Worksheet

The Solar System

MCQs

Question 1: The number of times the Earth has moved around the Sun since you were born
(a) is less than your age in years
(b) is equal to your age in years
(c) is greater than your age in years
(d) has no connection with your age

Answer :

Correct Answer is Option B.
As earth takes 365 days it will be almost equal to your age in years.

Question 2: Which places on the Earth are equally hot throughout the year?
(a) North Pole
(b) South Pole
(c) Places on the equator
(d) None – all places are cold in winter and hot in summer

Answer :

Correct Answer is Option C.
The amount of solar energy in a given area is greater at the equator than in an equal area at the poles, which is why the equator temperature is warmer than the polar temperatures.

Question 3: The largest planet is
(a) Earth
(b) Sun
(c) Saturn
(d) Jupiter

Answer :

Correct Answer is Option D.
In our Solar System, Jupiter is the largest planet we have.

Question 4: Which of these is not a planet?
(a) Earth
(b) Saturn
(c) Venus
(d) Sun

Answer :

Correct Answer is Option D.
The Sun is an ordinary star, just one among hundreds of billions of stars in the Milky Way Galaxy.

True & False

Question 5:

(a) When the northern hemisphere has day the southern hemisphere has night. **(True)**
(b) Planets far away from the Sun are made up of frozen gases. **(False)**
(c) There is six months of day and six months of night at the Poles. **(True)**

Tips:

- The Poles experience about six months of day and six months of night because of the tilt of the Earth on its axis. Because of this tilt each Pole is tilted towards and away from the Sun for about six months each. When the North Pole is tilted towards the Sun it experiences continuous daylight for six months.

Name the following

Question 6:

(a) The morning star. **Venus**
(b) The planet with the largest number of Moons. **Saturn**
(c) The hottest planet. **Venus.**
(d) The red planet. **Mars**

Tips:

- Venus shines so brightly that it is the first “star” to appear in the sky after the Sun sets, or the last to disappear before the Sun rises.

- While Earth has just one moon, other planets have several that orbit around them. With more than 80 confirmed and unconfirmed moons, Saturn is the planet with the most moons, but it is not the only planet with more than one.

- Venus is the exception, as its proximity to the Sun and dense atmosphere make it our solar system's hottest planet.

- Mars is known as the Red Planet because iron minerals in the Martian soil oxidize, or rust, causing the soil and atmosphere to look red.

Answer the following questions in detail

Question 7: How does the Earth's revolution cause seasons?

Answer : Earth has seasons because its axis is tilted. Earth's axis is always pointed in the same direction, so different parts of Earth get the Sun's direct rays throughout the year. For example, in summer, the Sun's rays hit that region more directly than at any other time of the year.

Question 8: Explain how day and night occur.

Answer : The sun shines during the day and the moon shines at night. The sun and the moon are on different sides of the Earth and the Earth rotates facing one and then the other. A day is the time it takes for the sun to move around the Earth. Night occurs when the moon covers the sun.

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Answer the following questions in brief

Question 10: What is the difference between rotation and revolution?

Answer : "Rotation" refers to an object's spinning motion about its own axis. "Revolution" refers the object's orbital motion around another object. For example, Earth rotates on its own axis, producing the 24-hour day. Earth revolves about the Sun, producing the 365-day year.

Question 11: What is the solar system?

Answer : Our Solar System consists of a star named the Sun, the planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. It also includes the satellites of the planets; numerous comets, asteroids, and meteoroids; and the interplanetary medium. The Sun is a star. Thus, the star nearest to the Earth is the Sun.

Question 12: What are the two poles of the Earth called?

Answer : Earth has two geographic poles: the North Pole and the South Pole. They are the places on Earth's surface that Earth's imaginary spin axis passes through. Our planet also has two magnetic poles: the North Magnetic Pole and the South Magnetic Pole.

Question 13: List the outer planets and the inner planets.

Answer : Inner planets

- They are closer to the Sun.
- They are small.
- They take a short time to complete one revolution.
- They are mostly made up of rocks and are called terrestrial planets.
- Examples: Mercury, Venus, Earth, Mars

Outer planets

- They are far away from the Sun.
- They are very large.
- They take a long time to complete one revolution.
- They are mostly made up of gases and are called gas giants.
- Examples: Jupiter, Saturn, Uranus, Neptune

Match the following

Question 14:

1. Mars - a. Earth’s fixed path around the Sun
2. Equator- b. Day and night
3. Saturn - c. Formed of rocks and iron
4. Orbit - d. Seasons
5. Rotation - e. Second largest planet
6. Revolution - f. Divides the Earth into two halves

Answer :

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