

## Geo ch-1

Q1 How does a planet differ from a star?

Ans Stars are very big & hot celestial bodies made of gases. They have their own heat & light they emit it in large amount. Planets are celestial bodies usually smaller than stars. They ~~don't~~ don't have their own heat & light. They are lit by the light of stars.

Q2 What's meant by the solar system?

Ans The term 'solar system' refers to the family of the Sun. The Sun, eight planets, satellites & some other celestial body known as asteroids, comets, meteoroids etc are a solar system.

Q3 Name all planets according to distance to the Sun.

Ans Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus & Neptune

Q. Why is the Earth called unique?

Ans. Earth is called a unique planet

i. It ~~is~~ is the only planet which has favorable conditions that support life.

ii. It is not too hot or cold.

iii. It has water & air which are very essential for our survival.

iv. The air has life support gases like oxygen

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

Ans. The moon moves around the Earth in about 27 days. It exactly takes the same time to complete one spin on its axis. As a result only one side of the moon is visible.

f. What is the universe?

1.15 A galaxy is a cluster of stars, cloud of dust & gases. Millions of galaxies make up the universe.

2. The planet that is known as 'Earth's twin' is

1.16 Venus

b. What is the third nearest planet to the Sun Earth.

c. All the planets move around the Sun in an ~~elongated~~ elongated path.

d. The pole star indicates the direction to the North.

e. Asteroids are found between orbits of Mars & Jupiter.

3. A group of stars forming various pattern is called constellation.

2. A huge system of stars is called galaxy.

3. The Moon is the closest celestial body to Earth.
4. Earth is the third nearest planet to the Sun.
5. Planets don't have their own heat & light.

### Homework

#### MCQ's

1. Full moon nights occur every month.
2. Hindi word for new moon night is Aman.
3. The Sun is all of above.
4. Ursa major is a/an ~~constellation~~ constellation.
5. Which of these was a planet till 2006 but now is a dwarf planet? Pluto.
6. The blue planet term indicates water.

## 2. Fill in the blanks

1. ~~100~~ 5 days

2. ~~big~~ hot

3. heat & light

4. ~~7~~ Saptarishi

5. Wanderers

6. Jupiter, Saturn, Uranus

7. orbit

8. Size & shape

9. Mountains, craters, volcanoes

10. ~~friction~~

3. true or false

i) false

ii false

iii true

iv false

v true

vi false

vii true

viii true

4 Match the following

A	B
1 The Sun	<del>a</del> The Sun is 150 million km away from Earth
2 The Moon	b The moon is 384,400 km away from Earth
3 The Earth	c 75% water
4 The planet with the longest year	d Neptune
5 Mars & Jupiter	e Asteroid belt
6 Planet having most moons known	f Saturn

2 Saturn & Uranus are outer planets

5 Planet with largest day / Venus  
largest day

## QSAQ'S

1. Name 2 celestial bodies visible only in the night sky

Ans moon & stars are the celestial bodies visible in the night sky

2. Why do you feel heat & light of the stars even though they are big hot

Ans we don't feel heat of the stars because they are far away

3. From which greek word 'planet' derives

Q. The word planet derives from the word planetai.

Q. What does the solar family consist of?

Ans. The solar family consists of Sun, planets, satellites, asteroids & meteoroids.

Q. What is the path of the orbit in which planets revolve around the sun?

Ans. The orbits of planets are elliptical in shape.

Q. Which planet is Earth's twin & why?

Ans. Venus is called Earth's twin because it is similar to Earth in shape & size.

Q. What is geoid?

Ans. A sphere with its ends flattened is geoid.

Q. Why is the Earth called blue planet?



ans Earth appears blue from outer space  
since it has over  $\frac{2}{3}$  water. It  
is called blue planet.

Q. How much time does the moon take to  
revolve around earth?

ans The moon takes approximately 27 days  
to revolve around the earth.

Q. What's the difference between INSAT  
& Moon.

ans The Moon is a natural satellite &  
INSAT is Artificial.

Q. What are asteroids?

ans Asteroids are numerous celestial  
bodies which revolve around the sun &  
mainly found in orbits of Mars & Jupiter.

Q. What's a meteoroid? meteoroid?

ans Small pieces moving around the sun are

meteoroid

## Q. 1

1. Name 2 extreme shapes of the moon & at what intervals do they occur?

ans The moon is seen in its two extreme shapes of the full moon & New moon. The full moon means the moon in its full circular shape. The new moon means the moon that can't be seen. The new moon comes every 14 nights or (every 29 days) a full moon occurs on the last day of a month.

2. What is the pole star? How can the Saptarishi be used to locate it?

ans The pole star is the star that is known to retain its position in the night sky always. We can locate the position of the pole star with the constellation 'Saptarishi'. If an imaginary line is drawn joining the 'pointer stars' of the Saptarishi,

Q. If a ~~ext~~ extended fence is drawn, it will point to the pole star.

3. Write a short note on the 2 closest planets nearest to Sun.

Ans. Mercury: It is the nearest planet to the Sun. It takes 88 days to revolve around the Sun. It is also the smallest planet.  
Venus: It is the 2nd nearest planet to the Sun. It is similar to Earth in shape & size. It is also called Earth's twin.

Q. How does Earth support life?

Ans. The Earth has conditions that support life. It is neither too hot nor too cold. It has both air & water, which are both indispensable for life. Presence of oxygen in the air in appropriate proportion supports life. These factors make Earth a unique planet.

## LQA

1. Write short notes on the following

- a) The sun
- b) The moon
- c) Galaxy

ans (a) The sun is considered the 'head' of the solar system. It's a star although it's smaller & less bright than most other stars. It's a huge celestial body made of extremely hot gases. It provides heat & light for the whole of solar system. Life on earth depends on many factors one of them is sunlight. The 150 million km away from earth.

(b) The moon is the only natural satellite of our planet earth. Its diameter is  $\frac{1}{4}$  of earth's diameter. It's 384,400 km away from earth. It does not support life. It revolves around the earth & rotate about its axis which only one side of the moon ~~Galaxy~~

(c) Galaxy is a term that refers to

billions of stars, clouds of dust & gases & other celestial bodies considered as a single unit. The only bigger unit is ~~milky~~ universe. Galaxies make a universe. The galaxy we live in is ~~milky way~~ Milky Way.

2. Draw a diagram showing the 8 planets of the Solar System in their orbits around the Sun. Also prepare a table mentioning the length of days & years

Planet	Length of year	Length of Day
1. Mercury	88 days	59 Days
2. Venus	243 days	255 days
3. Earth	1 <del>year</del> year	1 day
4. Mars	687 days	1 Day
5. Jupiter	11.92 years	9.93 hours
6. Saturn	29.42 years	10.67 hours
7. Uranus	84 years	17.23 hours
8. Neptune	164 years	16.2 hours

# SOLAR SYSTEM

