

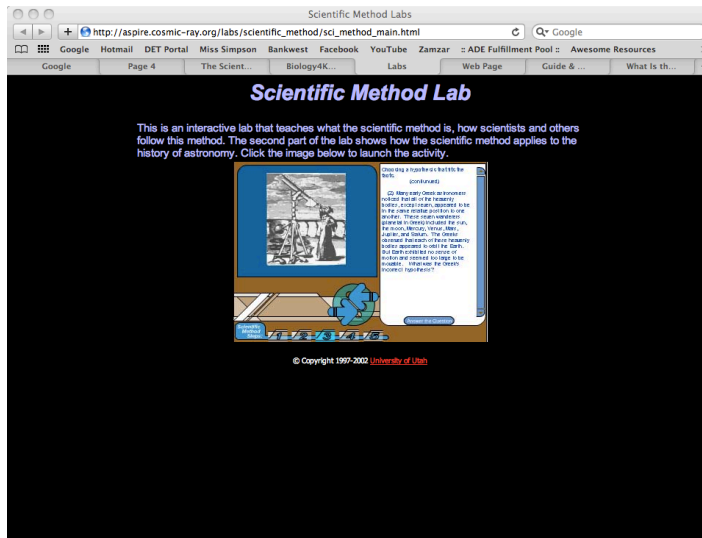
The Scientific Method Webquest

This webquest is designed to give you a more practical understanding of the Scientific Method and how it applies to everyday situations. Please answer the questions below in your science files.

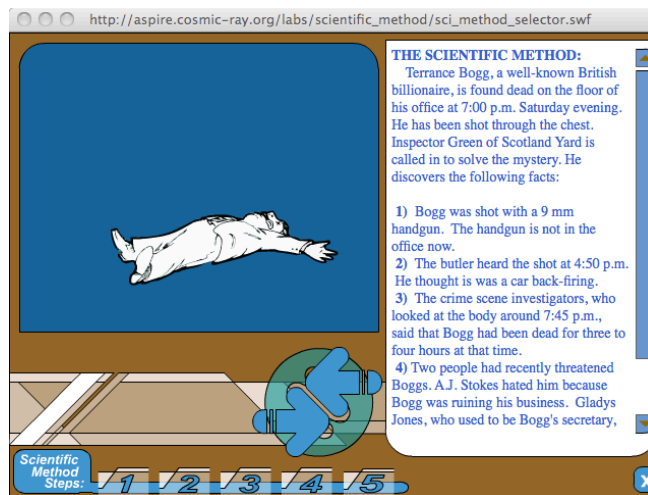
Go to the website


http://aspire.cosmic-ray.org/labs/scientific_method/sci_method_main.html or if this fails to load go to www.google.com and type in the keywords “scientific method lab” and select the first option from the list that is generated for you.

You know you have come to the correct website when it looks like this:



From here click on the image to launch the interactive site and then click “What is the scientific method?” You should come to a screen that looks like this:



Read through the information carefully and select the arrows to navigate through the website. 

Q1. Why can a detective and a scientist be considered to have a lot in common? _____

Q2. Complete the following table:

Solving the Mystery	The Scientific Method
1. Inspector Green is assigned to solve Bogg's murder.	1.
2.	2. Research and find the facts
3. Green guesses that A.J killed Bogg.	3.
4.	4. Test the hypothesis (experiment)
5. Green concludes that A.J is guilty. His initial guess was correct.	5.

Close this window and click on the arrow to come to **STEP 1: The Question.**
 Click on the blue bar called "Lab1" and complete the multiple-choice test. What was your score out of 2? _____.

Click on the arrow to come to **STEP 2: Research/Find the Facts.**

Q3. *Complete this sentence:*

A fact in science is something that can be _____ by _____ (seeing something with your own eyes) or _____ (using a tool, a ruler, scale, stopwatch to see differences that you cannot find very easily).

Q4. What is an opinion? _____

Q5. What is the main difference between an opinion and a fact? _____

Q6. What is an inference? _____

Click on the arrow to practice your skills at separating fact from inference.

Q7. *Complete the sentence:*

A good hypothesis must fit all of the _____ available. A careful scientist never _____ a fact just because it doesn't fit his/her first ideas.

Click on the blue bar to try some situations.

Q8. In the spaces below, write down your hypothesis for the following situations.

A) You are watching TV and the screen goes black. You try turning on the lights, but nothing happens.

B) It is just before dinner, and you see taco meat cooking on the stove. Your hypothesis:

C) Greg is an employee of yours. He asked for time off on the opening day of deer hunt, but you could not let him off of work. On opening day of deer hunt, Greg's wife calls and says that Greg is too sick to come to work.

Click on the arrow to come to **STEP 3: Form a Hypothesis**.

Complete the activity about Louis Pasteur.

Q9. What was his hypothesis? _____

Click on the arrow to come to **STEP 4: Test Your Hypothesis**

Q10. What is the most common way to test a hypothesis? _____

Q11. What are the four properties of a good experiment?

1) _____

2) _____

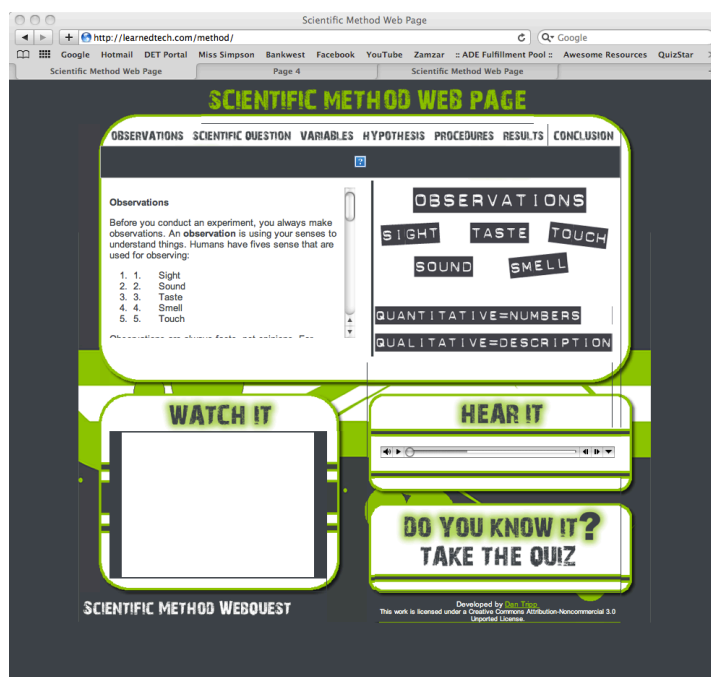
3) _____

4) _____

Click on the arrow to come to **STEP 5: Accept or Reject Your Hypothesis**

Q12. What is a scientific theory? _____

Next task is for you to go to the website <http://learnedtech.com/method/> or if this fails to load, go to www.google.com and type in “the scientific method web page” (select the first option from the list that is generated for you). It will look like this:



Go through each stage of the scientific method highlighted on the web page. Watch the videos, listen to the audio and take notes on the important information. Finally, complete the quiz at the end of each section and write your results below:

Observation Quiz Score: /6

Scientific Question Quiz Score: /10

Variables Quiz Score: /6

Hypothesis Quiz Score: /11

Procedures Quiz Score: /10

Results Quiz Score: /10

Conclusion Quiz Score: /6

END OF WEBQUEST