

Hypothesis Checklist

I. Which of the following are true for a well-written hypothesis?

1. A hypothesis must state the manipulated and responding variables. Yes/No
2. A hypothesis attempts to answer the 'problem' that inspired the experiment or research. Yes/No
3. A hypothesis that is proven wrong is meaningless and the experiment will have to be repeated. Yes/No
4. A hypothesis is always written as a question. Yes/No
5. A hypothesis must be written in testable terms. Yes/No

II. Identify the manipulated and responding variables in the following hypotheses.

6. If I increase the amount of fertilizer used on a house plant, then the plant will grow larger than a plant with a constant amount of fertilizer because an increase in nutrients will cause the first plant to grow more rapidly.

manipulated variable _____
responding variable _____

7. If I put fenders on the wheels of a bicycle, then the rider will stay dry because the fenders will decrease the amount of water that splashed on the rider.

manipulated variable _____
responding variable _____

8. If I decrease the amount of time spent studying for quizzes in science, then my scores on quizzes and tests will decline because I am less familiar with the material.

manipulated variable _____
responding variable _____