

Chapter - 1 | Exploring the Investigative World of Science

QUIZ-01

- What is the main aim of science learning in Grade 8?
 - Memorizing scientific facts
 - Learning definitions
 - Investigating and exploring the world scientifically
 - Preparing for exams(C)

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

- What do the root and kite symbols in the textbook represent?
 - Nature and science
 - Tradition and modernity
 - Observation and imagination
 - Culture and space(C)

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

- Which scientific concept explains why a car stops when brakes are applied?
 - Light
 - Force
 - Pressure
 - Magnetism(D)

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

- What leads to the phases of the Moon?
 - Earth's rotation
 - Moon's distance from the Earth
 - Relative positions of the Earth, Moon, and Sun
 - Earth's magnetic field(C)

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

- Why does a puri puff up when fried?
 - Due to sugar content
 - Because of air pressure inside
 - Due to heat causing water inside to vaporize
 - Because flour is fermented(C)

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

- What is a good practice while doing scientific experiments?
 - Change all variables at once
 - Guess outcomes
 - Change one variable at a time
 - Avoid writing observations(C)

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

- What allows us to see an image in a shiny spoon?
 - Refraction
 - Absorption
 - Reflection
 - Dispersion(C)

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

- What helps classify materials as elements, compounds, or mixtures?
 - Taste
 - Color
 - Particle composition and bonding
 - Temperature(C)

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

- What is the biggest threat mentioned that affects Earth's climate?
 - Moon phases
 - Animal extinction
 - Human activities
 - Solar flares(C)

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

- Why are microorganisms considered both helpful and harmful?
 - They are too small to matter
 - They only cause diseases
 - Some aid digestion or make medicine, others cause infection
 - All are dangerous(C)

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