

ST. ANDREWS SCOTS SR. SEC. SCHOOL  
9th Avenue, I.P. Extension, Patparganj Delhi-110092

CLASS: VI

SUB: SOCIAL SCIENCE

TOPIC:  
GEOGRAPHY

CH-2

2025-26

NAVIGATING EARTH'S GRID

A. Tick ( ) the correct option.

1. What are the imaginary lines drawn on the Earth to locate a place called?  
Lines of Latitude
2. The standard meridian of India is \_\_\_\_  $82\frac{1}{2}^{\circ}$  E
3. India is located in \_\_\_\_ Hemisphere. North-eastern
4. Russia has \_\_\_\_ time zones. 11
5. International Meridian conference was held in the year \_\_\_\_ . 1884

B. Match the following:

- |                   |                           |
|-------------------|---------------------------|
| 1. Prime Meridian | Greenwich                 |
| 2. Arctic Circle  | $66\frac{1}{2}^{\circ}$ N |
| 3. Torrid zone    | Hottest region            |
| 4. Latitudes      | Parallel lines            |
| 5. IST            | $82\frac{1}{2}^{\circ}$ E |

D. Short answer questions.

1. What are lines of latitude?

To locate a place on the Earth, imaginary lines are drawn on the Earth. The set of circles between the North Pole and the South Pole are called the lines of

latitude.

2. Define Earth's Grid.

The imaginary network of parallel latitudes and meridians on the surface of the Earth is known as the Earth's grid. We can locate any place on the Earth with the help of this grid.

3. Name the heat zones of the Earth.

The heat zones of the Earth are :

1. The Torrid Zone

2. The Temperate Zone

3. The Frigid Zone

4. Name the important latitudes of the world.

The important latitudes of the world are:

1. The equator  $0^{\circ}$

2. The North Pole  $90^{\circ}$  N

3. The South Pole  $90^{\circ}$  S

4. The Tropic of Cancer  $23\frac{1}{2}^{\circ}$ N

5. The Tropic of Capricorn  $23\frac{1}{2}^{\circ}$ S

6. The Arctic Circle  $66\frac{1}{2}^{\circ}$ N

7. The Antarctic Circle  $66\frac{1}{2}^{\circ}$ S

5. What is local time?

The time determined with respect to the meridian of a place is called the local time of that place.

6. Which meridians make a great circle and divide the Earth in two equal halves?

The Prime Meridian and  $180^{\circ}$  meridian make a great circle and divide the Earth in two equal halves.

E. Long answer questions.

1. What is longitude and its features?

Set of lines is required as a reference for locating places in the east and west directions. A set of lines is drawn joining the North Pole and the South Pole and these lines are called the Meridians of Longitude.

Features of Longitudes

1. Longitudes are semi-circles which are equal in length.
2. The  $0$  degree longitude is called the Prime Meridian.

3. There are 360 meridians of longitudes, 180 to the east of the Prime Meridian and 180 to the west of the Prime Meridian.
4. 180° E meridian and 180° W meridian fall on the same line. So, these two meridians are one and the same.
5. The Prime Meridian and 180° meridian make a great circle and divide the Earth in two equal halves.
6. The distance between any two meridians is not the same as all of them meet at North and South Poles.

2. Write a short note on International Date Line.

The 180° meridian is called the International Date Line (IDL). This line is not straight but cuts across the Earth in a zigzag pattern on the map. This is so that it does not cut through any island which would cause confusion with dates.

When the IDL is crossed, one must reset their watch. Crossing it from east to west requires adding a day while crossing it from west to east requires subtracting a day.

3. What are the features of parallels of latitudes ?

Features of Latitudes

1. There are 181 parallels of latitudes, 90 in the Northern Hemisphere, 90 in the Southern Hemisphere and the equator.
2. Each parallel of latitude is a circle and they do not cross each other.
3. Latitudes are of unequal lengths. The equator is the longest latitude.
4. The distance between the latitudes is always equal except at the poles where it is a little more than what is near the equator, as the Earth flattens at the poles.

4. What is the standard time and how is it different from local time?

The time determined with respect to the meridian of a place is called the local time of that place. All places along the same meridian share the same local time which can be calculated by knowing the meridian and the Greenwich Mean Time (GMT).

5. How is time calculated through longitudes?

Time calculated through longitudes is as follows:-

Time taken by the Earth to rotate once around its own axis = 1 day

1 day = 24 hours = (24 x 60) = 1440 minutes

One rotation of the Earth = 360° longitudes

Therefore, time taken to turn a distance of  $1^\circ = 1440/360 = 4$  minutes hour

Therefore, time taken to turn  $15^\circ$  of longitudinal distance =  $15 \times 4 = 60$  minutes  
= 1 hour