

Our Environment and the Solar System

Science · Class 3 · Topic-wise Practice Worksheet

TIME 40 minutes	QUESTIONS 15	TOTAL MARKS 21	MAX. SCORE ___ / 21
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **15 questions** in this worksheet. All questions are compulsory.
- Each question has four options (A), (B), (C) and (D). Exactly **one** option is correct.
- Questions 1–12 carry **1 mark** each. Questions 13–15 (Achievers Section) carry **3 marks** each.
- There is no negative marking. Study every diagram and table carefully.

Section A — Scientific Reasoning

Q1–Q8 · 1 mark each

- How many planets are there in our solar system?
 (A) Eight (B) Seven
 (C) Nine (D) Ten
- Which planet is nearest to the sun?
 (A) Venus (B) Mars
 (C) Earth (D) Mercury
- The natural satellite of the earth is the _____.
 (A) Moon (B) Sun
 (C) Pole star (D) Comet
- Day and night are caused by the _____ of the earth.
 (A) Revolution (B) Rotation
 (C) Size (D) Tilt
- The sun is a _____.
 (A) Planet (B) Comet
 (C) Satellite (D) Star
- Waste that rots away naturally, such as vegetable peels, is called _____.
 (A) Biodegradable (B) Non-biodegradable
 (C) Plastic (D) Metallic
- The three R's that help protect the environment are _____.
 (A) Read, Write, Repeat (B) Reduce, Reuse, Recycle
 (C) Rain, River, Rock (D) Remove, Replace, Rebuild
- Cutting down large numbers of trees is called _____.
 (A) Afforestation (B) Irrigation
 (C) Deforestation (D) Pollination

9. The diagram shows the eight planets in order of their distance from the sun. Which number marks the planet we live on?

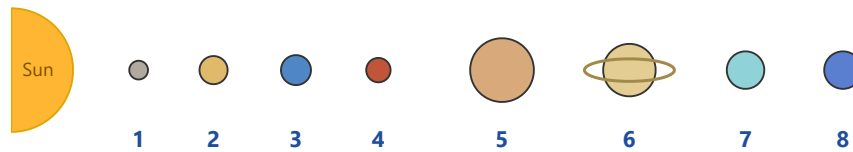


Fig. 9.1 — The planets in order from the sun (sizes and distances not to scale)

- (A) 1
(B) 2
(C) 3
(D) 4
10. In the table below, which row is **incorrectly** matched?

Row	Body	Description
(A)	Sun	A star
(B)	Jupiter	The largest planet
(C)	Moon	A planet
(D)	Saturn	Has bright rings

Table 10.1 — Bodies in the sky

- (A) Row (A)
(B) Row (B)
(C) Row (C)
(D) Row (D)
11. Why are the stars not seen during the day?
- (A) They stop shining in the day
(B) Clouds always cover them
(C) They move to the other side of the earth
(D) The bright sunlight in the sky hides their faint light
12. Which of these actions helps to **protect** the environment?
- (A) Using a cloth bag instead of a plastic one
(B) Burning plastic waste in the open
(C) Leaving taps running
(D) Cutting down trees for firewood

Achievers Section

Q13–Q15 · 3 marks each

13. Consider the following statements.
- (i) The moon produces its own light.
 - (ii) Planting trees helps reduce the amount of carbon dioxide in the air.
 - (iii) The earth takes about 365 days to go once round the sun.
- Which of the statements is/are correct?
- (A) (i) and (ii) only
(B) (ii) and (iii) only
(C) (i) and (iii) only
(D) All three
14. When it is noon in India, it is around midnight on the opposite side of the earth. Which single fact best explains this?
- (A) The sun travels round the earth once a day
(B) The earth is roughly a ball and spins, so only the half facing the sun is lit
(C) The earth goes round the sun once a year
(D) The moon blocks the sunlight on one side

15. Match each item in Column I with the correct bin in Column II.

Column I	Column II
(P) Vegetable peels	(1) Non-biodegradable waste
(Q) Plastic bottle	(2) Biodegradable waste
(R) Old newspaper	(3) Can be recycled into new paper
(S) Broken glass	(4) Must be handled carefully as it can cut

Table 15.1

(A) P-2, Q-3, R-1, S-4

(C) P-2, Q-1, R-3, S-4

(B) P-1, Q-2, R-4, S-3

(D) P-3, Q-1, R-2, S-4

Answer Key

1	A	2	D	3	A	4	B	5	D
6	A	7	B	8	C	9	C	10	C
11	D	12	A	13	B	14	B	15	C

Solutions

1. Answer: (A) Eight

There are **eight** planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. Pluto was counted as a planet until 2006, when it was reclassified as a dwarf planet.

2. Answer: (D) Mercury

Mercury is closest to the sun and also the smallest planet. It goes once round the sun in only about 88 earth days.

3. Answer: (A) Moon

The **moon** is the earth's only natural satellite. Satellites such as INSAT that people put into orbit are called artificial satellites.

4. Answer: (B) Rotation

As the earth spins on its axis — its **rotation** — the half facing the sun has day and the half turned away has night. One full spin takes about 24 hours.

5. Answer: (D) Star

The sun is a **star** — a huge ball of hot glowing gas. It looks far bigger than other stars only because it is much closer to us.

6. Answer: (A) Biodegradable

Biodegradable waste is broken down by bacteria and fungi into simple harmless substances. Plastic and glass are non-biodegradable and may last for hundreds of years.

7. Answer: (B) Reduce, Reuse, Recycle

Reduce means using less in the first place, **reuse** means using an item again, and **recycle** means turning waste into new products. Reducing is the most effective, because the waste is never made at all.

8. Answer: (C) Deforestation

Deforestation is the clearing of forests. It destroys the homes of animals, causes soil erosion and leaves more carbon dioxide in the air.

9. Answer: (C) 3

Counting outwards from the sun: Mercury (1), Venus (2), **Earth (3)**, Mars (4), Jupiter (5), Saturn (6), Uranus (7) and Neptune (8). Number 6 is easy to spot because of its ring.

10. Answer: (C) Row (C)

The moon is a **satellite**, not a planet — it goes round the earth, whereas planets go round the sun. The other three rows are correct.

11. Answer: (D) The bright sunlight in the sky hides their faint light

The stars shine all the time. During the day, sunlight scattered by the atmosphere makes the whole sky so bright that **their far fainter light cannot be picked out** — much as a candle is invisible beside a floodlight.

12. Answer: (A) Using a cloth bag instead of a plastic one

A cloth bag can be used again and again, so **using a cloth bag instead of a plastic one** cuts down non-biodegradable waste. Each of the other three harms the environment.

13. Answer: (B) (ii) and (iii) only

Statement (i) is false — the moon has no light of its own and merely reflects sunlight. Statement (ii) is true; trees absorb carbon dioxide during photosynthesis. Statement (iii) is true; that is why our calendar year is 365 days, with an extra day every fourth year. Hence **(ii) and (iii)**.

14. Answer: (B) The earth is roughly a ball and spins, so only the half facing the sun is lit

Because the earth is a ball, sunlight can fall on only one half of it at a time. As it spins, the lit half moves steadily round the globe, so places roughly halfway around the world always have opposite times of day. Revolution round the sun explains the year and the seasons, not noon and midnight.

15. Answer: (C) P-2, Q-1, R-3, S-4

Vegetable peels rot away, so they are **biodegradable** (2). A plastic bottle does not rot, so it is **non-biodegradable** (1). Old newspaper can be pulped and **recycled into new paper** (3). Broken glass **must be handled carefully as it can cut** (4). Hence P-2, Q-1, R-3, S-4.