

Name \_\_\_\_\_

## The Importance of the Scientific Method

### Short-Answer Answer Key

1. The scientific method can be used by anyone, not just scientists, because it's a structured way of finding answers to questions or solving problems. It helps ensure that investigations are organized and objective.
2. Conducting experiments helps scientists gather data that can be analyzed to determine if the hypothesis is correct or not. It allows for systematic testing of ideas and concepts.
3. The scientific method promotes objectivity by encouraging researchers to base their conclusions on evidence and data rather than personal beliefs or biases. It does so by following a structured process that emphasizes empirical evidence.
4. Scientists share their findings to contribute to the collective knowledge of their field, allowing others to learn from and build upon their research. This collaboration helps advance scientific understanding.
5. Answers may vary. An example could be solving the question of which cleaning product removes stains from clothes most effectively. Steps might include asking the question, researching various cleaning products, forming hypotheses, conducting experiments, collecting and analyzing data, drawing conclusions, and communicating results.

