St. Andrews Scots Sr. Sec. School

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Session: 2025 – 2026
(Answer Key)

Class: VI | **Subject: Science** | **Chapter: Beyond The Earth**

CHECKPOINT 1.

1. Stars 2. Alpha Centauri 3. 9.46×10^{12}km 4. Ursa Major. 5. Sirius

CHECKPOINT 2.

1. True **2.** False **3.** True **4.** False **5.** False

CHECKPOINT 3

1. Asteroids. **2**. shooting **3**. away **4**. Soviet Union

PRACTICE TIME

A. Tick the correct answers.

1. (d) 2. (a) 3. (b) 4. (d) 5. (a)

B. Assertion and Reason.

1. (d) 2. (a) 3.(c) 4. (a). 5.(b)

C. Fill in the blanks

1.Moon. 2.Stars. 3. Navigators. 4. Parsec. 5.Venus

D. Very short answer type questions.

1. The heavenly bodies moving around a planet are called satellite.
2. New moon.
3. Pole star is located just above the north end of the axis of rotation of the Earth.
4. The group of stars which forms a pattern is called a constellation.
5. The Earth is called the blue planet.

E. Short answer type questions.

1. Due to the position of Moon in relation to Earth and Sun, and its revolution around the Earth, we see different phases of the Moon.

2. The time period between two consecutive full moons is called a lunar month. It is 29 days,11 hours and 43 minutes long.

3. A heavenly body that revolves around the Sun is called a planet. There are eight planets in our solar system. These are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

4.The rocky objects of different sizes that revolve around the Sun are called asteroids. They are found between the orbits of Mars and Jupiter and form an asteroid belt.

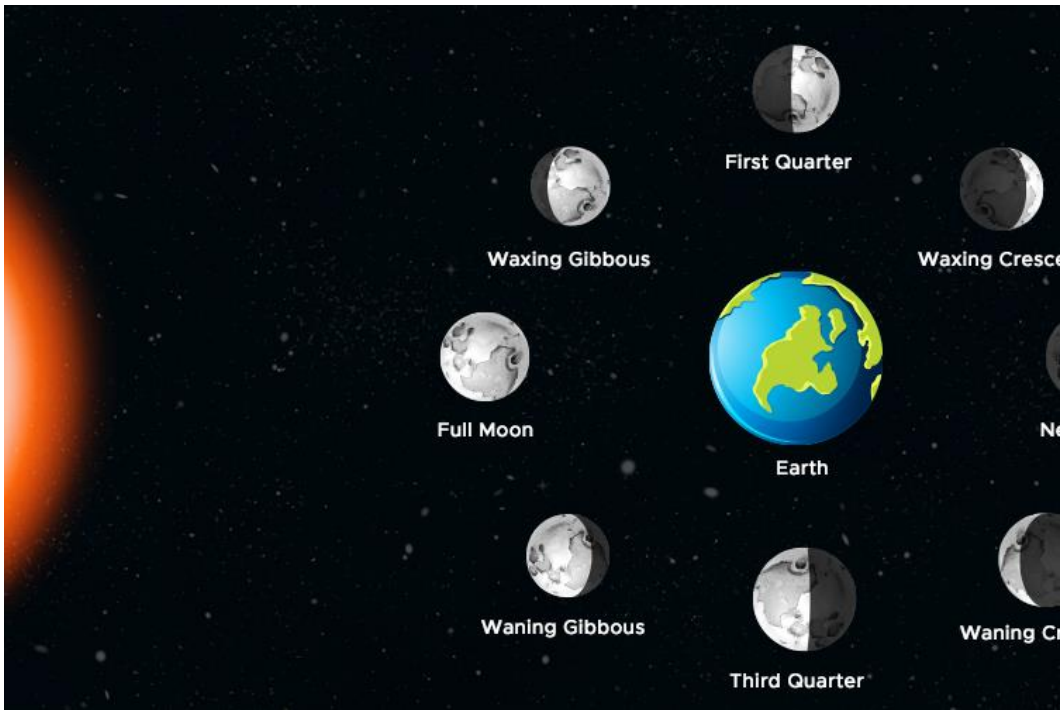
5. A satellite which is designed by man in order to revolve around the Earth in a fixed orbit is called an artificial satellite. India's first artificial satellite was Aryabhata.

F. Long answer Type Questions:

1. Different phases of the Moon are as follows:

- **New Moon:** It is the phase of the Moon when it is in the same direction as the Sun and its non- illuminated half part faces the Earth and is invisible to us.
- **Waxing Crescent Moon:** It is the phase of the Moon when a part of it is illuminated and is visible to us. This part is seen as a thin curve called crescent which starts growing bigger on every following night.
- **First Quarter Moon:** This phase comes a week after the New moon. At this phase, the half of illuminated Moon is visible to us.
- **Waxing Gibbous Moon:** At this phase, a still bigger part, which is more than half of the illuminated Moon, is visible to us.

- **Full Moon:** This phase comes two weeks after the new moon. At this phase, full illuminated moon is visible to us as a full circular disc.
- **Waning Gibbous Moon:** This phase comes a week after the full moon, when the illuminated part starts decreasing continuously.
- **Last Quarter Moon:** This phase comes three weeks after the new moon in which only half of the illuminated part of the Moon is visible to us.
- **Waning Crescent Moon:** At this phase, which is during the fourth week after the new moon, the size of illuminated part of the Moon decreases and is visible to us as a thin curve again.



2. The surface of the Moon on its near side is entirely different from its far side. The surface on the near side is extraordinarily uneven and consists of lunar highlands and maria (large ditches).
The surface on the far side of the Moon is comparatively smoother and has a finer texture, but is still found with a large number of craters formed by the falling of meteors.

3. The characteristic features of the Sun are:
(a) The Sun is a medium-sized star. It gives out its own light.
(b) It gives a large amount of heat and light to us which is necessary for life to exist.
(c) Its distance from the Earth is 150 million kilometres.

4. The conditions that favour life on the Earth are:

(a) The distance of the Earth from the Sun is such that it receives optimum amount of heat and light from the Sun.

(b) The Earth has a protective covering of atmosphere around it, which protects it from many high energy radiations coming from the Sun.

(c) The atmosphere of the Earth has oxygen gas, which is essential for life to exist.

(d) The atmosphere of the Earth helps in maintaining a moderate temperature range onthe earth.

(e) The gravity on the Earth is optimum that holds the water (oceans) and the atmosphere on the surface and prevents them from escaping. It allows an easy movement of creatures and objects on the surface of the Earth. The just appropriate amount of heat, light, gravity, atmosphere, oxygen and water, all factors combine their goodness together favour life on this planet.

5. On 24 August 2006, the planet Pluto was degraded by the International Astronomical Union (IAU) from the group of nine planets and considered as a dwarf planet.The changes that have occurred in the solar system after August 2006 are mentioned below:

(a)The planets that come in the classical group are 8, except Pluto.

(b)These planets have sufficient mass for their self-gravity to overcome rigid force so that they assume a nearly round shape.

(c)They have cleared the neighbourhood near their orbits.

G. HOTS Questions

1.Do yourself. (**Hint:** Uttarakhand is a hilly state where the sky is very clear with very less or no light pollution.)

2. Jupiter is the largest planet and has many faint rings around it. It has 63 moons revolving around it. One can look for its surface, atmosphere, etc. These features will help to understand its environment, surface composition, etc.

3. (a) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

(b) Planet Venus is called Morning Star because it shines very brightly in the sky before sunrise.

(c) The outermost four planets are Jupiter, Saturn, Uranus and Neptune. The outer planets have gaseous composition and are icy cold. They have rings around them.

G. Passage/case based Questions

1. A shooting star is a meteor which starts glowing on entering the atmosphere of the Earth.
2. Shooting stars look like a streak of light because they burn in the atmosphere of the Earth due to air friction and start glowing.