

Scientific Method Assignment – Student Edition

I. True or False

On the blank, write true if the statement is true. If false, change the underlined word/s to make the statement true.

- _____ 1. Scientific method is a systematic way of solving a problem.
- _____ 2. Scientific method is a general process of investigation that uses evidence and testing.
- _____ 3. Scientists who use scientific method cannot reproduce another scientist's experiment.
- _____ 4. Scientific studies always start with a conclusion in mind that they aim to provide a solution.
- _____ 5. A variable is a tentative answer to a problem.
- _____ 6. A hypothesis usually describes the relationship between two or more variables.
- _____ 7. A hypothesis is a specific, untestable prediction about what is expected to happen in a study.
- _____ 8. In order to test a claim scientifically, it must be possible that the claim could be proven false.
- _____ 9. Testing the hypothesis means conducting an experiment to gather data.
- _____ 10. Once data are gathered and analyzed, scientists can now come up with a theory that summarizes the results of the experiment.

II. Identification

Complete the table below by providing the basic steps in scientific method.



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III. Short Answers

Answer the following questions.

1. Describe each step of scientific method.

- a. _____

- b. _____

- c. _____

- d. _____

- e. _____

- f. _____

2. Enumerate the four criteria that a good hypothesis must meet.

3. Describe a controlled experiment and explain its importance.

4. Explain the importance of scientific method in doing a science investigation.

