

How can we find out where places are?

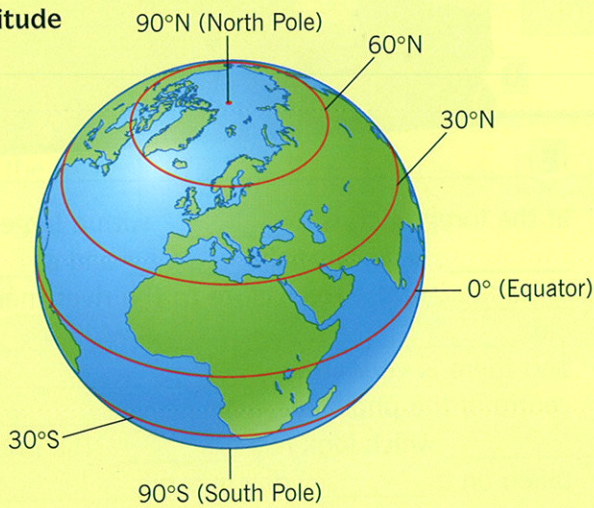
People often need to know where places are. They need to know this if, for example, they are going shopping or on holiday. Many people, like lorry drivers and ambulance drivers, need to know where places are to do their job. On television we are always hearing about different places, on the news and in other programmes.

Geographers use maps to find out where places are and what they are like. An **atlas** is a book that has maps showing places all around the world, and it is easy to use. The most accurate way to show the whole world is on a **globe**. This is because a globe, being round, shows the actual shape of the earth.

To help us find places, imaginary lines called **latitude** and **longitude** are drawn onto the globe. These are shown in diagram **A**.

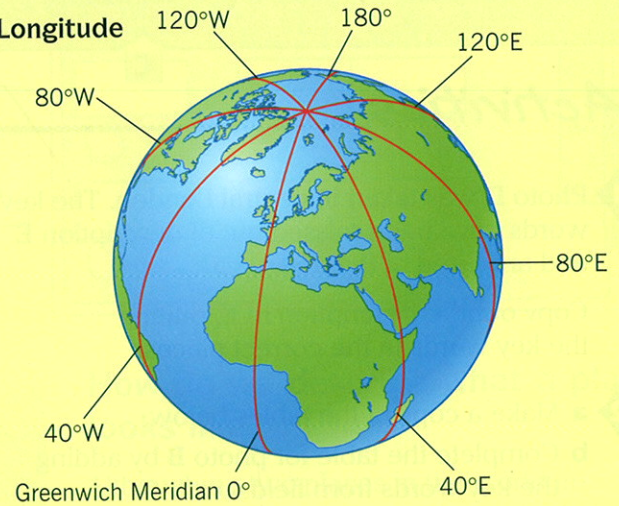
A

Latitude



Lines of latitude are imaginary lines going around the earth from east to west. They are measured in degrees north or south of the **Equator**. Latitude 0° is called the Equator.

Longitude

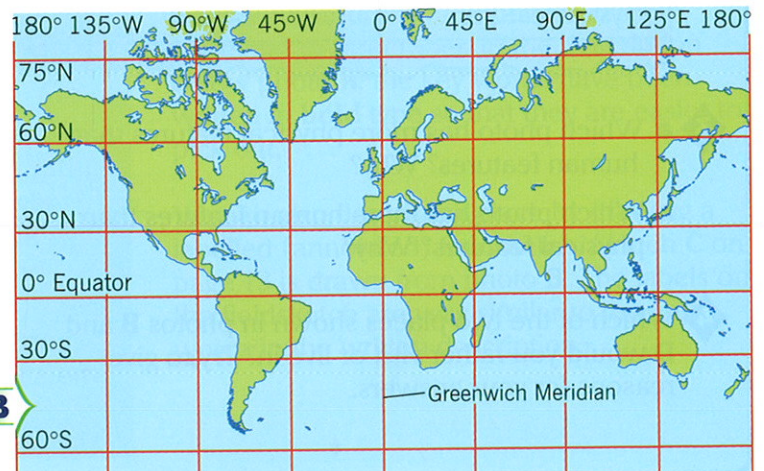


Lines of longitude are imaginary lines going from the North Pole to the South Pole. They are measured from the **Greenwich Meridian**, which passes through London. The Greenwich Meridian is 0°.

It is impossible to draw the earth accurately on a piece of paper. Parts of it will always be either the wrong size or the wrong shape. This is because the earth is round, and a piece of paper is flat. Imagine peeling the skin off an orange and trying to lay it out flat. It cannot be done, because the peel will split and some parts will be pushed out of shape.

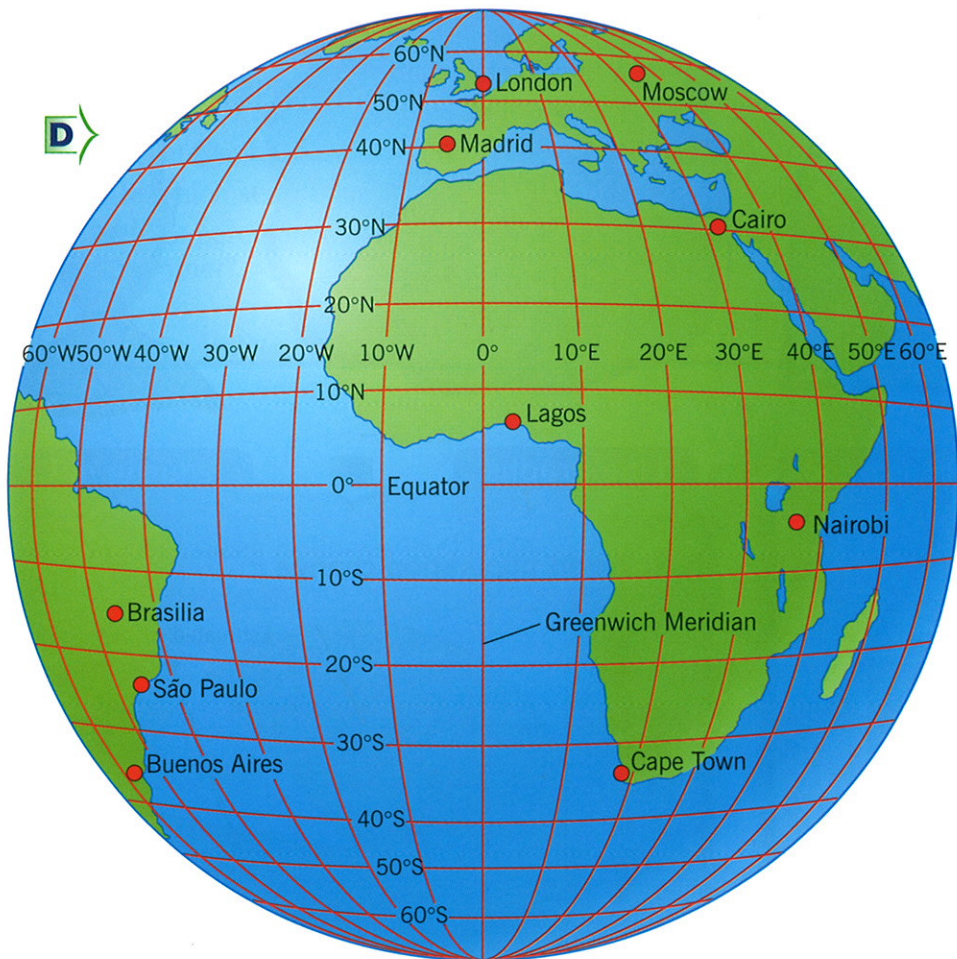
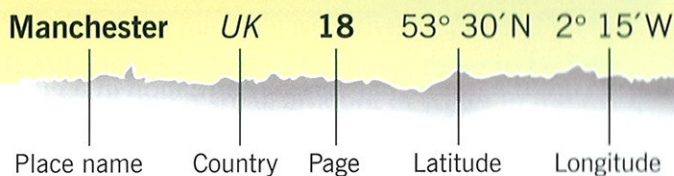
One way of drawing the globe as a flat map is shown in map **B**. Some places have been stretched, and others squashed to make them fit.

B



Using an atlas

The **contents** page at the front of the atlas shows on which page each map can be found. The **index** at the back of the book shows exactly where a particular place may be found. The index gives the latitude and longitude of that place to help you find it more easily. Diagram C shows you how to use the index of an atlas.



Remember

- ✓ Lines of latitude go across the map.
- ✓ Lines of longitude go up and down the map.
- ✓ Latitude is always given first.
- ✓ Latitude and longitude are measured in degrees (°). Each degree is divided into 60 smaller parts called minutes (').

Activities

- 1 Look at map D above. Name the city at each of the following:
- | | |
|-------------|--------------|
| a 30°N 31°E | b 34°S 18°E |
| c 40°N 4°W | d 24°S 47°W. |

- 2 Use map D to give the latitude and longitude for each of these cities:
- | | |
|-----------|----------------|
| a London | b Lagos |
| c Moscow | d Buenos Aires |
| e Nairobi | f Brasilia. |

- 3 Find each of the cities below in the index of your atlas. For each one give the country, page number and latitude and longitude.

New York Tokyo Sydney Calcutta

Summary

Maps are useful to people. They help us to find out where places are and what they are like. An atlas shows many places around the world. These places may easily be found using latitude and longitude.