

Exercises

Exercise 01:

Fill in the blanks with the appropriate scientific terms:

1. The _____ is a testable explanation for a phenomenon in an experiment.
2. In the materials and methods section, you should provide a detailed _____ of the experiment.
3. The data collected should be presented in _____ or _____ form.
4. The results of the experiment must be _____ to determine their significance.
5. The _____ section summarizes the key findings and their implications.
6. The use of the _____ voice is common in scientific writing to emphasize the action or process.

Solution

1. The **hypothesis** is a testable explanation for a phenomenon in an experiment.
2. In the materials and methods section, you should provide a detailed **procedure** of the experiment.
3. The data collected should be presented in **tables** or **graphical** form.
4. The results of the experiment must be **analyzed** to determine their significance.
5. The **discussion** section summarizes the key findings and their implications.
6. The use of the **passive** voice is common in scientific writing to emphasize the action or process.

Exercise 02: Experiment Report

Write a brief experiment report on the following experiment. Follow the structure discussed in the course, including the title, introduction, materials and methods, results, discussion, and conclusion.

Experiment Title:

The Influence of Temperature on Water Evaporation Rate

Introduction:

Explain the purpose of the experiment and provide a hypothesis.

Materials and Methods:

Describe the materials and equipment used and outline the experimental procedure.

Results:

Present the data you collected, and use appropriate graphs or tables.

Discussion:

Interpret the results and discuss their implications.

Conclusion:

Summarize the key findings and suggest potential areas for further research.