

Science

Core-concept practice following the current chapter sequence, with explanations, worked examples, applications and answer guidance. Supplementary to the textbook.



12 practice units

72 tasks with answer guidance

Name / नाम: _____

Original selected-topic practice. Use alongside school lessons and the prescribed textbook. The contents define this book's scope.

UNIT 01 / 12 · LEARN & TRY

The Wonderful World of Science

Name: _____ Date: _____

Learn

Science uses questions, observations, measurements and explanations that can be checked. An observation records what happened; an inference offers a possible explanation. In a fair comparison, change one relevant factor and keep other important conditions alike. Repeat measurements because one result can be unusual. Evidence may cause an explanation to change.

Worked example

To compare how paper type affects water absorption, use equal-size pieces, the same amount of water and the same waiting time.

Follow a question through an investigation



Keep relevant comparison conditions alike; a repeated measurement may still contain systematic error.

1. Which is an observation: the paper is wet, or the paper must be weak?

UNIT 01 · PRACTISE · 2–6

The Wonderful World of Science

2. Name the changed factor in the example.

3. Name two conditions kept alike.

4. Why repeat the comparison?

5. A result contradicts your prediction. What should you do?

6. Write a testable question about paper.

Explain one answer. Choose a question to revisit after a few days.

UNIT 01 · ANSWER GUIDANCE

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1. The paper is wet.
2. Paper type.
3. Piece size, water amount or waiting time; any two.
4. To check whether the result is consistent and reduce the effect of unusual trials.
5. Check the method and evidence, repeat if needed, and revise the explanation if the evidence supports revision.
6. For example: Which of these equal-size paper pieces absorbs more water in one minute?

Teaching note

Ask for a prediction and a reason. Compare it with the evidence, then explain any revision. Revisit one question after two days.