



## Planet Earth is huge, so how do we pinpoint the exact location of places on our planet?

We map the Earth's surface **with** lines called **latitude** and **longitude**. Imagine our planet as a huge ball or sphere. At one end is the **North Pole** and at the other, the **South Pole**. In the middle, circling the Earth **between** the two poles, is an imaginary line called the **equator**. Its line of latitude is zero **degrees** ( $0^\circ$ ). More lines of latitude circle the Earth **from** east to west, **parallel** to the equator. They are the same distance apart (about 111 km); each distance is measured in degrees,  $0-90^\circ$  **to** the north and  $0-90^\circ$  to the south.

Lines of longitude run from the North Pole to the South Pole. The lines divide the Earth's surface **into** **vertical** sections, like pieces of an orange. These lines are measured in degrees too,  $0-180^\circ$  to the east and  $0-180^\circ$  to the west.

What happens when a location is between the lines? We divide the degrees **into** minutes and seconds, so the exact location can be found. This code is called a **coordinate**.

Remember that these are imaginary lines – you can't actually see them!

### Key words: map reading

**pinpoint:** to find out or say the exact position

**pole:** the most northern and southern points of the Earth

**degree:** a unit of measurement

**parallel:** two lines of equal distance apart

**vertical:** standing upwards

**coordinate:** a code with numbers and letters that shows exact positions on a map

Exercise 1: Read the text and label the Earth diagram

Exercise 2: Choose the correct answer for each question.

1. What are the lines called that help us find the exact location on Earth?
  - a) Borders and roads
  - b) Latitude and longitude
  - c) Time zones
  - d) Circles and triangles
2. What is the name of the imaginary line that circles Earth in the middle?
  - a) Prime Meridian
  - b) Timeline
  - c) Equator
  - d) Horizon
3. What is the degree of the equator?
  - a) 90°
  - b) 180°
  - c) 45°
  - d) 0°
4. How do latitude lines run across the Earth?
  - a) From North Pole to South Pole
  - b) In circles around cities
  - c) From east to west
  - d) From Australia to Europe
5. What is a coordinate used for?
  - a) To draw circles
  - b) To measure speed
  - c) To find exact locations on a map
  - d) To describe directions using colors
6. What do longitude lines divide the Earth into?
  - a) Continents
  - b) Horizontal strips
  - c) Oceans
  - d) Vertical sections

Exercise 3: **Instructions:** Fill in the blanks with the correct word from the box below.

**Word bank:** pinpoint, pole, vertical, coordinate, degree, parallel

1. A \_\_\_\_\_ is a unit used to measure distances in latitude and longitude.
2. The North Pole is an example of a \_\_\_\_\_.
3. We use a \_\_\_\_\_ to give the exact location of a place on a map.
4. The teacher asked us to \_\_\_\_\_ the city on the map using its exact position.
5. Lines of longitude are \_\_\_\_\_ lines that go from the North Pole to the South Pole.
6. Latitude lines run in \_\_\_\_\_ lines from east to west, never crossing each other.