**The Scientific Method Quiz Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score \_\_\_ /10**

1. The Scientific Method is only used by scientists T/F

2. Abu Ali al-Hasa was the first to be credited with the idea of

1. the scientific method
2. the hypothesis
3. The conclusion
4. All of the above

3. A famous experiment conducted by Galileo using an inclined ramp proved that:

1. Small objects fall faster than large objects
2. large objects fall faster than small objects
3. large and small objects fall at the same rate

4. What does the scientific method always start with?

1. a question
2. an experiment
3. a belief
4. An independent variable

5. A hypothesis is not so much of an educated guess but more a statement about what we think might happen T/F

6. An independent variable is the variable that

1. Is always kept the same
2. Responds to the variable that is changed
3. Is manipulated to see if it has an effect

7. Controlled variables are:

1. Variables that are dependent on what is manipulated
2. Variables that are constantly changing in an experiment
3. Variables that can be ignored in an experiment
4. Variables that are kept the same while the independent variable is changed.

8. What is a control group?

1. an experimental setup that is run alongside your experiment so you can be sure the independent variable had an effect.
2. the same experimental setup without the independent variable
3. the same experimental setup without the manipulated variable
4. All of the above

9. When graphing data:

1. the independent variable goes on the y axis (vertical)
2. the independent variable goes on the x axis (horizontal)
3. the independent variable is always shown as a bar graph
4. none of the above

10. When communicating your conclusions

1. you talk about the effect the dependent variable had on the independent variable
2. you do not say anything about a hypothesis that is incorrect
3. You look back at the question and say whether the hypothesis was correct or incorrect
4. You ignore data that doesn’t support your hypothesis

**KEY**

**1. F**

**2. b**

**3. c**

**4. a**

**5. T**

**6. c**

**7. d**

**8. a**

**9. b**

**10. c**