

1. What is the main aim of science learning in Grade 8?

- A. Memorizing scientific facts
- B. Learning definitions
- C. Investigating and exploring the world scientifically
- D. Preparing for exams (C)

**Explanation :** The chapter emphasizes learning how to investigate scientifically using observation, questioning, and experimentation.

2. What do the root and kite symbols in the textbook represent?

- A. Nature and science
- B. Tradition and modernity
- C. Observation and imagination
- D. Culture and space (C)

**Explanation :** The root symbolizes grounded observation; the kite symbolizes soaring imagination.

3. Which scientific concept explains why a car stops when brakes are applied?

- A. Light
- B. Force
- C. Pressure
- D. Magnetism (D)

**Explanation :** Force is the concept that explains changes in motion, including stopping.

4. What leads to the phases of the Moon?

- A. Earth's rotation
- B. Moon's distance from the Earth
- C. Relative positions of the Earth, Moon, and Sun.
- D. Earth's magnetic field (D)

**Explanation :** The changing positions among Earth, Moon, and Sun cause different parts of the Moon to be illuminated.

5. Why does a puri puff up when fried?

- A. Due to sugar content
- B. Because of air pressure inside
- C. Due to heat causing water inside to vaporize
- D. Because flour is fermented (C)

**Explanation :** Heat causes moisture inside to turn to steam, making the puri puff up.

6. What is a good practice while doing scientific experiments?

- A. Change all variables at once
- B. Guess outcomes
- C. Change one variable at a time
- D. Avoid writing observations (C)

**Explanation :** Changing one variable at a time ensures clear results and reliable observations.

7. What allows us to see an image in a shiny spoon?

- A. Refraction
- B. Absorption
- C. Reflection
- D. Dispersion (D)

**Explanation :** Reflection of light from the spoon's surface creates the image.

8. What helps classify materials as elements, compounds, or mixtures?

- A. Taste
- B. Color
- C. Particle composition and bonding
- D. Temperature (C)

**Explanation :** Classification depends on how particles are combined and bonded.

9. What is the biggest threat mentioned that affects Earth's climate?

- A. Moon phases
- B. Animal extinction
- C. Human activities
- D. Solar flares (C)

**Explanation :** The text highlights that human actions cause temperature changes and climate disruptions.

10. Why are microorganisms considered both helpful and harmful?

- A. They are too small to matter
- B. They only cause diseases
- C. Some aid digestion or make medicine, others cause infection
- D. All are dangerous (C)

**Explanation :** The chapter explains that microbes play positive and negative roles in our lives.