

## Vocabulary

Word	Meaning
<b>Antarctic Circle</b>	A special line of latitude located around 66 degrees south of the equator. Anything south of the Antarctic Circle is in Antarctica.
<b>Arctic Circle</b>	A special line of latitude located around 66 degrees north of the equator. Anything north of the Arctic Circle is in The Arctic.
<b>climate</b>	Average measurements of temperature, wind, humidity, snow, and rain in a place over the course of years. Climate is like the weather, but over a long time.
<b>compass</b>	A device having a magnetic needle that indicates direction on the Earth's surface by pointing toward the north. Points on a compass include north, south, east and west.
<b>Equator</b>	One of the imaginary circles around Earth. It divides Earth into two equal parts: the Northern Hemisphere and the Southern Hemisphere. It runs east and west halfway between the North and South poles.
<b>hemisphere</b>	Half of a sphere, therefore when the Earth is cut in half horizontally you are left with the Northern and Southern Hemispheres.
<b>humid</b>	When there is a lot of water vapour in the air (warm enough to begin evaporation but not hot enough to complete the process). Muggy or steamy.
<b>International Date Line</b>	At approximately 180 degrees longitude, is an imaginary line on the Earth that officially marks the beginning of one day and the end of another.
<b>latitude</b>	The distance north or south of the equator measured in degrees.
<b>longitude</b>	The distance east or west of the prime meridian measured in degrees.
<b>Prime/ Greenwich Meridian</b>	The prime meridian is the imaginary line of 0° longitude, the starting point for measuring distance both east and west around the Earth.
<b>time zone</b>	An area on Earth that has a specific time that all citizens can set their clocks to. Different places on Earth have different time zones. They exist because the earth is round and they allow everyone to have sunrise in the early morning and sunset at night.
<b>Tropic of Cancer</b>	An imaginary latitude line located above the equator that runs across the globe at about 23 degrees north. This is the exact location where the sun is overhead on June 21.
<b>Tropic of Capricorn</b>	Opposite the Tropic of Cancer is the Tropic of Capricorn, whose latitude line circles the globe at about 23 degrees south (below the equator) and where the sun is exactly overhead on December 21.
<b>tropical</b>	A damp climate in which all twelve months have mean temperatures above 18° C. Tropical Climates have almost continuous rainfall throughout the year, usually in the afternoon.

## Early Explorers

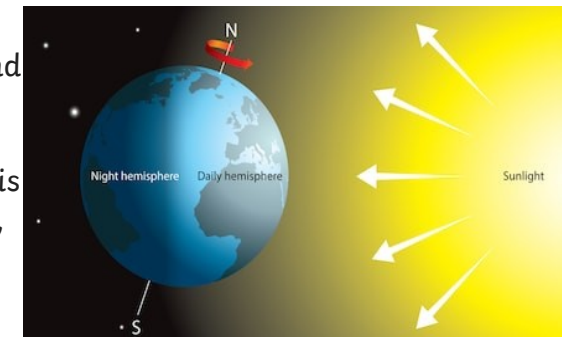
For centuries, sailors used globes to navigate their ships around the world. However, a globe is difficult to carry around and store. It is also difficult to measure



distances with a ruler of a globe. Therefore, mapmakers decided it would be easier to and more practical to transfer the information onto sheets of paper.

## Day and Night

The Earth is a sphere, or ball, which spins round and round as it travels around the Sun. One full rotation around the sun is one year, while one rotation of the Earth on its axis is 24 hours (one day). One side of the Earth faces the Sun, while the other side faces away into space. The side facing the Sun is bathed in light and heat – we call this daytime. The side facing away is cooler and darker, and experiences night.



## Latitude and Longitude



**Latitude:** Lines of latitude circle the Earth parallel to the Equator. They run in an east-west direction all of the way around the Earth. Latitude is measured in degrees and the Equator is located at 0°. Anything north of the Equator is in the northern hemisphere and is labelled °N. While anything south of the Equator is in the southern hemisphere and is labelled °S.

**Longitude:** Lines of longitude run between the North and South Poles, these lines are called meridians. Like latitude, longitude is measured in degrees. The Greenwich (or Prime) Meridian is at 0°E. Anything east of the Greenwich Meridian is in the eastern hemisphere and is labelled °E. While anything west of the Greenwich Meridian is in the western hemisphere and is labelled °W.



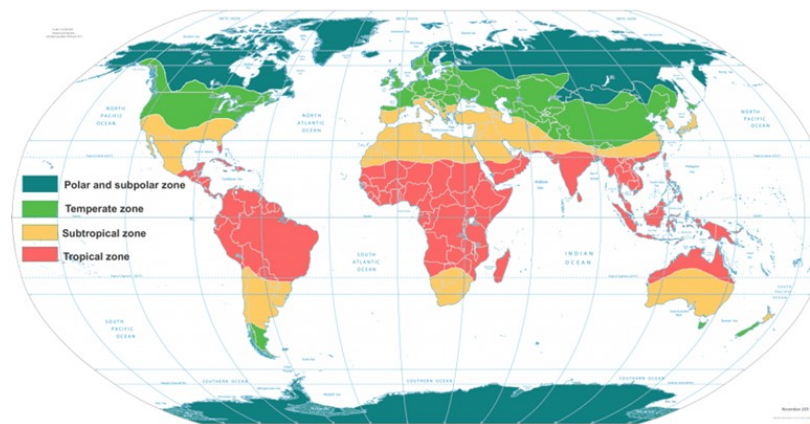
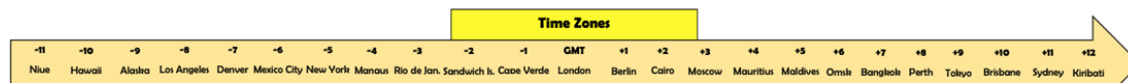
### Fascinating Facts

- Although lines of longitude and latitude are only imaginary, they exist on maps and atlases to help to show us where different places are.
- The distance around the Equator is about 24,900 miles.
- About 68% of land is in the Northern Hemisphere.
- Only About 32% of land is in the Southern Hemisphere.
- In the Antarctic and Arctic Circles, all places have 24 hours of daylight during the summer solstice.
- Greenwich was chosen because its Royal Observatory was used as a major navigational base at the time.
- There are 24 time zones across the world.

## Geography

## Longitude & Latitude

### Time and Climate Zones



There are different time and climate zones around the world.

The countries nearer to the equator have the hottest climate. The U.K. is in what is known as the temperate zone. The areas at the top and bottom of the Earth are the polar regions.

### Extending your learning

Things you could do at home to extend your learning:

- Use BBC Bite Size <https://www.bbc.co.uk/bitesize/subjects/zbkw2hv> to learn more about maps.
- Research, design and create your own compass. You could draw or even use cardboard to create a 3D version.
- Research how we get day and night through these videos. Can you make a poster to explain this to a Year 2 child? <https://www.bbc.co.uk/bitesize/topics/zwccwmn/resources/1>
- Look at the climate zones map, the UK is in a temperate climate zone. Using this information, can you predict what the climate is like in Tasmania and the South Island of New Zealand? What do you think it is like in summer and winter?

## Year 5 Autumn Term