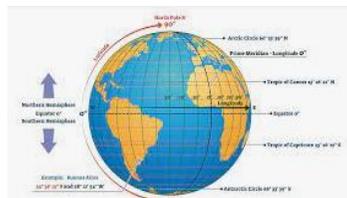


# Year 6: Phoenix Geography Autumn 1

## Spatial Sense

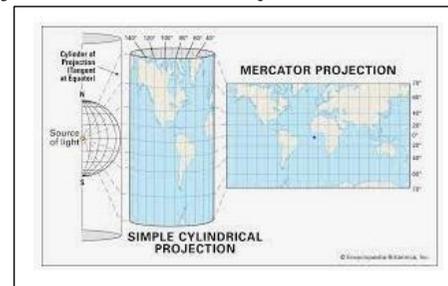


Gerhardus Mercator was a Flemish **cartographer** who first projected the Earth's surface onto a flat **map** in the 1500s. Generally, his map projection is accurate between the **tropics of Cancer and Capricorn**, however the landmasses nearer the **poles** look larger than they are. Greenland looks larger than Australia when it is not the case. **Map projection** is the stretching of the globe to fit a flat page. If you compare a globe and a flat map, you may notice countries are different sizes. On some maps, the country of Iceland looks very large, larger than Italy, but Italy is three times the size of Iceland.

Key Vocabulary	Definition
<b>axis</b>	An imaginary line around which the Earth rotates.
<b>cartographer</b>	Someone who collects information about the geography of an area to design and produce maps, charts and plans.
<b>equator</b>	An imaginary line that divides the Earth into two halves – the top half and the bottom half.
<b>hemispheres</b>	The top half of the Earth is called the Northern hemisphere and the bottom half is called the Southern hemisphere.
<b>lines of latitude</b>	Imaginary lines parallel to the equator that help map makers locate places with accuracy. They are horizontal lines.
<b>lines of longitude</b>	Imaginary lines parallel to the prime meridian that help map makers locate places with accuracy. They are vertical lines.
<b>map</b>	It is a diagrammatic representation of an area of land or sea showing the physical features.
<b>map projection</b>	A method that represents Earth on a flat surface by stretching the globe.
<b>Prime Meridian</b>	The line of longitude a 0°.
<b>spatial sense</b>	Looking at maps, compasses, lines of longitude and latitude, and aerial views to see how features are laid out on the earth's surface.
<b>the poles</b>	The two locations on the surface of the Earth that are at the Northern and Southern ends of the axis of rotation.
<b>Time Zone</b>	A range of longitude that shares a common time.
<b>Tropic of Cancer</b>	The line of latitude 23° north of the equator.
<b>Tropic of Capricorn</b>	The line of latitude 23° south of the equator.



Gerhardus Mercator



Mercator's Projection

**Lines of latitude** are connected to the time of day. As the earth rotates on its **axis**, different parts of the earth point towards the sun, only half of Earth faces the sun at any given time, the other half is experiencing night time. When it is noon at the **Prime Meridian**, it is midnight at the 180 degrees meridian on the other side of Earth. Using the **Prime Meridian**, we can divide the world into 24 **time zones** to match the 24-hour cycle of Earth's rotation on its **axis**. Some countries change their clocks forwards or backwards to get lighter mornings in the winter, or longer evenings in the summer.

**Maps** help you see where you're going, where you are, and where you've been. They teach about the world by showing sizes and shapes of countries, locations of features and distances between places. Here we have maps showing where Brandon is in relation to the UK.

