

Name: \_\_\_\_\_

Period: \_\_\_\_\_

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Using the Scientific Method  
WebQuest Worksheet

**Step 1: Make an Observation**

How to Make Observations Using the Scientific Method [http://www.ehow.com/how\\_2052859\\_make-observations-using-scientific-method.html](http://www.ehow.com/how_2052859_make-observations-using-scientific-method.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-increase-your-powers-of-observation/>

2. 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?
4. 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](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://www.colby.edu/biology/BI17x/expt\\_method.html](http://www.colby.edu/biology/BI17x/expt_method.html)

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

<http://www.brandonbeltz.com/scimeth/conclusion1.htm>

13. How do scientists draw conclusions?

Scientific Method-Conclusion of a Science Fair Project  
(Type the question into a web browser to get the answer.)

14. What three things should your conclusion be?

#### **The Scientific Method**

(Type the question into a web browser to get the answer.)

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