

I Fill in the blanks.

- 1) The equator is 0° latitude, and it's a great circle.
- 2) The Antarctic Circle is found in the southern Hemisphere.
- 3) The temperate zone falling between $23\frac{1}{2}^\circ$ N and $23\frac{1}{2}^\circ$ S is called the Torrid Zone.
- 4) The distance between lines of longitude is not same towards the poles.
- 5) The standard meridian of India is $82^\circ 30'$

II True or false?

- 1) A latitude is the angular distance ~~from~~

from the equator to the poles. True

2) All lines of latitude are of the same length. False

3) The north temperate zone lies to the north of the Arctic Circle. False

4) The 0° longitude passes through the British Royal observatory. True

5) A country can have more than one standard time. True

Cee
19/7/21

Q/A

1) Define Globe.

As Globe is a miniature form of the earth.

2) ~~Draw a neat diagram showing the temperature zones.~~

~~As~~

3) ~~Q~~ What makes the torrid zone the hottest among the temperature zones?

A The torrid zone lies between the Tropic of Cancer and Tropic of Capricorn. The sun rays falling exactly overhead gives out more than slanting sun rays. Therefore torrid zone the hottest among the temperature zones.

4) Why is Bangladesh half an hour ahead of India?

A Bangladesh standard time (BST) is technically GMT (+6:00). Indian standard time (IST) is usually GMT (+5:30). So, there is a 30 minute difference there. India nor Bangladesh observes DST (day light saving) and therefore always have a 30 min gap.

5) What is 'Solar time'?

As Solar time is based on the position of the Sun. It is the time we all use where a day is defined as 24 hours, the average time that it takes for the sun to return to its highest point. Local noon in solar time is the moment when the sun is at its highest point in the sky.

6) Why is standard meridian important for a country?

As Standard time is useful for a country because it shows and fixes a particular time for the country. A country may have many longitudes in between and there is a time gap of 4 minutes between each longitude. Therefore standard meridian should be there in each country for the equal time.

7) How can we measure the time difference between countries? Explain giving an example.

As The earth has 360 imaginary lines called longitudes or meridians running vertically between the poles. Each of these longitudes is called a degree. The 0 degree longitude passing through Greenwich, near London, is considered as standard and the time of all the other time zones are calculated accordingly. The time difference between each longitude (each degree) is 4 minutes. So if it is 12 noon at Greenwich (0 degree), it could be 12:04 pm at 1 degree meridian and so on. In India, the standard meridian is 82 and half degree. So the time difference between Greenwich and India is 82.5×4 , which is 330 minutes (5 hrs 30 min).

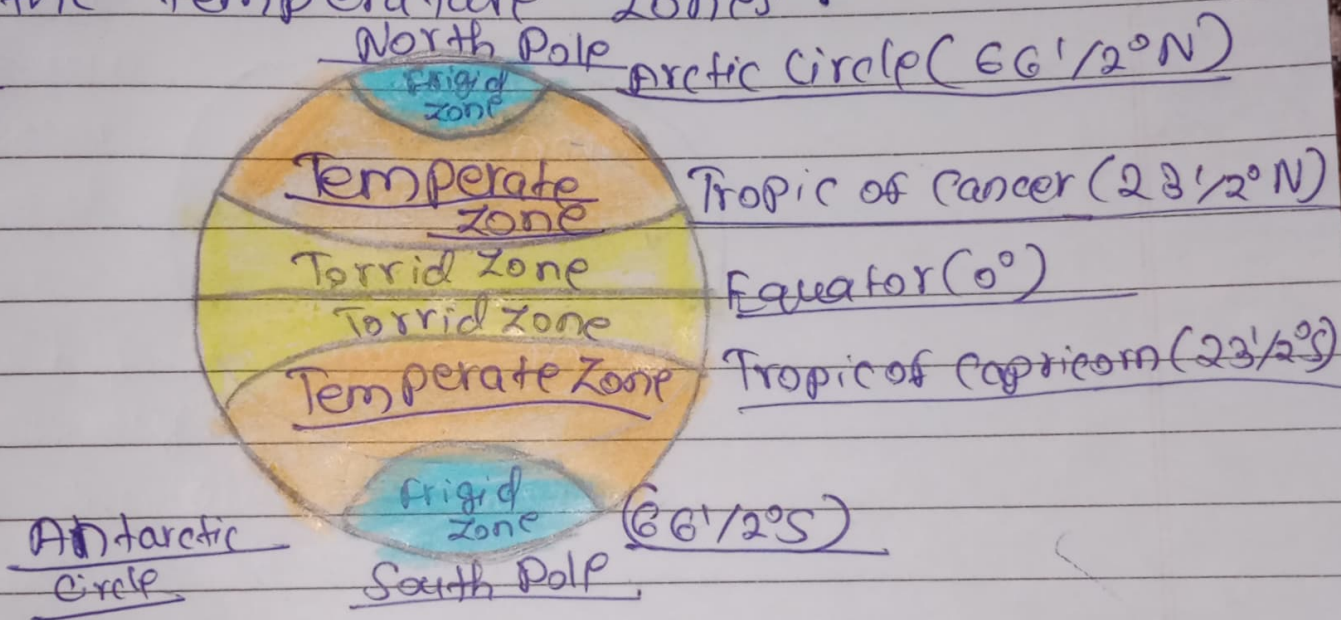
Q) How are the lines of latitude and longitude useful to us?

As As lines of latitudes and longitudes cross each other, they form a grid. Any position on earth can be located if the latitude and longitude are known. The grids on the maps help us find a particular

location. Longitudes also help us to calculate the time of a particular place.

2) Draw a neat diagram showing the temperature zones?

As



Multiple choice questions

① Which of these statements is correct?

Ans a) A globe is more accurate than a map as it follows the curvature of the Earth. It is therefore...

② The axis of the earth is tilted at an angle of:

Ans d) $23\frac{1}{2}^\circ$ to the vertical

③ When you say that your school lies to the south of the airport, you are giving the AS b relative location of your school.

④ Lines of latitude are imaginary lines:
AS a that ~~run~~ run horizontally across the surface of the earth.

⑤ The equator is drawn:
AS c around the middle of the globe.

⑥ Why is there an unequal distribution of heat energy on the surface of the earth?
AS c Due to the tilted nature of the earth's axis, the angle of incidence of the sun's rays differs.

⑦ The torrid Zone lies between the:
AS a Tropic of Cancer and the Tropic of Capricorn.

⑧ The Prime meridian:
AS b Passes through Greenwich, England, where the British Royal observatory is located.

9) In 1884, Sir Sanford Fleming divided the world into:

Ans a) 24 time zones.

10) Why did India adopt the Indian Standard time (IST)?

Ans d) All of the above

11) The time difference between GMT and IST is:

Ans d) 5 1/2 hours

12) If a person crosses the International Date line while moving from the west to the east, he or she

Ans b) loses a day

13) One degree of longitude is equal to:

Ans a) 4 minutes of time.

14) The meridian passes through Greenwich is called:

AS of the prime meridian