

Class 6
GEOGRAPHY

CHAPTER – 1 THE EARTH IN THE SOLAR SYSTEM

PREVIOUS KNOWLEDGE QUESTIONS

Ques.1 How many planets are there in our solar system?

Ans. There are 8 planets.

Ques.2 What is the ultimate source of energy?

Ans. Sun is the ultimate source of energy.

Ques.3 What is the solar system consist?

Ans. The solar system consist the sun and the eight planets.

VERY SHORT QUESTION ANSWERS

Ques.2 Name all the planets according to their distance from the sun.

Ans. There are nine planets in our solar system. In order of their distance from the sun, they are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

Ques.3 Why do we see only one side of the moon always?

Ans. The time taken by the moon for one rotation and one revolution is 27days and 8 hours. Hence we are able to see only one side of the moon from the earth.

Ques.4 What is the universe?

Ans. Universe is the whole of body of all the celestial bodies – the stars, the planets, the satellites, the dust particles, gases etc.

SHORT QUESTION ANSWERS

Ques.1 How does a planet differ from a star?

Ans.

Stars	Planets
- Stars emit a large amount of heat and light. - They are big heavenly bodies. - There are many stars which we cannot see	- They do not have heat and light of their own. They only reflect the light of the sun. - Planets are called 'Wanderers'

with our naked eyes.	because they revolve around the sun in their fixed orbits. Planets can be seen with the help of the telescope.
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Ques.2 What is meant by the "Solar System"?

Ans. The sun the planets and satellites together with other minor bodies make up the solar system. The sun is at the centre of the solar system. The planets revolve around the sun in their fixed orbits. The satellites revolve around the planets.

LONG QUESTION ANSWER

Ques.1 why is the Earth called a unique planet?

Ans. The earth is a unique planet in the solar system due to the following reasons:

- (i) The earth is the only planet, which contains life.
- (ii) It consists of land, water and air, and three essential things to sustain life. No other planet possesses these qualities.
- (iii) It has moderate temperature and moderately dense atmosphere containing gases useful in supporting life on the earth.
- (iv) It contains 71 per cent of its surface area covered with water. 29 per cent of its area is covered by land.

TICK THE CORRECT ANSWER

(a) The Planet known as the "Earth's Twin" is

- (1) Jupiter (2) Saturn (3) Venus

(b) Which is the third nearest planet to the sun?

- (1) Venus (2) Earth (3) mercury

(c) All the planets move around the sun in a

- (1) Circular path (2) Rectangular path (3) Elongated path

(d) The pole star indicates the direction to the

- (1) South (2) North (3) East

(2) Asteroids are found between the orbits of

- (1) Saturn and Jupiter (2) mars and Jupiter (3) The earth and mars

Ans. a(iii) Venus, b(ii) Earth, c(i) Circular Path, d(ii) North

FILL IN THE BLANKS

- (a) A group of stars forming various patterns is called a constellation.
- (b) A huge system of stars is called galaxy.
- (c) Moon is the closest celestial body to our earth.
- (d) Earth is the third nearest planet to the sun
- (e) Planets do not have their own heat and light.

HOTS QUESTIONS

Ques.1 How does an artificial satellite differ from natural satellite?

Ans. Natural Satellites –

- i) They formed naturally
- ii) We have no control over them
- iii) Naturally orbit a planet

Man made satellite

- i) It is human made
- ii) controlled by humans
- iii) Send transmissions to Earth

Ques.2 Why there is no life on the moon?

Ans. (i) There is no water on Moon

- ii) Oxygen is not available on Moon
- iii) Temperature of moon is not suitable for the life to exist

VALUE BASED QUESTION ANSWERS

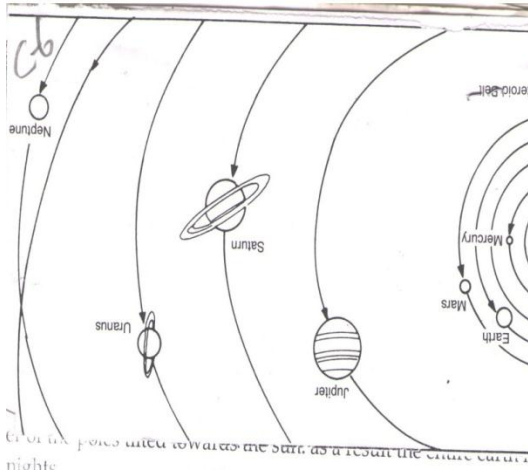
Ques.1 The sun and other heavenly bodies are making a joint family together. Which family do you like nuclear or joint family? Give reasons.

Ans. Yes, we also like to live in joint family because-

- i. We learn to share resources better like kitchen, money and many more things
- ii) Our elders watch us and teach us right things
- iii) We get better attention for individuals by different family members
- iv) We learn about the importance of different relations in our lives

ACTIVITY

1. Prepare a chart of solar system



2. Quiz on the earth and solar system.

1. How many planets are there in solar system?

- ☐ Eight
- ☐ Nine
- ☐ Ten
- ☐ Eleven

2. Are the orbits of the planets the same place?

- ☐ Yes more or less
- ☐ No they're all over the place
- ☐

3. How old is the solar system

- ☐ 500 years
- ☐ 5 million years
- ☐ 5 billion years
- ☐ 500 billion years.

4. How long does it take for light from the sun to reach earth?

- ☐ 1 minute
- ☐ 8 minute
- ☐ instantaneous
- ☐ 24 hours

CHAPTER – 2 GLOBE LATITUDES AND LONGITUDES

PREVIOUS KNOWLEDGE QUESTIONS

Ques.1 What is the use of Globe?

Ans. Globe is used to locate the places on Earth.

Ques.2 What are longitudes and latitudes?

Ans. These are imaginary lines drawn on the globe.

Ques. What is the shape of the globe?

Ans. it is round in shape.

VERY SHORT QUESTION ANSWERS

a. What is a globe?

Ans. The spherical representation of the Earth is called globe. The globe is small model of earth which represent continents ocean, countries etc.

b. What is the true shape of the Earth?

Ans. Earth is spherical in shape. It is slightly bulging at the equator and flattened at the poles.

c. What is the latitudinal value of the tropic of cancer?

Ans. The latitudinal value of tropic the cancer is $23\frac{1}{2}^{\circ} N$

d. What are the three heat zones of the Earth?

Ans. The three heat zones of Earth are:

i) Torrid Zone ii) Temperate Zone iii) Trizid Zone

e. Why is 5:30 pm in India and 12:00 noon in London?

Ans. India located east of Greenwich at $82^{\circ}30'E$ is 5 hours and 30 minutes ahead of GMT so it will be 5:30 Pm in India when it is 12:00 noon in London.

SHORT QUESTION ANSWERS

Ques.1 What are parallels of latitude and meridians of longitude?

Ans. All parallel circles from the equator upto the poles are called parallel of lititudes. Latitudes are measured in degree. The record type of circles from north to south and pass through the north pole and south pole. Half of these circles between the north pole and the siuth pole are called meridians or longitudes.

Ques.2 Why does the torrid zone receive maximum amount of that?

Ans. The word 'torrid' means 'hot' all places located between the tropic of cancer and the tropic of Capricorn experience vertical rays of the sun twice in a year. Therefore, this region receives the maximum amount of sunlight or heat.

LONG QUESTION ANSWER

Ques.1 Describe the important parallels of latitudes.

Ans. Important parallels-

1. Equator-

Equator is the longest parallel running the east west direction.

2. Tropic of cancer

It is the parallel of $23\frac{1}{2}^{\circ}$ N the northern hemisphere.

3. Tropic of Capricorn-

It is the parallel of $23\frac{1}{2}^{\circ}$ S in the southern hemisphere.

4. Arctic circle –

It lies at $66\frac{1}{2}^{\circ}$ south of the equator.

5. Antarctic circle-

It lies at $66\frac{1}{2}^{\circ}$ south of the equator.

6. 90° parallel-

It is shown by a point.

Its length is zero.

7. North pole-

It is at 90° north of the equator.

8. South pole-

It is 90° south of the equator.

TICK THE CORRECT ANSWERS

a. The value of prime meridian is -

Ans. (i) 90^0 (ii) 0^0 (iii) 60^0

b. The frigid zone lies near -

Ans. (i) Poles (ii) the equator (iii) the tropic of cancer

c. The total number of longitudes are -

Ans. (i) 360 (ii) 180 (iii) 90

d. The Antarctic circle is located in

Ans. (i) the northern hemisphere
(ii) The southern Hemisphere
(iii) The eastern hemisphere

e. Gird is a network of -

Ans. (i) Parallels of Latitudes and meridians of Longitudes
(ii) The tropic of cancer and the tropic of Capricorn
(iii) The North Pole and the southpole

Ans. a (ii) 0^0 , b (i) poles, c (i) 180, d (i) the southern hemisphere, e (i) parallels of latitudes and meridians of longitudes.

FILL IN THE BLANKS -

a. The tropic of Capricorn is located at $23\frac{1}{2}^0$ south

b. The standard meridian of India is 82^030E

c. The 0^0 Meridian is also known as Prime Meridian

d. The distance between the longitudes decreases towards Poles

e. The Arctic Circle is located in the northern hemisphere

HOT QUESTIONS

Ques.1 why does the time of a place not depend on its latitude?

Ans. To see the position of a place it is necessary to know latitude of a place. For example that Tonga Island (Pacific Ocean) and Mauritius island (in the Indian ocean) are situated on the same latitude (i.e. 20^0s). Now in order to locate them precisely we must find out how far east or west there places are from a given line of reference running from pole. The lines of references are called the meridians of longitude.

Ques.2 why do the days and nights always remain equal at the equator?

Ans. Because throughout the entire orbit around the sun the earth's equator remains nearly the same distance away at all times this results in an almost uniform balance of day and night throughout the year for locations closest to the equator.

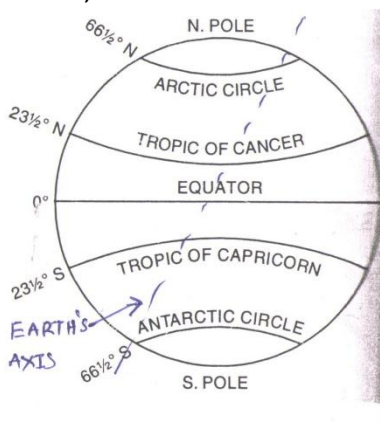
VALUE BASED QUESTIONS

Ques.1 If you found someone who missed his way to reach home. How you can help to that person in finding his own home?

Ans. These days we have computerized maps which can be zoomed in and out to change the scale of the map. We may begin with looking at streets in the neighbourhood and may zoom out to view the map of the whole city and the major roads in the city, We helped the person by asking his address and finding it out throughmap and send him to his home.

ACTIVITY

Draw a diagram of the globe showing the earth's axis, the equator, tropics of cancer and Capricorn, Arctic Circle and Antarctic Circle.



CHAPTER – 3 MOTIONS OF THE EARTH

INTRODUCTORY QUESTIONS

Q.1 How many types of motions Earth has?

Ans Earth has two types of motions – Rotation & Revolution.

Q.2 What do you understand by rotation?

Ans The spinning of the earth on its own axis is known as rotation.

Q.3 Does the Earth move?

Ans Yes, the Earth moves around the sun.

TICK THE CORRECT ANSWER.

(a) The movement of the earth around the sun is known as

- (i) Rotation (ii) revolution (iii) inclination

(b) Direct rays of the sun fall on the equator on

- (i) 21 March (ii) 21 June (iii) 22 December

(c) Christmas is celebrated in summer in

- (i) Japan (ii) India (iii) Australia

(d) cycle of the seasons is caused due to

- (i) Rotation (ii) revaluation (iii) gravitation

Ans. a (ii), b (i), c (iii), d (ii).

FILL IN THE BLANKS.

- (a) A leap year has **366** number of days.
(b) The daily motion of the earth is **rotation**.
(c) The earth travels around the sun in **elliptical**.
(d) The sun's rays fall vertically on the Tropic of **cancer** on 21st June.
(e) Days are shorter during **winter** season.

VERY SHORT QUESTION ANSWER

Q.1 What is a leap year?

Solution:

A year, which has 366 days, is called a leap year.

Q.2 What is the angle of inclination of the earth's axis with its orbital plane?

Solution:

The axis of the earth which is an imaginary line makes an angle of $66\frac{1}{2}$ with its orbital plane.

SHORT QUESTION ANSWER

Q.1 Define rotation and revolution.

Solution: Rotation

The spinning of the earth on its axis is called rotation. The time of rotation is about 24 hours. Days and nights follow each other in regular succession in all part of the earth due to rotation.

Revolution

Annual motion of the earth around the sun is called revolution. The time of revolution is 365 days 6 hours. The change of season takes place because of the revolution of the earth.

Q.2 Differentiate between the Summer and Winter Solstice.

Solution:

Summer solstice: It is the position of the earth when the Northern Hemisphere has the longest day and the shortest night. It occurs on 21st June. In the Southern hemisphere, it is winter season at this time. The days are short and the nights are long.

Winter Solstice: It is the position of the earth when Southern Hemisphere has long days and shorter nights. In the Northern Hemisphere, the days are short and the nights are long. It occurs on 22nd December.

Q.3 What is an equinox?

Ans. Equinox are days when direct rays of the sun fall on the equator. At this position neither of the poles are tilted towards the sun, so the whole earth experiences equal days and equal nights. It occurs on 21st march and 23rd September.

Q.4 Why do the poles experience about six months day and six months night?

Solution:

The Revolution of the earth and the inclination of the earth's axis in a fixed direction makes the poles experience about six months day and six months night.

LONG QUESTION ANSWER

Q.1 Why does the Southern Hemisphere experience Winter and Summer Solstice in different times than that of the Northern Hemisphere?

Solution:

The earth revolves round the Sun and completes its revolution in one year (365 $\frac{1}{4}$ days).

Its axis is bent towards each by $23^{\circ} 30'$. Hence sometimes the North Hemisphere is bent towards the Sun while another time the South Hemisphere is bent towards the Sun.

The Hemisphere which is bent towards the Sun experience summer while another Hemisphere which is away from the sun experiences winter, and vice versa.

These situations occur on 22nd June and 22nd December.

On 22nd June the sunrays shine perpendicular at Tropic of Cancer. Hence North Hemisphere experiences summer and summer solstice in the North Hemisphere.

On 22nd December the sunrays shines on the Tropic of Capricorn and south Hemisphere experiences summer. Hence this Hemisphere has summer solstice.

There is winter solstice in the south Hemisphere when sunrays shine perpendicular on the Tropic of Cancer on 22nd June. On 22 December North Hemisphere experiences winter solstice.

HOTS QUESTIONS

Q.1 What would happen if our Earth stopped rotating?

Ans The portion of Earth facing the sun would always experience day, this bringing continuous warmth to that region. The other half would remain in darkness and be freezing cold all the time. Life would have not been possible in such extreme condition.

VALUE BASED QUESTIONS

Q.1 The Earth takes 24 hours to complete its rotation. It moves continuously on its own axis without delay. What do you learn from this quality of Earth?

Ans. As the Earth completes its task on time and it never delays in the same way we must complete our work on time and never delay.

ACTIVITY

On a table, place a globe and a table lamp in a line. Light the table lamp.

What do you observe?

Solution: We will observe that the glow of the table lamp illuminated a part which will be daytime in those parts of the globe.

Similarly, the side of the globe which is away from the table lamp looks dark. Night will prevail in those parts of the globe.

