

Chp-1 Locating Places on the Earth

Answer Key

GEAR UP

PAGE 2

1. South
2. MBD Hotel
3. South

PROGRESS MILESTONE

PAGE 8

1. 🌐
2. ✓
3. 🌐
4. 🌐

PROGRESS MILESTONE

PAGE 13

1. T
2. F
3. F
4. T

LET US PRACTISE

PAGES 14–15

A. Tick (✓) the correct option.

1. (c) geographic coordinates
2. (a) legend
3. (a) Greenwich near London
4. (a) 23°30'N

B. Fill in the blanks.

1. cartography
2. political map
3. 24
4. Russia

C. Very short answer type questions

1. The four main cardinal directions are North, South, East and West.
2. Geographic coordinates are a system of latitude and longitude used to locate places on the Earth's surface.
3. Equator, Tropic of Cancer, Tropic of Capricorn, Arctic Circle and Antarctic Circle are the important parallels of latitude.
4. The full form of IST is Indian Standard Time and that of GMT is Greenwich Mean Time.

D. Short answer type questions

1. Symbols and colours help represent different features and information on a map in a simplified way, allowing for easier navigation and understanding of the area.
2. As India is located east of Greenwich and Indian Standard Time (IST) is 5 hours and 30 minutes ahead of Greenwich Mean Time (GMT) therefore, India is 5 hours and 30 minutes ahead of London due to the difference in time zones, with India following Indian Standard Time (IST).
3. A globe accurately represents the Earth's spherical shape, allowing for a true depiction of distances, sizes and relationships between places, unlike flat maps which can distort these aspects.
4. The three types of scales used on a map are Verbal Scale, Linear Scale and Representative Fraction.

E. Long answer type questions

1. Maps are categorised into three main types:
 - Physical maps illustrate natural features of the Earth, such as mountains, rivers and deserts, making them useful for education and outdoor activities.

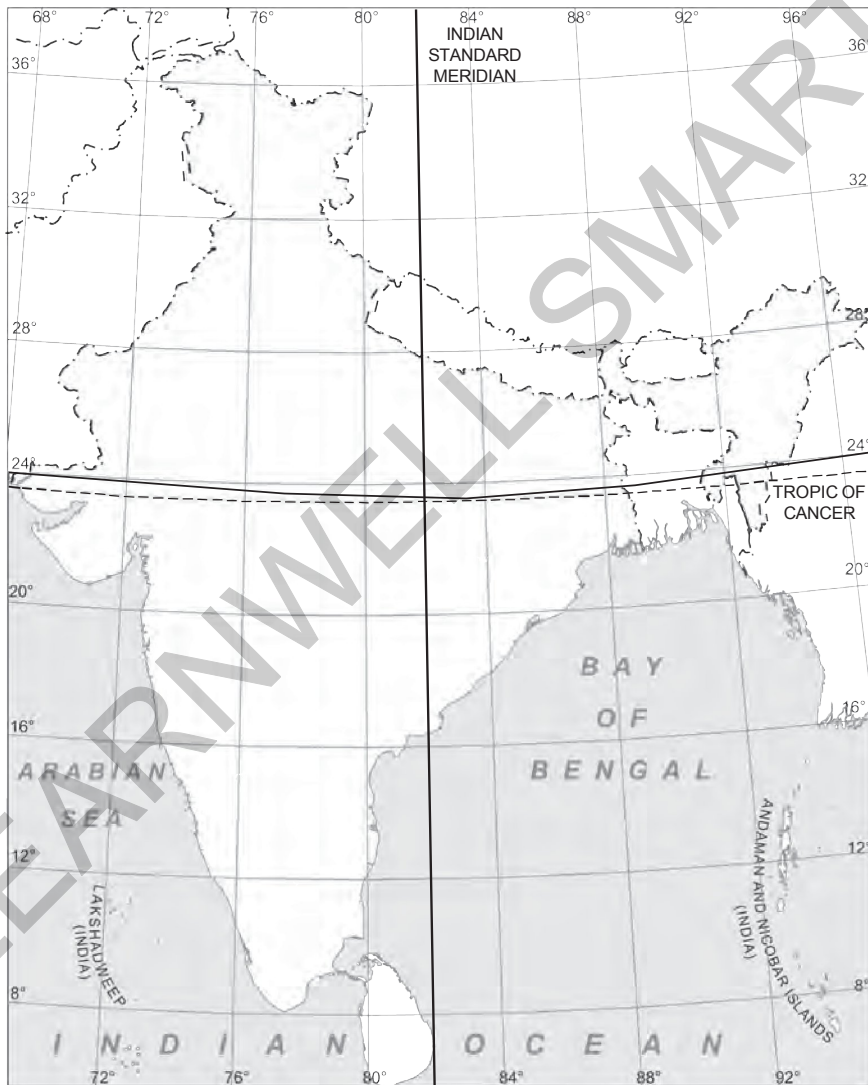
- Political maps depict human-made boundaries of countries, states and cities and are essential for navigation and understanding political geography.
 - Thematic maps focus on specific topics, such as population distribution, climate patterns, distribution of crops, temperature, rainfall, etc.
2. Latitudes are horizontal lines that run parallel to the Equator, which is at 0° latitude. They measure the distance north or south of the Equator, ranging from 0° at the Equator to 90° at the poles. Important parallels include the Equator (0°), Tropic of Cancer ($23^\circ 30' N$), Tropic of Capricorn ($23^\circ 30' S$), Arctic Circle ($66^\circ 30' N$) and Antarctic Circle ($66^\circ 30' S$). Longitudes are vertical lines called meridians that run from the North Pole to the South Pole. They measure the distance east or west of the Prime Meridian (0°), which passes through Greenwich, England.
 3. The Earth's heat zones are primarily determined by latitude, which affects how much solar energy different regions receive. There are three main heat zones: the Tropical Zone, the Temperate Zone and the Frigid Zone.
 - **Tropical Zone (Torrid Zone):** Located between the Tropic of Cancer ($23^\circ 30' N$) and the Tropic of Capricorn ($23^\circ 30' S$), this zone experiences direct sunlight throughout the year. The sun is directly overhead at noon, resulting in high temperatures and high humidity.
 - **Temperate Zone:** Lies between the Tropic of Cancer ($23^\circ 30' N$) and the Arctic Circle ($66^\circ 30' N$) in the Northern Hemisphere and between the Tropic of Capricorn ($23^\circ 30' S$) and the Antarctic Circle ($66^\circ 30' S$) in the Southern Hemisphere. In these two zones, located in the north and south, the sun's rays are slanted. As a result, these zones experience moderate temperatures and rainfall.
 - **Frigid Zone:** the Frigid Zones are found beyond the Arctic Circle ($66^\circ 30' N$) and the Antarctic Circle ($66^\circ 30' S$), encompassing the polar regions. These are the coldest zones of the earth as these regions receive the least solar energy.
 4. The relationship between longitudes and time is based on the Earth's rotation and how it divides time zones. As the Earth rotates, it completes a full 360° in 24 hours, meaning it rotates approximately 15° of longitude every hour. This leads to a consistent time difference related to longitudinal positions. Prime Meridian (0°) serves as the starting point for timekeeping. Locations east of the Prime Meridian are ahead of Greenwich Mean Time (GMT), while those to the west are behind. Thus, every 1° of longitude corresponds to a time difference of about 4 minutes, establishing a clear relationship between geographic location and local time.

F. Read the given text and answer the following questions.

1. Mia noticed that while her friend Sam in New York was having breakfast, it was already lunchtime for her in London. This showed her that time was different in each place.
2. London is 5 hours ahead of New York. So, if it's 7:00 AM in New York, it's 12:00 PM in London.
3. We have different time zones because the Earth is divided into sections based on its rotation. As the Earth spins, different parts of the world experience daylight and darkness at different times. Time zones help keep track of local time and ensure that activities like work, travel and communication align with the daylight hours in each region.

1. (b) Both (A) and (R) are true but (R) is not the correct explanation of (A).
2. (c) (A) is true but (R) is false.

1. The object shown in the figure is Globe and two of its features are:
 - It represents the true shape and axial tilt of the earth.
 - Shape, size, direction, location and distance are shown accurately on a globe without any distortion.
2. Globe has some limitation also such as it cannot display extensive information, such as political boundaries, climate zones or transportation networks, as comprehensively as maps can.



There is a change or distortion while making a map because maps can have varying scales across their surface, which can lead to inconsistencies in the representation of distances

and areas. The information used to create maps may be incomplete or outdated, leading to inaccuracies in representation. (Answers may vary)

LIFE SKILLS

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To popularise solar energy in India, the government could offer subsidies and tax benefits for installing solar panels. This would make solar energy more affordable for individuals and businesses. Awareness campaigns and training programs could further encourage its use, while creating jobs in the solar sector. (Answers may vary)

GIVE IT A TRY

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Students will do it by themselves.

LEARNWELL SMART