

Chapter 1

Locating Places on the Earth

Answer the following questions from the given passage

Passage:

Latitudes are imaginary lines drawn on the Earth parallel to the Equator. The Equator is the longest latitude and is located at 0° . It divides the Earth into the Northern and Southern Hemispheres. Latitudes help us measure the distance of a place north or south of the Equator. Important latitudes include the Tropic of Cancer, Tropic of Capricorn, Arctic Circle, and Antarctic Circle. These lines also help in understanding climate, as places near the Equator are hotter, while places near the poles are colder. Latitudes are equally spaced and never meet each other.

Questions:

1. What are latitudes?
2. What is the Equator?
3. What do latitudes help measure?
4. Name any one important latitude.
5. Why are places near the Equator hotter?

Passage:

Longitudes are imaginary lines that run from the North Pole to the South Pole. These lines are also called meridians. The Prime Meridian is the most important longitude and is located at 0° . It passes through Greenwich in England and divides the Earth into Eastern and Western Hemispheres. Longitudes are used to measure the distance east or west of the Prime Meridian. They are very important for calculating time, as the Earth rotates from west to east. Because of this rotation, different places experience different times, leading to the concept of time zones.

Questions:

1. What are longitudes also called?
2. What is the Prime Meridian?
3. What do longitudes measure?

4. Why are longitudes important for time?
 5. In which direction does the Earth rotate?
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Passage:

The Earth is divided into different time zones to maintain uniform time in different regions. Since the Earth rotates, different places experience day and night at different times. To avoid confusion, the world is divided into 24 time zones, each differing by one hour. The Prime Meridian is used as the starting point for time calculation, known as Greenwich Mean Time (GMT). Countries adopt a standard time to maintain uniformity within their borders. For example, India follows Indian Standard Time (IST), which is 5 hours and 30 minutes ahead of GMT. This system helps in maintaining proper time for travel, communication, and daily activities.

Questions:

1. Why are time zones needed?
 2. How many time zones are there in the world?
 3. What is GMT?
 4. What is IST?
 5. How much is IST ahead of GMT?
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ANSWERS**Set 1 Answers:**

1. Latitudes are imaginary lines drawn parallel to the Equator.
 2. The Equator is the longest latitude at 0° .
 3. They measure distance north or south of the Equator.
 4. Tropic of Cancer / Tropic of Capricorn (any one).
 5. Because they receive direct sunlight.
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Set 2 Answers:

1. Meridians
 2. It is the 0° longitude passing through Greenwich.
 3. Distance east or west of the Prime Meridian.
 4. Because they help calculate time differences.
 5. West to east
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Set 3 Answers:

1. To maintain uniform time across regions.
 2. 24
 3. Greenwich Mean Time
 4. Indian Standard Time
 5. 5 hours 30 minutes
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