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

Hour: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Identifying Variables

We have learned in class that the dependent variable is what is being measured and the independent variable is what the scientist purposely changes. A constant is any condition that is kept the same between the test set up and the control set up. The control set up is the set up you compare your experiment back to.

Identify the variables or constants for each experiment.

1. Tiffany was investigating how fast it took Hayden to react to different sounds.
   1. Identify the following:
      1. Independent Variable
      2. Dependent Variable
      3. One Constant
2. Nick wanted to see how high an ice cube would float in different temperatures of water.
   1. Identify the following:
      1. Independent Variable
      2. Dependent Variable
      3. One Constant
3. Mrs. Crain wanted to see how different types of music affected students’ pulse rates. She played different types of music: heavy, metal, rap, R&B, alternative, pop, country, and classical music.
   1. What is the independent variable?
   2. What is the dependent variable?
   3. What should be her control group? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. What constant(s) should be considered when doing this experiment?

1. Mario wanted to know if the size of the hole would affect how far water would spurt out of a milk carton. He punched three different sized holes at the same height and measured the water flow.
   1. Identify the following:
      1. Independent Variable
      2. Dependent Variable
      3. One Constant