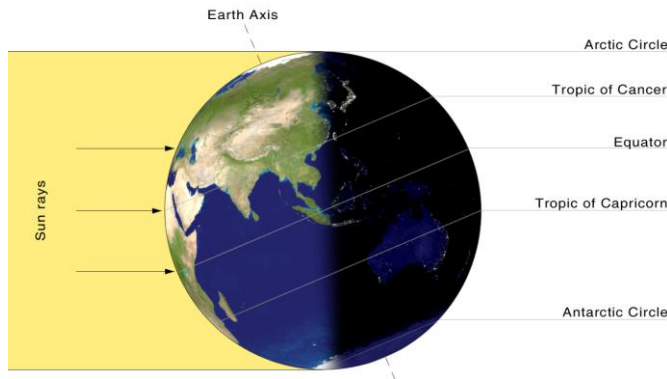




# Year 6 Time Zones



As the Earth rotates on its axis, the Sun only shines on the side of the Earth that it is facing. This means:

- It is daytime for the parts of the Earth that have the Sun shining on them
- It is night-time for places that are on the opposite side of the Earth and are in the shade.

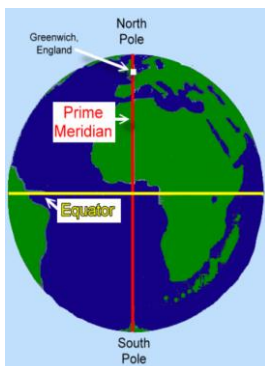
As it is night in some parts of the world while it is day in other parts, different places in the world have different times. This is why the world is divided into 24 different time zones. One for each hour in a day.

## Sticky Knowledge

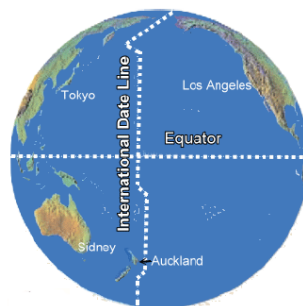
- Time zones are divided by imaginary lines called **meridians** which run from the North Pole to the South Pole. There is an imaginary line running through the UK called the **Prime Meridian**. It runs through a place in London called *Greenwich*.
- The **Prime Meridian** splits the world into eastern and western hemispheres
- Time in countries to the east of **Prime Meridian** is always in front of that in the UK. Time in countries to the west of the **Prime Meridian** is always behind that of the UK.



Very large countries that are spread out across many time zones, such as Russia or the USA, are divided into separate time zones. Most smaller countries keep to the same time zone even if part of them falls outside the meridian line.



**Greenwich Mean Time** is an internationally standard time format. It is the main time zone in several countries, including the United Kingdom and Portugal. When the sun is at its highest point exactly above the Prime Meridian, it is 1200 noon at Greenwich. **Greenwich Mean Time** is now called UTC (Coordinated Universal Time).



The **International Date Line** is an imaginary line on the opposite side of the world from the **Prime Meridian**. When it is noon along the **Prime Meridian**, it is midnight along the **International Date Line**.

## Key Vocabulary

time zone	A time zone refers to any region where the same standard time is kept.
North Pole	The northern end of Earth's axis.
South Pole	The southern end of Earth's axis.
Prime Meridian	An imaginary line running through <i>Greenwich</i> in London which splits the world into eastern and western hemispheres.
eastern hemisphere	Countries to the east of Prime Meridian.
western hemisphere	Countries to the west of Prime Meridian.

## North and South Poles

- Because the Earth rotates on a tilted axis as it revolves around the sun, sunlight is experienced in extremes at the poles.
- For six months of the year, the Sun never rises over one pole, and never sets over the other.
- Compared to the **North Pole**, the **South Pole** is relatively easy to travel to and study. The **North Pole** is in the middle of the Arctic Ocean, while the **South Pole** is on a stable piece of land.
- The North Pole is much warmer than the South Pole. But it's not exactly beach weather! In the summer, the warmest time of year, the temperature is right at the freezing point 0°C.