



Extra, Extra Read All About It!



Introduction:

As humans, we are classified as *consumers* or *heterotrophs*, we cannot make our own food energy like our plant or *producer* friends. Being human makes us very unique when compared to other *species*. We consume or use many things that have nothing to do with food. As a group list ten things that you consume that are not foods in your notebooks. Need a hint, think about all the things we use (our consumption). The truth of the matter is, we change our environment in thousands of ways that we don't even think of. From the rivers we control, to the urban farms that are paved over, to the things we throw away, the health of our ecosystem and the biodiversity within it is threatened by simple everyday activities.

Now you know that T.V. is full of one thing and that is COMMERCIALS! These commercials are encouraging us to consume the items or products such as clothes, food, cars or make-up. As our *population* and technology have increased, we have developed many things we "think" we need to survive. Often, we think we "need" these products because the commercials make a *claim* that it will improve something in our life. These advertisements use *cause and effect* claims to persuade you to choose their product over some other one. In 1960, the average American threw away 2.7 pounds of trash a day. Today, the average American throws away 4.4 pounds of trash every day! What are we going to do with all that trash? It has to go somewhere and that means another ecosystem or specie is affected.

For example, look at the advertisement in your folder. Identify the **cause and effect** relationship using post its in the advertisement. From L'Oreal™ promising better hair, Tag™ promising attention from females or a large SUV such as a Hummer™ eating smaller cars, each commercial encourages you to purchase their product promising that it will provide you with something. But does their product live up to its promises? There is only way to find out....Science!!!!

Process:

1. In your cooperative groups form two teams. Leaf through the selected advertisements and select an article from a magazine that you find interesting. It should make a claim that it can or will do something for you or your life. This is often a line of text or writing called a caption or tag line. You all know Nike's famous line, "Just Do It"! Write the claim down on the graphic organizer.
2. Now compare your two advertisements and decide if you as a group like one better than the other. If you do, you may work as a group of four. If you can't decide, continue working in pairs for the remainder of the project. **Write down the source of the article after the claim on your graphic organizer.**

3. Now that you have a claim, what is a ***hypothesis*** we can create to test the validity or truthfulness of it? Discuss with your partner and write it down on your graphic organizer.
 - a. Good Hypotheses are measurable
 - b. Remember to use the **If/Then statement** for example:
 - i. If the claim _____ is true then _____ this will happen.
4. Great, you have a hypothesis, now you can design your experiment to test this product. Here are some things to include on your graphic organizer before you write out your steps for the test. Remember to be specific as though you were giving directions for another student to repeat this experiment. My students next year may be using your procedure for one of their first experiments!!!
 - a. ***How long will your study last?***
 - b. ***How many times will you do the experiment? Why would you do it multiple or several times?***
 - c. ***What will be your control group?***
 - d. ***What variables will you need to keep constant or the same (time, length, amount...)?***
5. *Lastly, once you do the experiment what will you be able to decide or conclude??*
6. If the product does or does not work, ***how can the product affect the environment?*** Use your classmate's environmental posters to search for ideas if you are having difficulty generating your own.
7. **Create your poster** with the information from your graphic organizer and your advertisement.
8. **Prepare to share** your advertisement with the class!

Claim:

Hypothesis:

Control:

Variable to keep Constant:

- 1)
- 2)
- 3)

Length of Experiment:

Number of Trials: