

Name _____

Date _____

Scientific Method

Read each question and circle the correct answer.

1. Galileo was an Italian scientist who helped to develop the

- A. placebo effect.
- B. scientific method.
- C. cannon.
- D. Leaning Tower of Pisa.

2. The scientific method is a(n)

- A. series of steps scientists use to answer questions and investigate problems.
- B. experiment done using two variables.
- C. way of dividing test subjects into two groups with one group getting a placebo.
- D. way to divide cells during reproduction.

3. A hypothesis is a(n)

- A. kind of placebo.
- B. experiment.
- C. analysis of test results.
- D. tentative explanation for an observation.

4. In a controlled experiment, scientists investigate a single

- A. placebo.
- B. control.
- C. variable.
- D. cell.

5. In a double-blind test, the non-control group receives a

- A. hypothesis.
- B. new medicine.
- C. control.
- D. placebo.

6. Why is a placebo used in double-blind drug test?

- A. to prevent people from having side effects from the drug
- B. to keep the cost of the experiment down
- C. so that everybody in the experiment thinks they took the medicine, but nobody did
- D. so that the subjects and the scientists do not know which group is the control group

7. The fake pill or medicine taken by members of a control group is a

- A. placebo.
- B. hypothesis.
- C. double-blind experiment.
- D. variable.

8. What must occur for a hypothesis to be considered fully proven?

- A. Newspapers must report the event.
- B. Public opinion must agree with the results.
- C. Other scientists must repeat the experiment and get the same results.
- D. There must be a specific number of controlled experiments.

9. What is the first step in the scientific method?

- A. forming a hypothesis
- B. asking a question
- C. conducting a controlled experiment
- D. looking for more support

10. What form do we use to write hypotheses?

- A. control-test
- B. question-answer
- C. yes-no
- D. if-then