

# CHAPTER 1

# EVER EVOLVING WORLD OF SCIENCE

VEDA  
ACADEMY

CLASS 7<sup>TH</sup>

## NCERT SOLUTIONS - SCIENCE

1. Why is science described as not just a collection of facts but as a process of exploration?

### ANSWER

Science is not only about memorizing facts but about asking questions, experimenting, and making discoveries. It is a way of thinking that encourages curiosity, exploration, and deeper understanding of the natural world.

2. How does curiosity help in the learning and discovery of science? Give suitable examples.

### ANSWER

Curiosity makes us ask questions like Why are some fruits sour? or Why does a haldi stain turn red with soap? These questions lead to experiments and discoveries. For example, curiosity about flying led from paper planes to the invention of real aircraft.

3. Why do we classify materials into metals and non-metals? Mention two properties that help in this classification.

### ANSWER

Materials are classified into metals and non-metals to study their properties and uses more easily.

- Metals are good conductors of heat and electricity, and they are malleable.
- Non-metals are generally poor conductors and are brittle.

4. Differentiate between reversible and irreversible changes with suitable examples.

### ANSWER

- **Reversible changes:** Changes that can be undone. Example – melting of ice into water.
- **Irreversible changes:** Changes that cannot be undone. Example – ripening of fruits or rusting of iron.

5. How does heat play an important role in the changes we see around us? Explain with two examples.

### ANSWER

Heat speeds up or causes many changes.

- Ice melts into water when heat is given.
- Glaciers melt due to heat from the Sun.



6. Describe the water cycle in your own words. Why is it important for life on Earth?

**ANSWER**

The water cycle involves evaporation of water from oceans and rivers, condensation into clouds, and precipitation as rain, which seeps underground or flows back to seas. It is important because it maintains the availability of fresh water on Earth.

7. How do plants and animals obtain food and energy for their survival? Explain briefly.

**ANSWER**

Plants make their own food by photosynthesis, using sunlight, water, and carbon dioxide. Animals cannot make food, so they depend on plants or other animals for their nutrition and energy.

8. What methods did early humans use to measure time, and how are they different from modern methods?

**ANSWER**

Early humans measured time using shadows of objects (sundials) and natural events. Modern methods use clocks and watches, including digital ones, which are far more accurate and convenient.

9. Explain how light and shadows are useful in our daily lives. Give at least two examples.

**ANSWER**

- Shadows helped early humans measure time.
- Light allows us to see objects and also helps in phenomena like eclipses, which give us knowledge about celestial bodies.

10. How do the movements of the Earth and the Moon affect our lives on Earth? Discuss with examples like day–night and eclipses.

**ANSWER**

The Earth's rotation on its axis causes day and night. The Earth's revolution around the Sun causes seasons. The Moon's movement around Earth causes phases of the Moon and eclipses when it blocks or passes into Earth's shadow.

