

How to describe your position anywhere in the world...



...using latitude and longitude.


Longitude and
Latitude

Before we entered into lockdown, you may remember the words *longitude* and *latitude* being mentioned. We are going to spend our first geography lesson this term recapping these terms and what they mean.



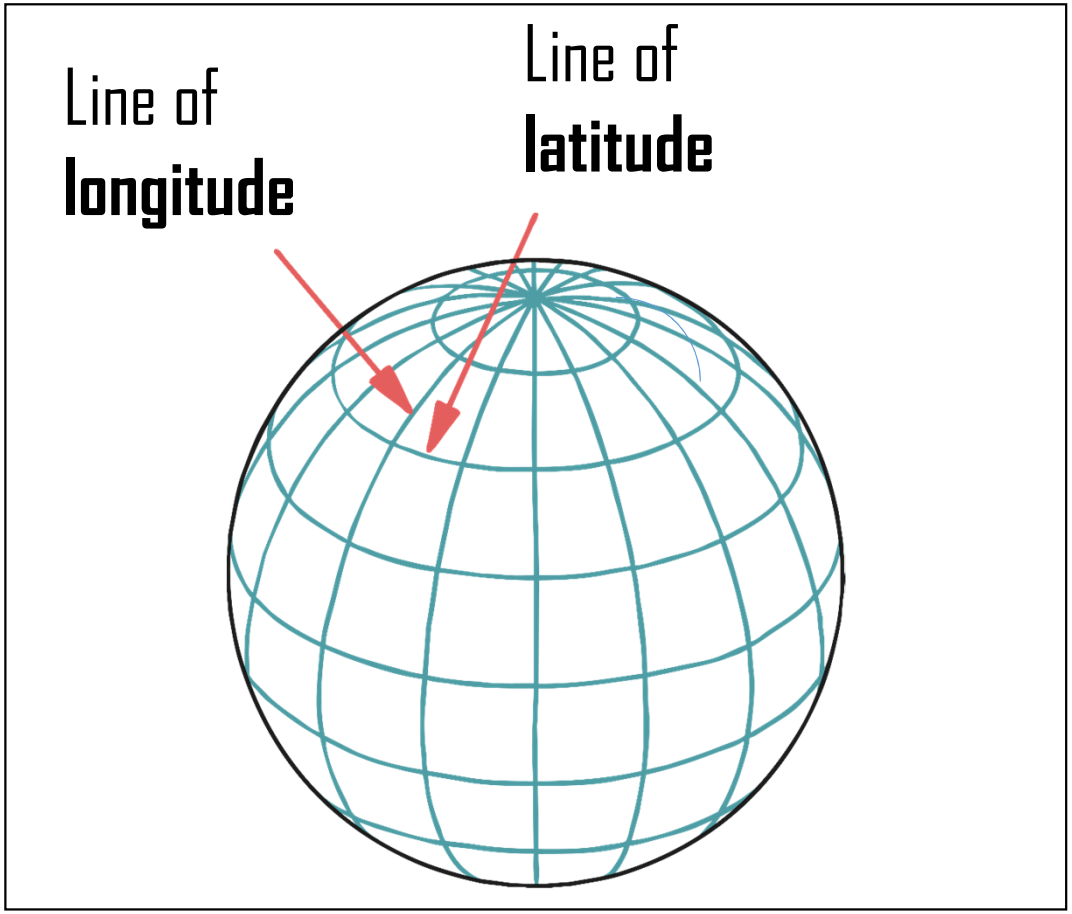
How is it possible to find the exact location of a place on Earth?

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.

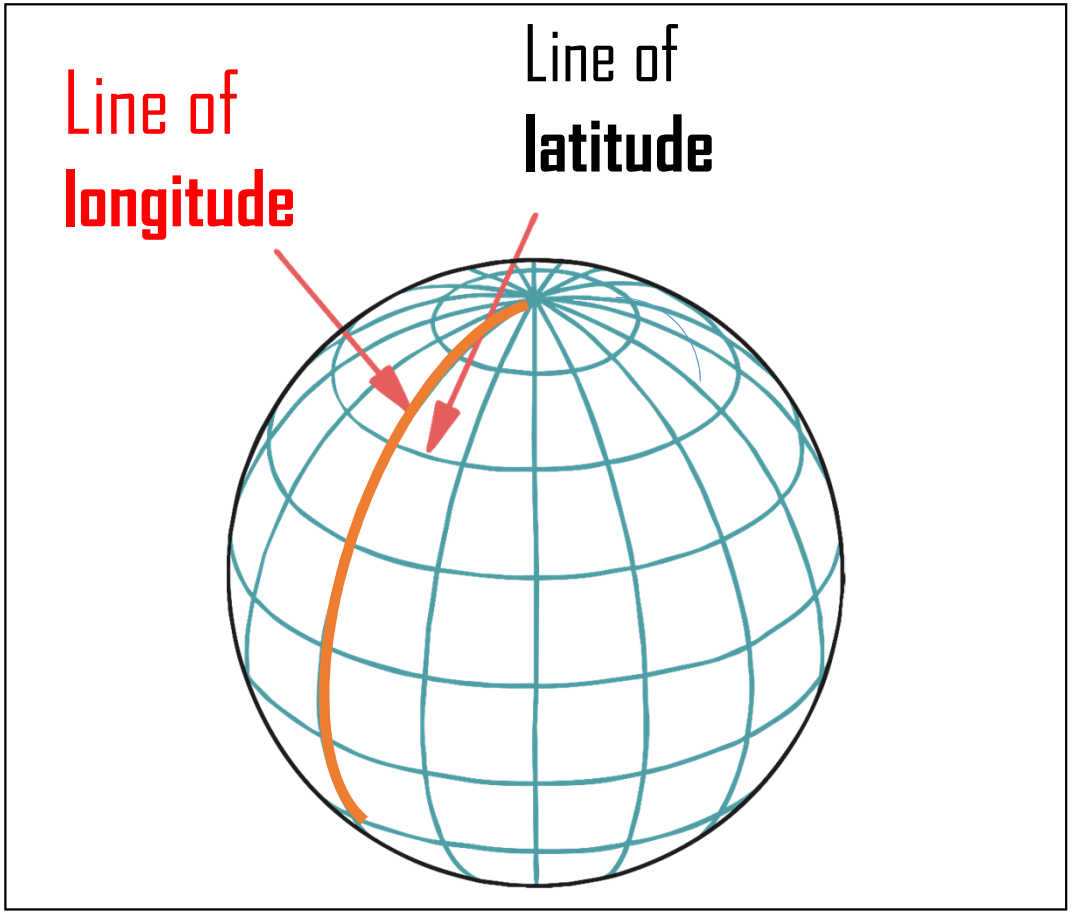
These lines help to create a co-ordinate to locate a place accurately.



Latitude and Longitude

Invisible lines of latitude and longitude form a grid over the Earth.

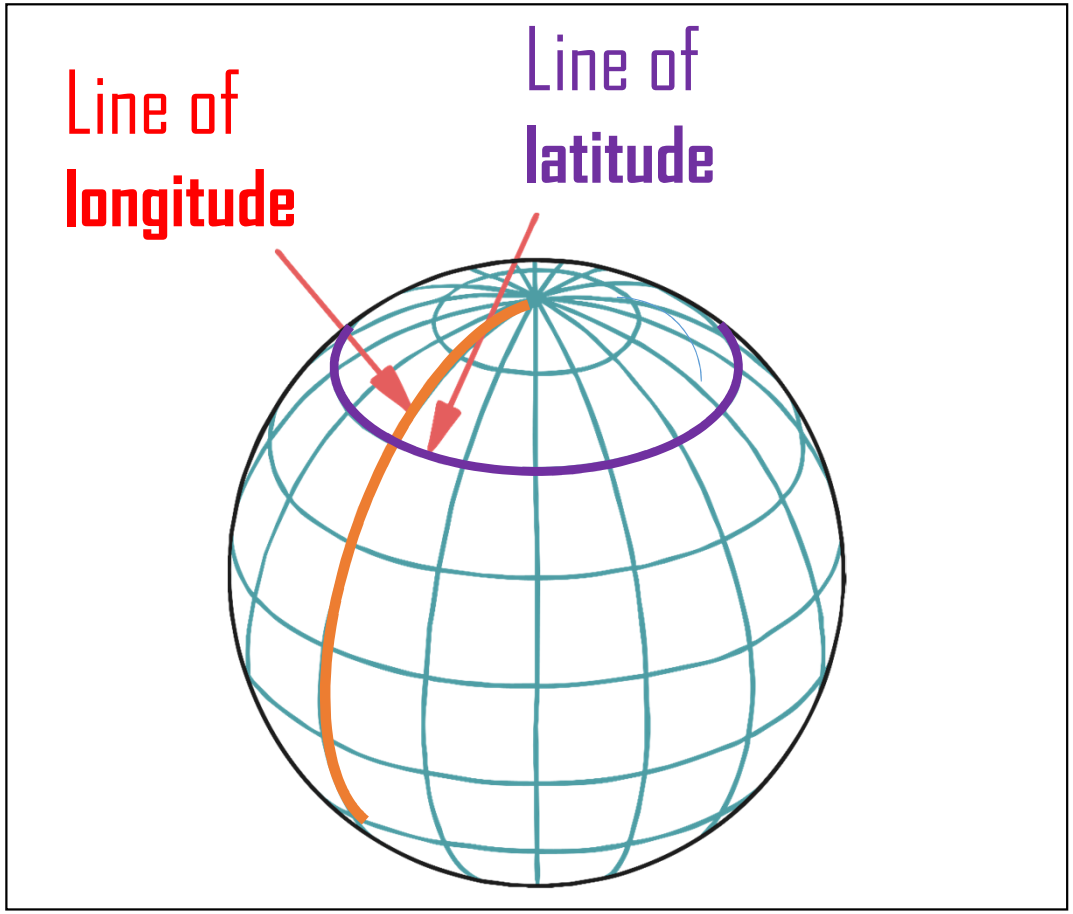
These lines help to create a co-ordinate to locate a place accurately.



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.



Latitude and Longitude

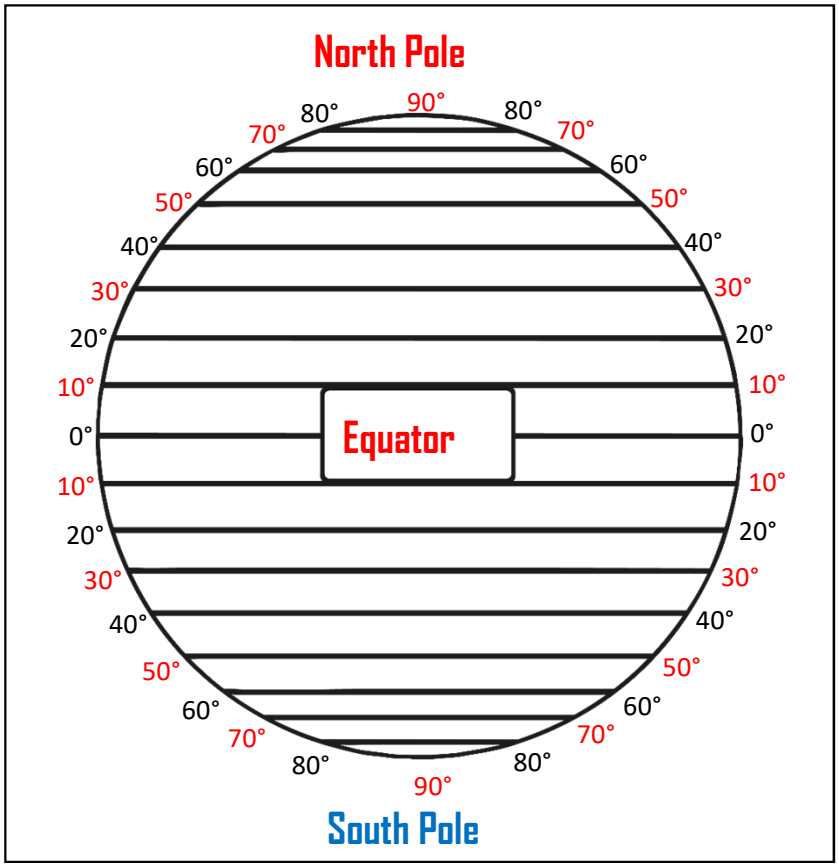
Invisible lines of latitude and longitude form a grid over the Earth.

These lines help to create a co-ordinate to locate a place accurately.

Latitude

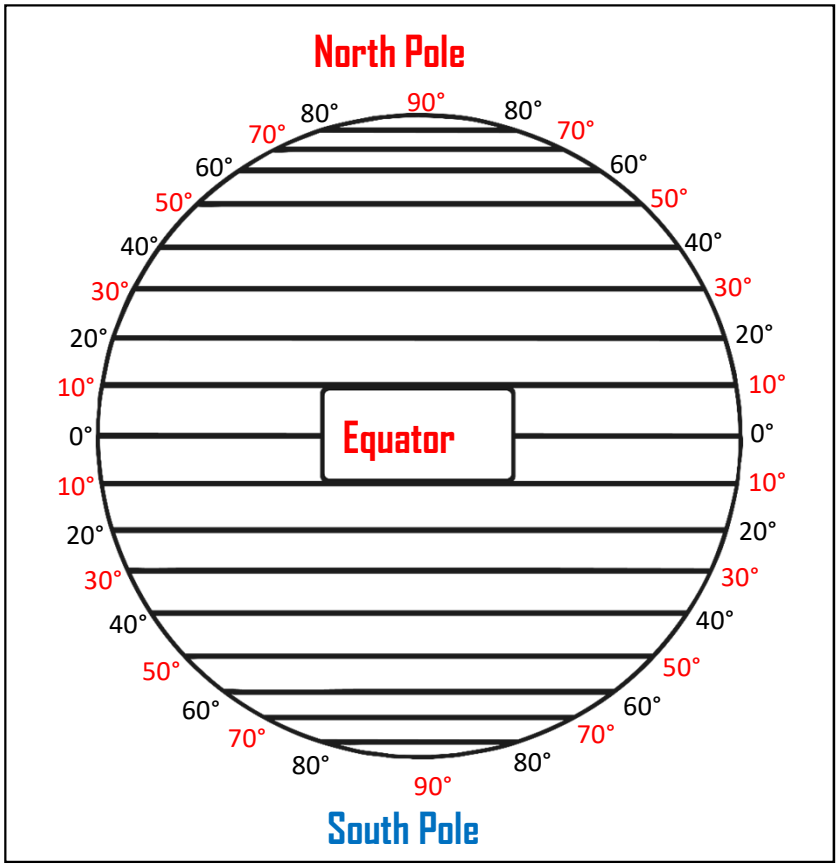
- Lines of latitude (also known as **parallels**) circle the Earth from east to west.

- These invisible lines are all the same distance apart. They are *parallel*



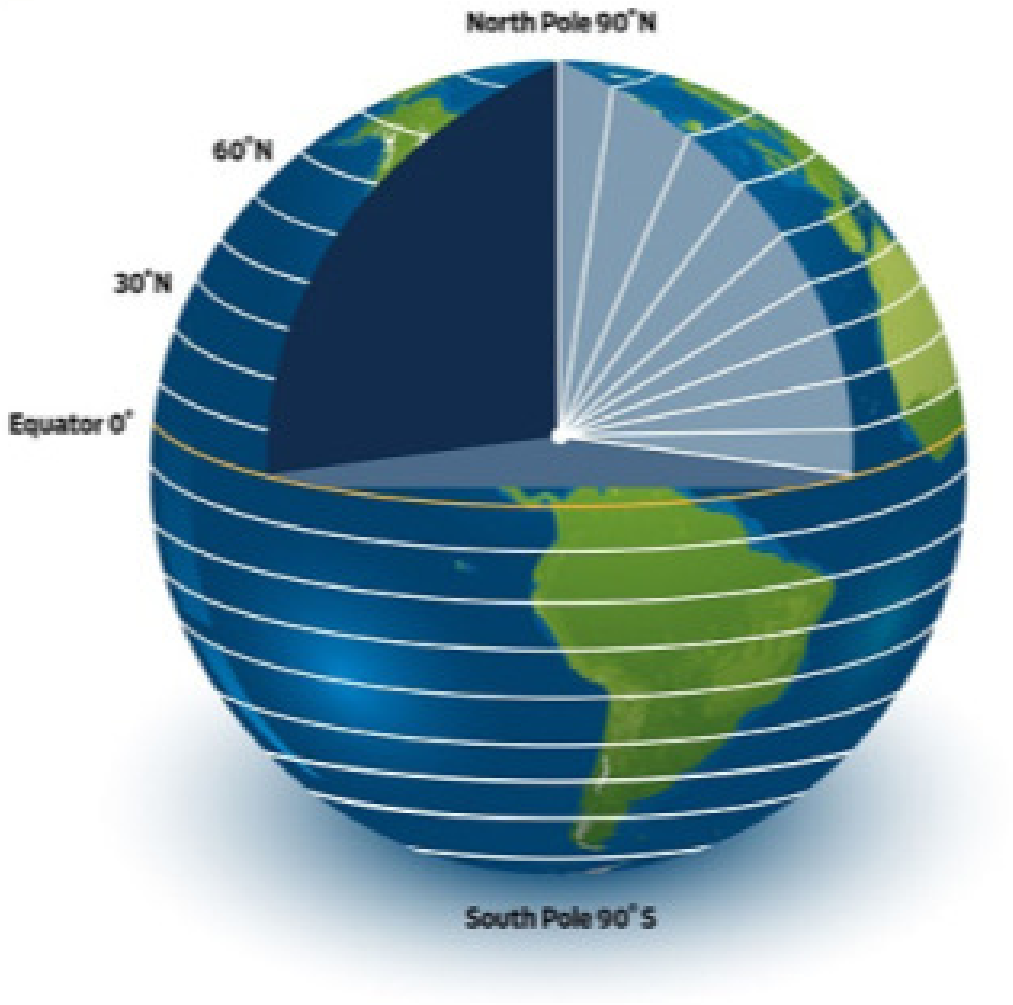
Latitude

- Lines of latitude are measured in degrees.



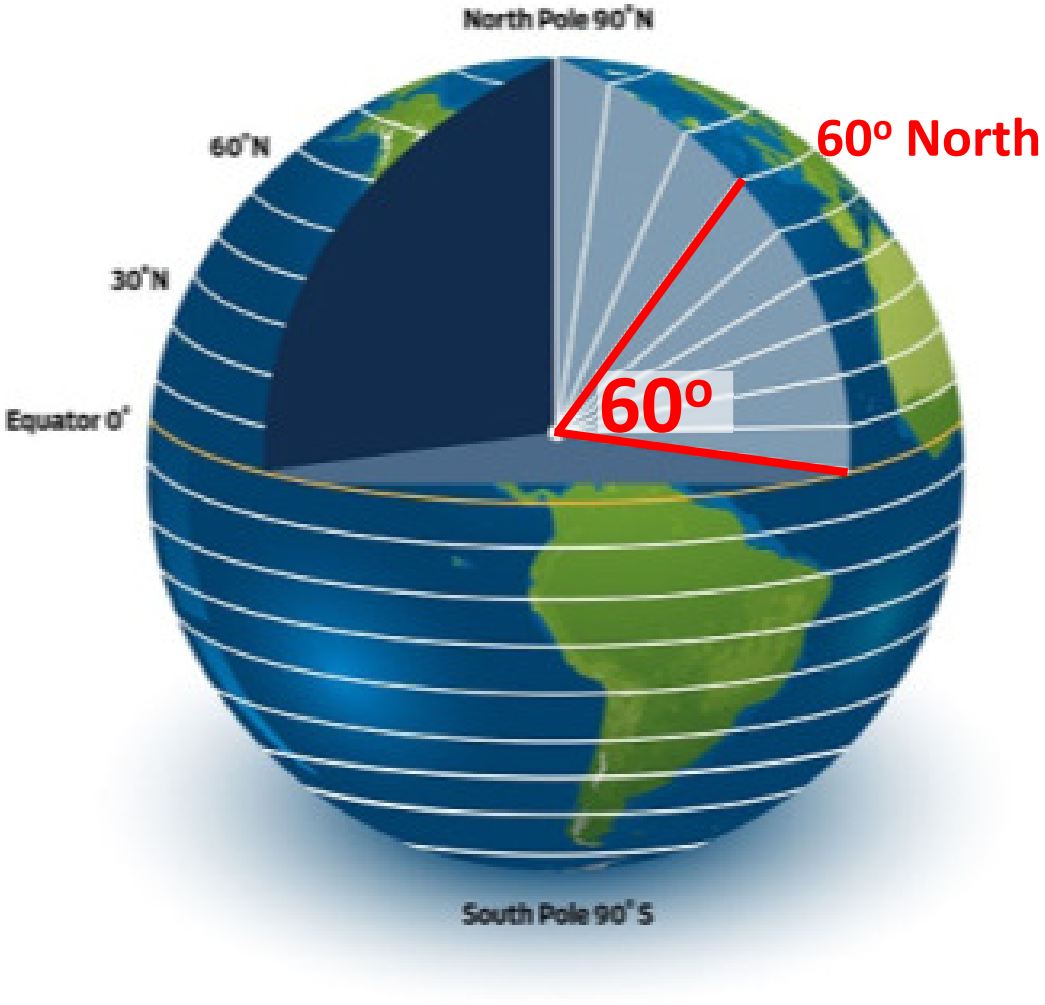
Latitude

They are measured in degrees because they describe the angles made by drawing imaginary lines from the centre of the earth.



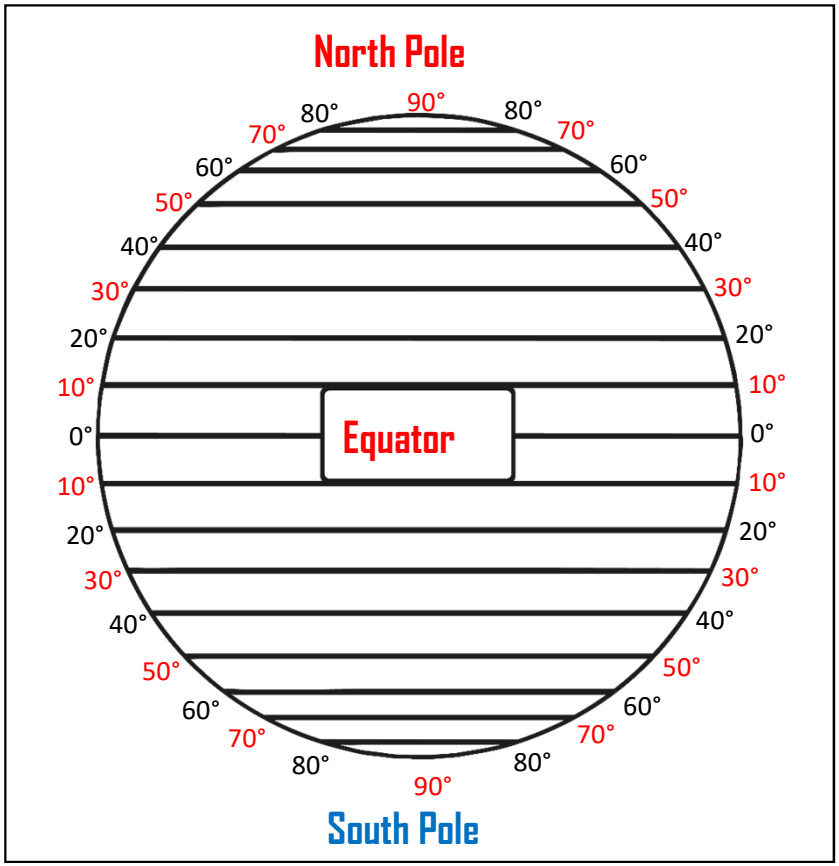
Latitude

They are measured in degrees because they describe the angles made by drawing imaginary lines from the centre of the earth.



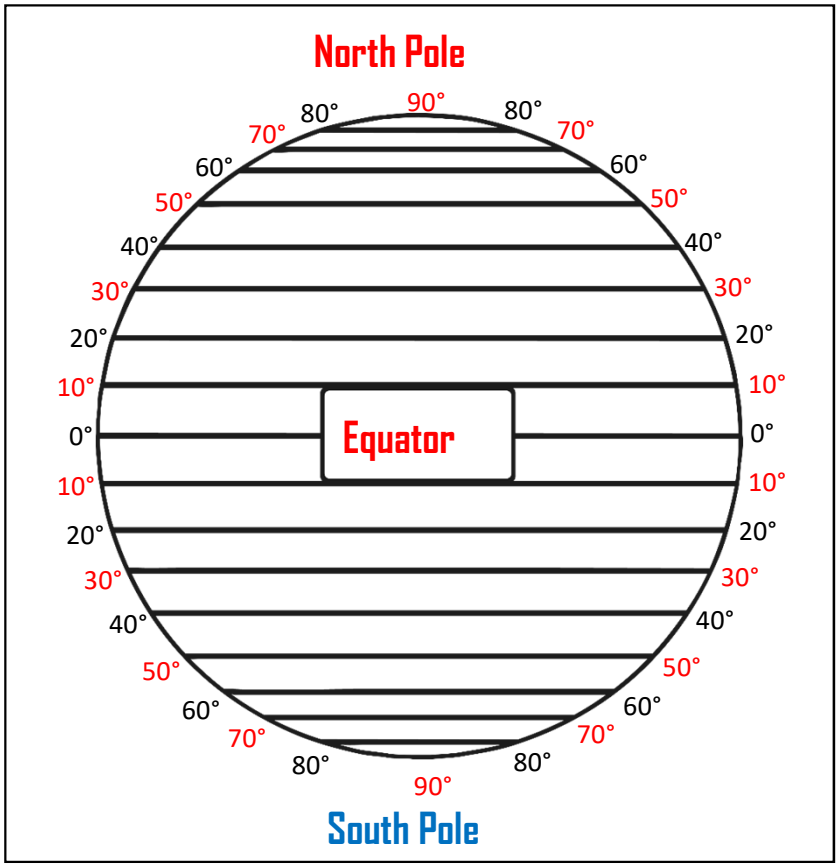
Latitude

- Like any angle, 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



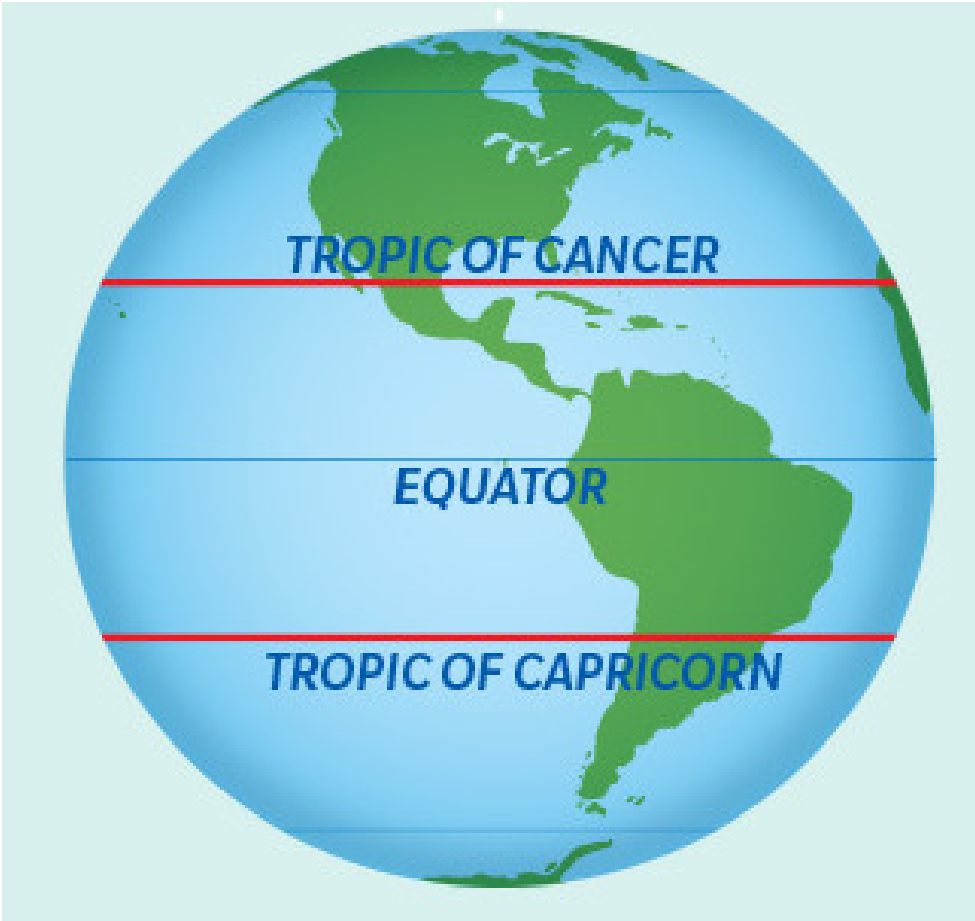
Latitude

- The <u>equator</u> 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.



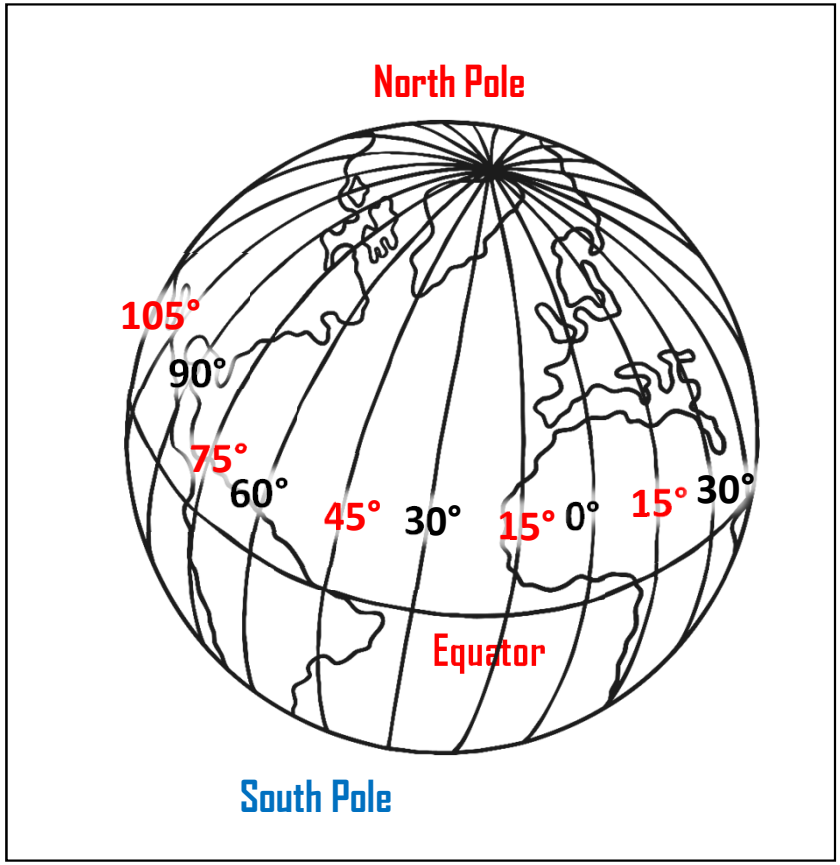
Latitude

- Other important lines of latitude have names.
- We'll learn about these next time



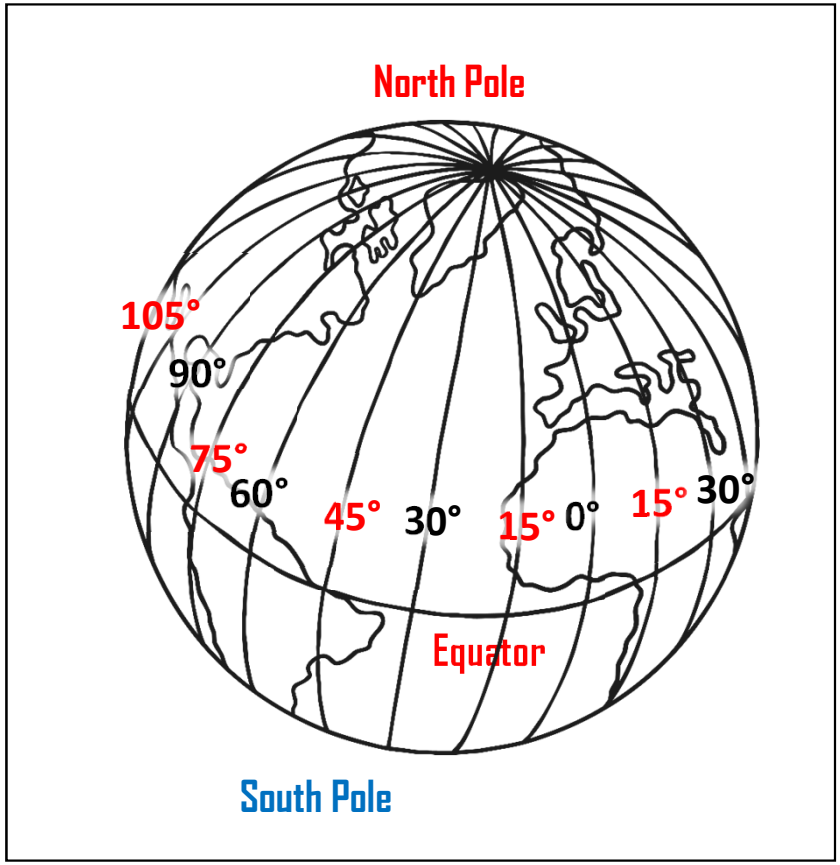
Longitude

These are the lines which run north and south and are known as lines of longitude (or meridians of longitude).



Longitude

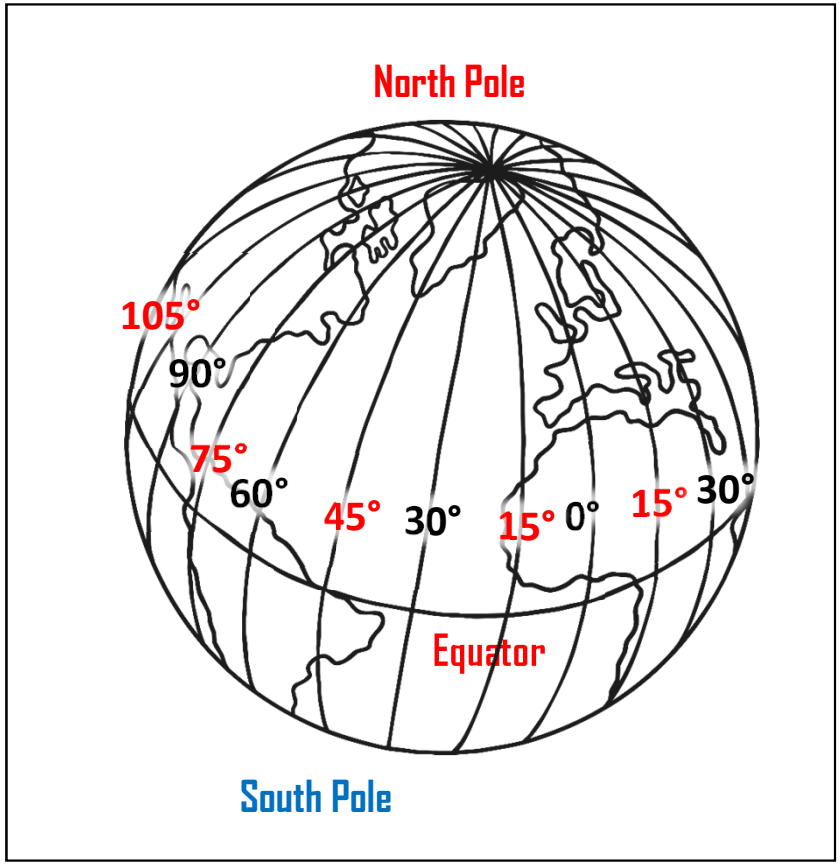
Lines of longitude are not parallel.



Longitude

The Prime Meridian or Greenwich Meridian line is a line of longitude at 0 degrees.

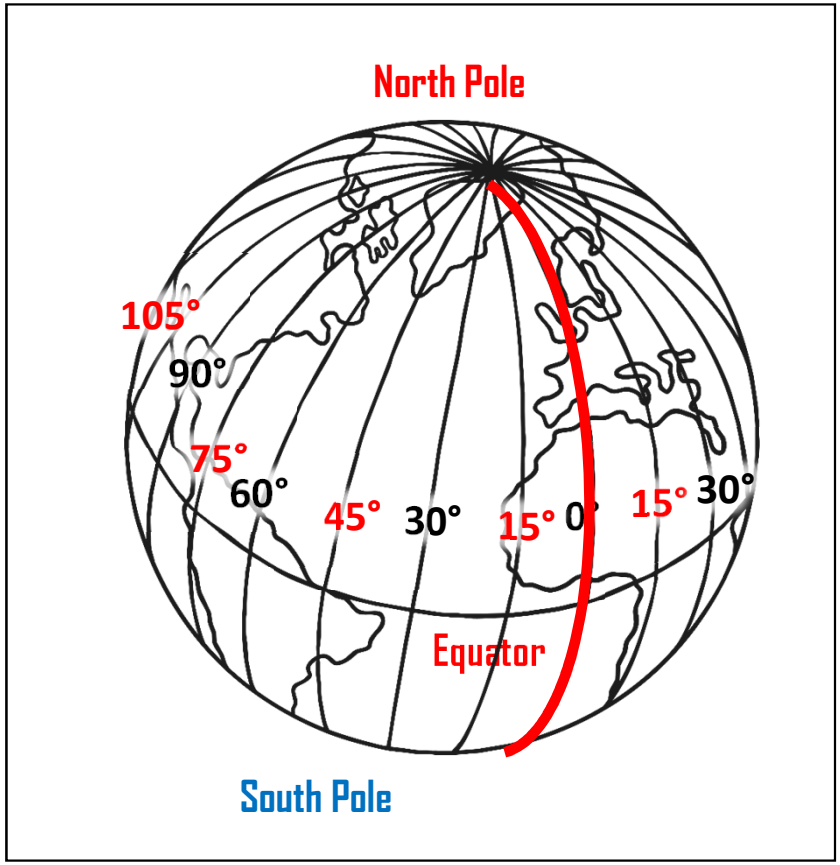
It passes right through Greenwich in London.



Longitude

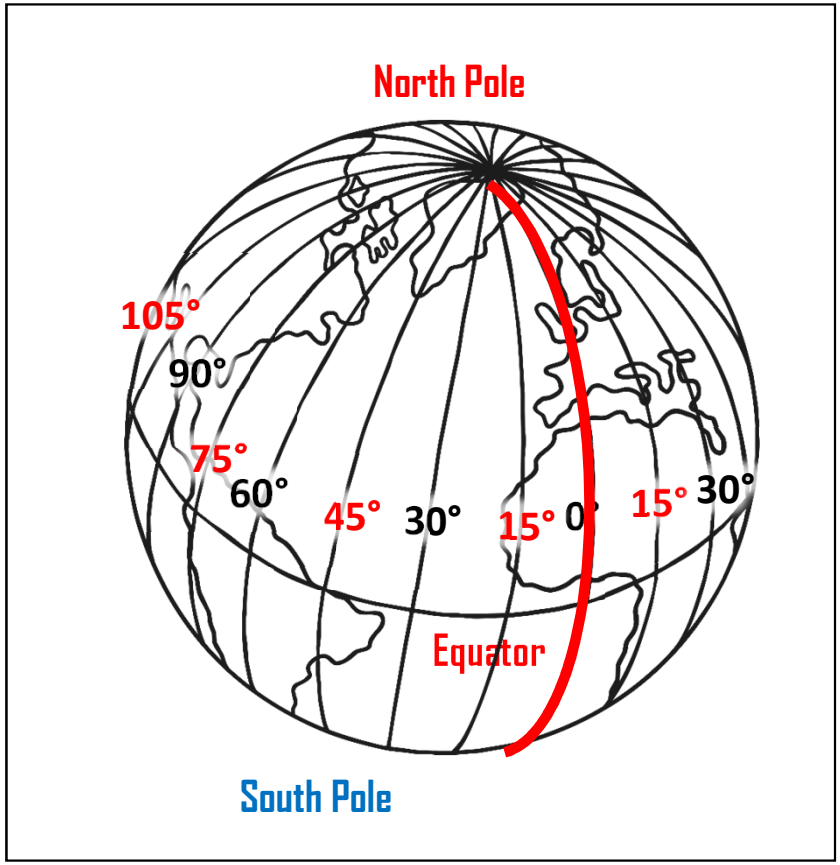
The Prime Meridian or Greenwich Meridian line is a line of longitude at 0 degrees.

It passes right through Greenwich in London.



Longitude

These lines are measured in degrees in the same way as the lines of latitude.

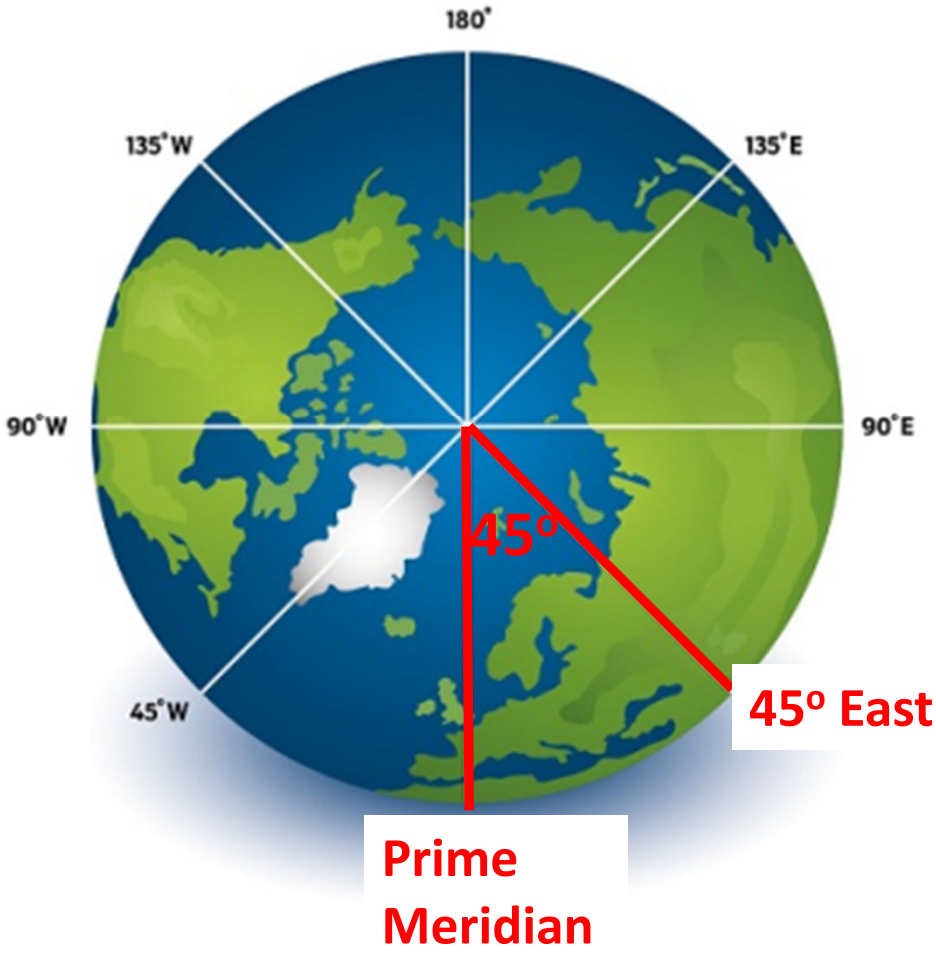


Longitude

The lines meet at the North Pole.

Lines are measured by the angle that they form with the prime meridian.

This image shows Earth with the North Pole at the centre



Task 1:

- In your own words, explain your understanding of Latitude and Longitude in as much detail as you can. Followed by a paragraph explaining Longitude.

- After you have completed your paragraphs, draw a table in your book to complete the task on the next page.

Which are lines of latitude and which are longitude?

Lines of Latitude	Lines of Longitude

Prime Meridian

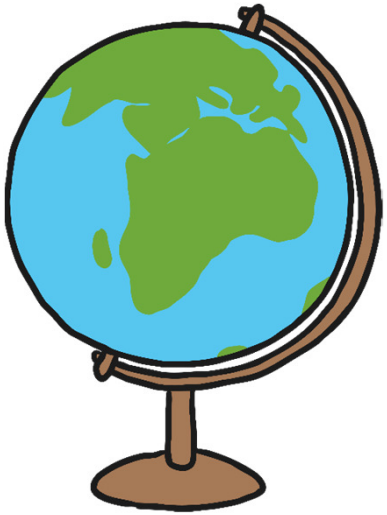
Tropic of Cancer

Tropic of Capricorn

Equator

Greenwich Meridian

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.

How do we use this information to locate a place?



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.



Your Task:
Can you find destinations using co-ordinates?

Using Google Maps, type into the search engine the following co-ordinates to find the destinations. Once you have found the five destinations email them to your teacher.

1. 52.380357, -0.692595
2. 52.301541, -0.618557
3. -35.280709, 149.128641
4. 41.381073, 2.122895
5. 51.538810, -0.016625

Top Tip – Take care when copying the co-ordinates across, it may help to write them down beforehand.

Extension: Challenge your friend to finding the destination of a place, using co-ordinates. Send them by email, or use Google Classroom!