

CLASS 9

SCIENCE

EXTRA QUESTIONS

Class 9 Science Chapter 1 Entering the World of Secondary Science – Extra Questions with Answers

Extra practice questions for Class 9 Science Chapter 1 (Entering the World of Secondary Science), beyond the textbook. These Class 9 Science Chapter 1 important questions are handy for last-minute exam practice.

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Very Short Answer Questions (1 mark)

Short Answer Questions (2–3 marks)

Higher-Order Thinking / Application Questions

Extra practice questions for Class 9 Science Chapter 1 (Entering the World of Secondary Science), beyond the textbook. These Class 9 Science Chapter 1 important questions are handy for last-minute exam practice.

Very Short Answer Questions (1 mark)

Q1. What is the first step of the scientific method?

Ans: Observation.

Q2. Define hypothesis.

Ans: An educated guess or proposed explanation made on the basis of limited evidence, used as a starting point for further investigation.

Q3. What does SI stand for in SI units?

Ans: International System of Units (Système International).

Q4. Give one example of a scientific law.

Ans: Newton's laws of motion (or the Law of Conservation of Mass).

Q5. What is a scientific model?

Ans: A simplified representation of a real-world system, used to understand complex phenomena.

Short Answer Questions (2–3 marks)

Q6. Distinguish between a law and a theory, with an example of each.

Ans: A law describes a regular, often mathematical pattern in nature (e.g. Newton's laws of motion), while a theory is a broader, well-substantiated explanation built from many tested hypotheses (e.g. the theory of evolution). A law states what happens; a theory explains why.

Q7. Why is estimation considered a valuable skill in science, even though it is not as precise as measurement?

Ans: Estimation allows scientists to quickly sanity-check results, form reasonable predictions, and catch errors, without needing exact measurement every time — useful when precise tools aren't available or when a rough answer is enough to guide the next step.

Q8. Explain, with an example, why models are used in science even though they are simplified versions of reality.

Ans: Models make complex or inaccessible systems (like atoms or the solar system) easier to visualise and reason about. For example, the Bohr model of the atom simplifies electron behaviour into orbits, which, though not fully accurate, helps explain many observed atomic properties.

Higher-Order Thinking / Application Questions

Q9. A student notices that plants near a window grow faster than plants in a dark corner and proposes that "light makes plants grow faster." Identify the steps of the scientific method demonstrated here, and suggest the next step.

Ans: The student has made an **observation** (plants near the window grow faster) and formed a **hypothesis** (light makes plants grow faster). The next step would be to design a controlled experiment — growing similar plants under different light conditions while keeping other factors (water, soil, temperature) constant — to test the hypothesis.

Q10. Explain why a scientific law does not by itself explain why a phenomenon happens, using Newton's laws of motion as an example.

Ans: A law like Newton's laws of motion describes and predicts how objects behave (e.g. force equals mass times acceleration) but does not explain the deeper reason why mass and force are related this way — that kind of explanation comes from broader theories. Laws are precise descriptions of patterns; theories provide the explanatory framework behind them.

See also: [Chapter 1](#)