

The Complete Scientific Method

Name _____

Fill in the missing parts of the Scientific Method.

A. Observation

1. Define a problem.
2. Ask a _____.

B. Hypothesis

1. Form a hypothesis, which is an _____ to explain your observation.

C. Test the Hypothesis

1. Collect _____.
2. Analyze the _____.
3. Gather your _____ that you will need to conduct an experiment.
4. Perform an experiment. Experiments must contain:
 - a. variables
 - b. _____
 - c. _____
5. Keep accurate records of your procedures and results.
6. When finished, draw a _____.
7. Decide if your conclusion confirms your original _____.
8. If it does not, you must revise your hypothesis.

D. Publish

1. Share your conclusions and your procedures with others.

E. Verification

1. Other scientists read your published work.
2. Other scientists perform their own _____ and collect their own data.
3. If their experiments support your conclusion, your hypothesis is said to be _____.

F. Theory

1. If the work of other scientists continues to support your hypothesis over time and as more evidence grows to support it, your hypothesis and other related hypotheses form a _____, which is an explanation based on facts and evidence.