

Key Knowledge and Understanding

Latitude & Longitude

Latitude and longitude are a system of lines that are used to describe the location of any place on Earth. Although lines of latitude and longitude are imaginary, they exist on maps and atlases to help to show us where different places are.

Lines of Latitude

Lines of latitude circle the Earth in an east-west direction and are parallel to the Equator. Latitude is measured in degrees north or south of the Equator, which is located at 0° latitude. Anything north of the Equator is in the Northern Hemisphere and is labelled °N. Anything south of the Equator is in the Southern Hemisphere and is labelled °S.

Important lines of latitude are:

Equator – 0°

Tropic of Cancer – 23.5° N

Tropic of Capricorn – 23.5° S

Arctic Circle – 66.5° N

Antarctic Circle – 66.5° S

North Pole – 90° N

South Pole – 90° S

Lines of Longitude

Lines of longitude run between the North and South Poles and are called meridians. They are not parallel, as lines of latitude are, but divide the Earth into segments like an orange. Longitude is measured in degrees east or west of the Prime (or Greenwich) Meridian, which is located at 0° longitude. Anything east of the Prime Meridian is in the Eastern Hemisphere and is labelled °E. Anything west of the Prime Meridian is in the Western Hemisphere and is labelled °W.

Important lines of longitude are:

Prime/Greenwich Meridian – 0°.

International Date Line (IDL) – 180° E/W.

Time Zones

As it is day in some parts of the world and night in others, meridians divide the world into 24 different time zones. All time zones are measured from a starting point at the Prime (or Greenwich) Meridian. Time at the Greenwich Meridian is known as Greenwich Mean Time (GMT) or Universal Time.

The time east of the Prime Meridian is always in front of the UK, and the time west of the Prime Meridian is always behind the UK

Lines of Latitude

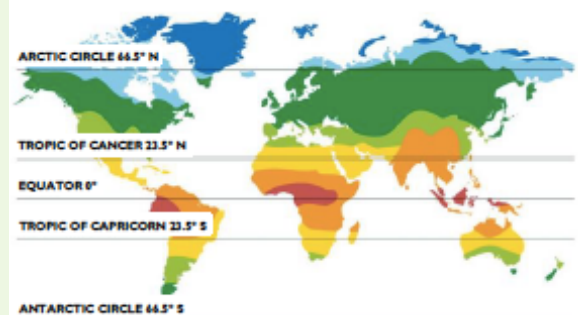


Lines of Longitude

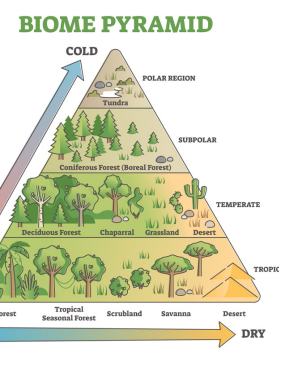


Latitude and longitude enable us to pinpoint the location of any place on Earth in relation to the Equator and the Prime Meridian. Latitude is always given first. London is located at 52° N, 0.1° W.

Latitude & Climate Zones



Climate is affected by latitude, distance from the Equator and the height and type of land. Climates are hottest near the Equator, where the sun's rays are most concentrated, and coolest towards the poles, where the sun's rays are less concentrated.



Key

Vocabulary:

Antarctic Circle
Arctic Circle
biome
climate zone
ecosystem
Equator
lines of latitude
lines of longitude
Northern Hemisphere
Prime/Greenwich Meridian
Southern Hemisphere
time zones
Tropic of Cancer
Tropic of Capricorn

Key Skills

- Describe the significance of latitude, longitude, Equator, hemispheres, Tropics, Arctic and Antarctic Circles, biomes etc
- Use maps, atlases and globes to locate countries and describe the features studied.
- Describe and understand key aspects eg biomes, climate zones.