**Using the Scientific Method WebQuest**

Directions: Please answer the questions by exploring the weblinks.

**Step 1: Make an Observation**

How to Make Observations Using the Scientific Method

<https://classroom.synonym.com/make-observations-using-scientific-method-2052859.html>

1. What are the two main sections of a scientific observation? Define each.

How to Make Observations Like a Scientist

<http://ideas.time.com/2012/05/02/how-to-incease-your-powers-of-observation/>

1. What is the difference between casual observers and scientific observers?

**Step 2: Form a Question**

How Stuff Works

<http://science.howstuffworks.com/innovation/scientific-experiments/scientific-method6.htm>

*Scroll down to step 2: Ask a Question*

3. What is the purpose of the question?

1. Does construction of scientific questions require training as a scientist?

**Step 3: Form a Hypothesis**

Science Buddies

<http://www.sciencebuddies.org/science-fair-projects/project_hypothesis.shtml>

5. Define the term hypothesis.

6. What is the major requirement for your topic?

**The Experimental Method**

<http://faculty.winthrop.edu/huffmons/HypoOverhead.htm>

7. List the five characteristics of a good hypothesis.

**Step 4: Experiment**

How Stuff Works

<http://science.howstuffworks.com/scientific-method7.htm>

8. What is the purpose of a control group?

9. Why is it important to hold all variables constant, other than the one being tested?

**Step 5: Analyze your Data**

Data Analysis

<http://scidiv.bellevuecollege.edu/rkr/Biology211/labs/pdfs/DataAnalysis211.pdf>

10. Define the term data.

11. Why do you need to analyze your data?

12. Define the term graph and list four types of graphs.

**Step 6: Conclusion**

The Scientific Method

<https://www.sciencebuddies.org/science-fair-projects/science-fair/writing-conclusions>

13. How do scientists draw conclusions?

**Scientific Method-Conclusion** *(Type the questions into a web browser to get the answer.)*

14. What three things should your conclusion be?

15. What you need to do if your hypothesis is wrong?