

BIJENDRA PUBLIC SCHOOL

Class - 6

Subject - SOCIAL STUDIES (GEOGRAPHY)

Chapter - 12 THE PLANET EARTH

I. Tick (✓) the correct option.

1. The planet with rings made of ice and rock around it is

- a. Uranus b. Saturn c. Pluto

Ans. a. Uranus

2. The planet also known as the Red planet is

- a. Jupiter b. Mars c. Mercury

Ans. b. Mars

3. Indian's first mission of the Moon is

- a. Edusat b. Aryabhata c. Chandrayaan 1

Ans. b. Aryabhata

4. Asteroids are

- a. Small rocky bodies that lie in a belt between Mars and Jupiter.
b. Small, rocky, airless fragments that orbit the sun.
c. Objects of dust, ice and gases.

Ans. b. Small, rocky, airless fragments that orbit the sun.

5. The unit used to measure distance in space is

- a. light year b. km c. miles

Ans. a. light year

II. State whether the following statements are true or false and rewrite the incorrect statements to correct them.

1. The Earth is the third nearest planet to the sun. - True

2. The period when the Moon becomes smaller is known as waxing. - False

Ans. The period when the Moon becomes smaller is known as waning

3. Jupiter is the largest planet in the solar system. - True

4. Venus is the hottest planet. - True

5. The Moon takes about 30 days to revolve around the Earth. - False

Ans. The Moon takes about 28 days to revolve around the Earth.

III. Answer the following in one sentence.

1. Name the most accepted theory about the birth of the universe.

Ans. The Big Bang theory is the most accepted theory about the birth of the universe.

2. What is a star?

Ans. Stars are heavenly objects that are self - luminous.

3. Which celestial body lies at the centre of our solar system?

Ans. The sun is at the centre of our solar system.

4. What holds all the celestial bodies in the solar system in place?

Ans. Gravity holds all the celestial bodies in the solar system in place.

5. What is waxing period of the Moon?

Ans. When the shape of the Moon appears to be growing, it is called the waxing period.

IV. Answer the following questions in brief.

1. Define galaxy.

Ans. A galaxy is a huge collection of gas, dust and billion of stars and their solar systems. Our galaxy, the milky way also has a super massive black hole in the middle. Some scientists think there could be as many as on hundred billion galaxies in the universe.

2. How is a star different from a planet?

Ans. The main difference between stars and planets is that stars have high temperatures compared to planets. Because they radiate energy, stars are very bright objects. Planets do not generate their own energy through nuclear reactions. They reflect some of the radiation coming from their parent star.

3. Why do we use light year to measure the distance of the celestial bodies?

Ans. It is difficult to measure distance in space by an ordinary unit. Therefore, a light year is used to measure such a distance. A light year is the distance travelled by light in one year, at the speed of 300,000 km/second.

4. What are comets?

Ans. Comets are small bodies, made of dust, gas and ice, which orbit around the sun. The ice particles change to gas when the comet nears the sun. This vaporised part forms a long tail of gas and fine dust.

5. What are meteoroids?

Ans. Chunks of rocky and metal debris hurtling through space and orbiting the sun are known as meteoroids.

6. What is a meteor?

Ans. Smaller pieces of rocky material burn when they enter the Earth's atmosphere from space. These are meteors.

V. Answer the following questions in detail.

1. How was our solar system formed?

Ans. Our solar system formed about 4.6 billion years ago from a dense cloud of interstellar gas and dust. When this dust cloud collapsed, it formed a solar nebula - a spinning, swirling disk of material. At the center, gravity pulled more and more material in.

2. Why is the Earth considered a unique planet?

Ans. The earth is called a unique planet due to the following reasons:

- i. The earth is at a right distance from the sun to receive heat and light that can support life.
- ii. The earth is the only planet to have sufficient oxygen to enable breathing.
- iii. The earth has the right proportion of other gases such as nitrogen, carbon dioxide, water vapour, inert gases.
- iv. The earth has the atmosphere around it, which is a protective blanket against ultraviolet radiation.
- v. The earth has soil and water, which is necessary for survival of life.

3. What are satellites? Write a note on India's satellite programmes.

Ans. Celestial bodies that revolve around the planets are satellites. The Moon is the only natural satellite of the Earth.

Today, human - made satellites are being launched into space by various countries. India's first human-made satellite Aryabhata was launched in 1975. Since then many more satellites have been sent to space to study our land and resource.

EDUSAT - India's first education satellite, was launched in September 2004.

RISAT - 1 is India's first all - weather Radar Imaging satellite, whose images will facilitate agriculture and disaster management.

India's first interplanetary mission in Nov. 2013, was the Mars Orbiter Mission or Mangalyaan, to explore and observe Mars.

4. Explain the waxing and waning periods of the Moon.

Ans. The Moon has different phases. It appears to change its shape during the month. When the shape appears to be growing, it is called the waxing period, and when the shape appears to be reducing, it is called the waning period. We see different shapes of the Moon due to the sun lighting up its different parts in its journey around the Earth.

5. What is the difference between meteoroids and meteorites?

Ans. Chunks of rocky and metal debris hurtling through space and orbiting the sun are known as meteoroids.

Many larger fragments of rocks complete the journey to the Earth's surface without getting destroyed. These are known as meteorites.