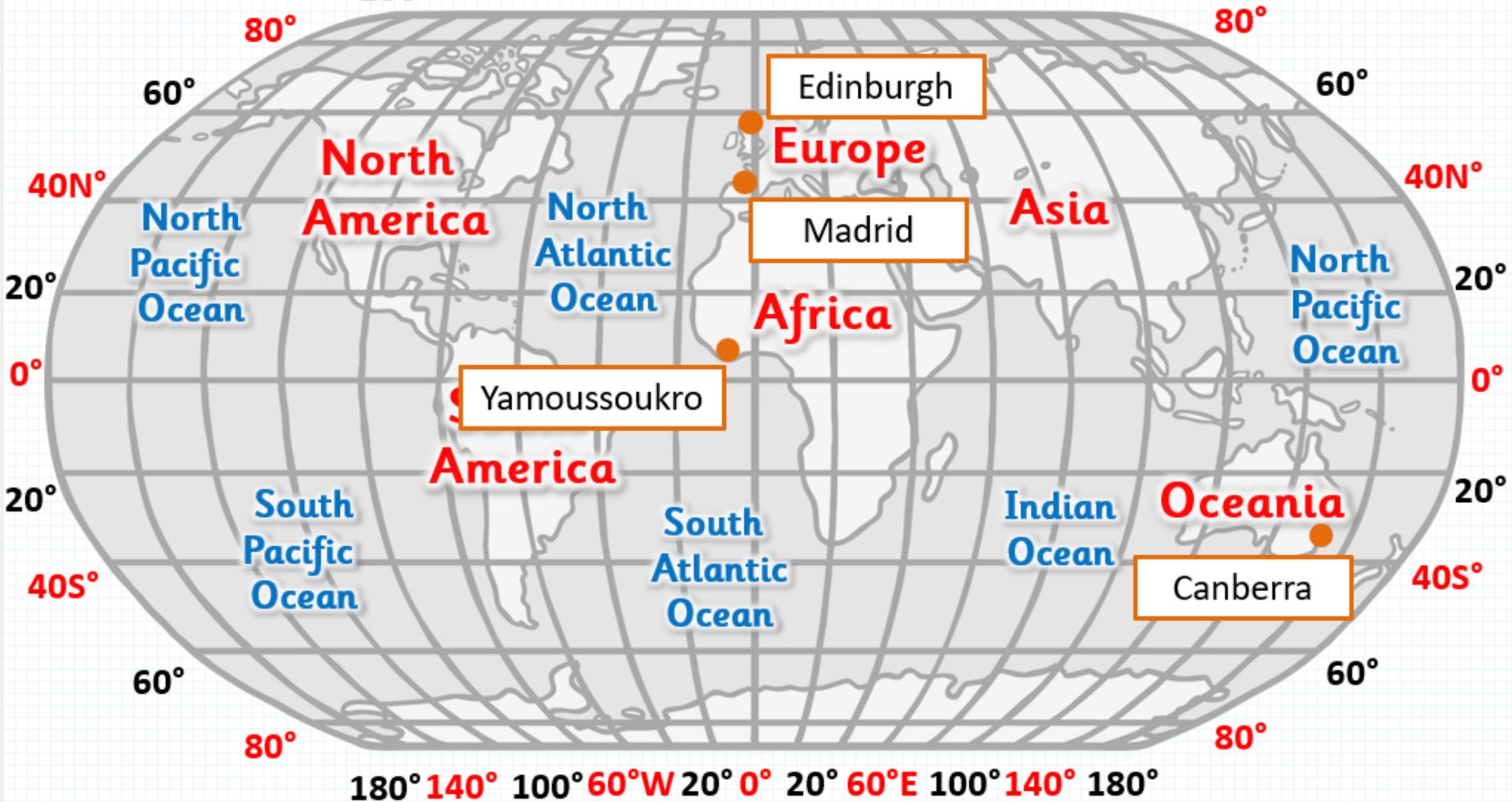
The World



- Edinburgh - 55° 57' N
03° 17' W
- Canberra - 35° 15' S
149° 8' E
- Yamoussoukro - 6° 49'
N 5° 17' W
- Madrid - 40°25'N
03°45'W

The World Answers

180° 140° 100° 60°W 20° 0° 20° 60°E 100° 140° 180°



- How did you do?

Using Latitude and Longitude to Locate Places

- Satellite Navigation systems, or 'Sat Navs' as they are sometimes called, allow you to input latitude and longitude co-ordinates instead of an address.
- These co-ordinates will get you to your destination just as easily.



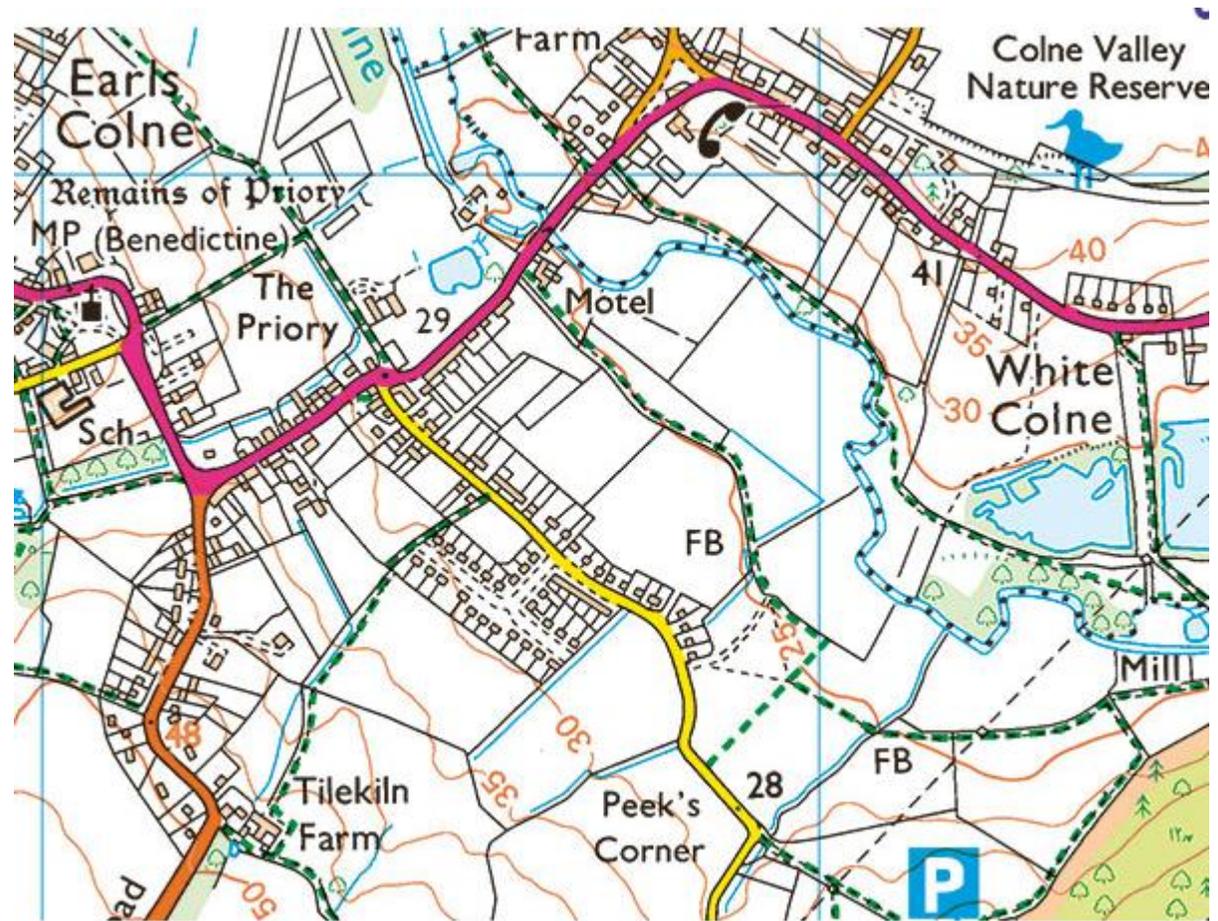
What are Ordnance Survey Maps?

Ordnance Survey maps were first made for the military in the 1700s, but it wasn't until the early 20th century that they started work on the maps we might recognise today.



These maps were all drawn and labelled by hand... can you imagine the numbers of people, and the time that would take... never mind how much paper!

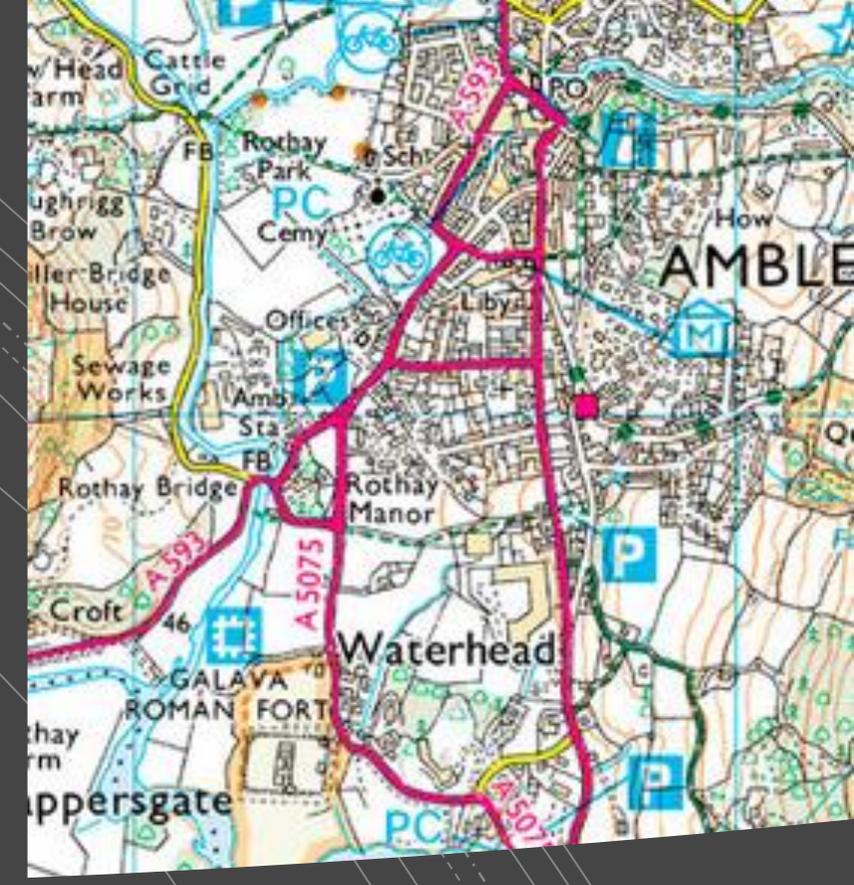
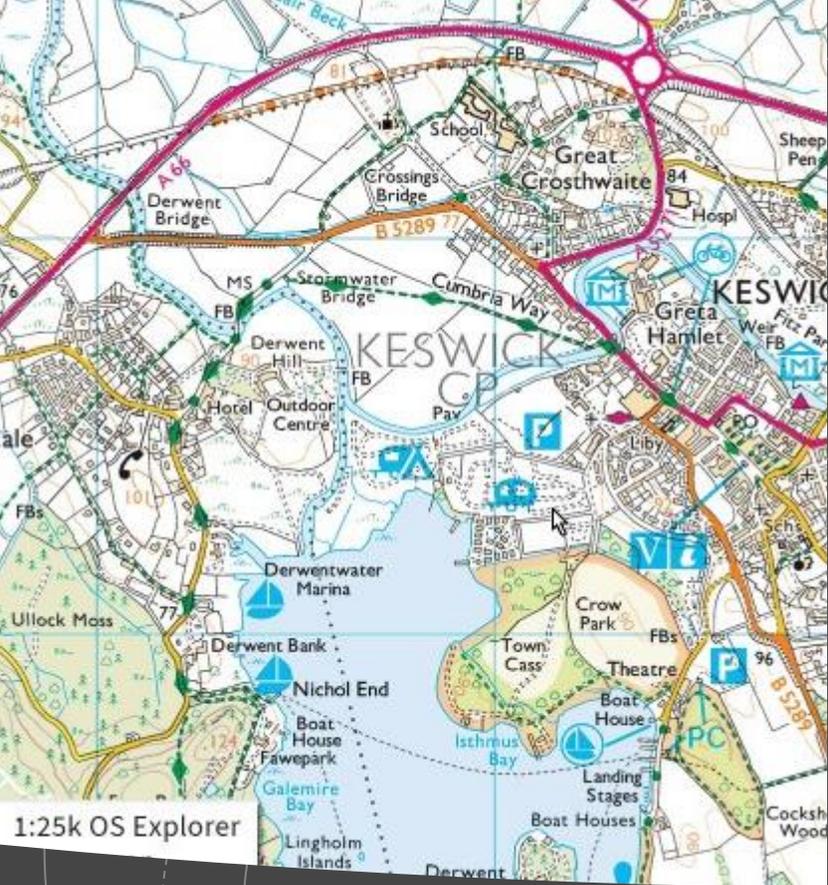
What an
ordnance map
looks like today



Symbols

Why do maps use symbols?

- Maps often use symbols instead of words to label real-life features and make the maps clearer. With so many features on a map, there would not be enough space to write everything down in words.
- Symbols can be small pictures, letters, lines or coloured areas to show features like campsites, youth hostels or bus stations. If you look closely at a map, you will see that it is covered in symbols. There will usually be a key next to the map to tell you what the symbols mean.



Symbols

- Look closely at the maps. What symbols for things and places can you see?
- What do the symbols stand for?

Symbols

Symbol	Meaning
	Motorway
	Main road
	Footpath
	Bridleway
	Train station (single black line on its own mean rail track).
	Forest
	Important building
	Bus or Coach station
FB	Footbridge
	Mud
	River
	Camping
	Picnic
	Information center
	Parking

What do you think the symbols for these map features would look like? Remember to make your symbols simple and clear.

nature reserve	castle	national boundary line	theme/pleasure park	visitor's centre
camp site	railway station	place of worship	main road	level crossing
cycle trail	motorway	wind turbine	multiple track railway line	picnic site

Create your own symbols.
Remember: Make your symbol clear and easy to understand.