

Name: _____ Period: _____

Writing Hypothesis

A hypothesis does not just predict what will happen in an experiment, but it specifically tells how one variable (manipulated) might affect another variable (responding). A hypothesis can be written in a specific way to express this relationship between the manipulated and responding variables. **Remember that a hypothesis is a guess about the results; it does not have to be correct.**

Example:

Research Question: Does salt water freeze faster than fresh water?

Manipulated Variable: Type of water **Responding Variable:** Time it takes to freeze

Possible Hypothesis: *If* I freeze fresh and salt water at 32° F, *then* the fresh water will freeze faster *because* salt water freezes at a lower temperature than fresh water.

Directions: Identify the manipulated and responding variables in each experiment described below. Then write a hypothesis. **Circle** "if" and "then" in your hypothesis and underline the manipulated and responding variables.

1. Which type of music quiets a crying baby faster: jazz, classical, or rock?

MV: _____

RV: _____

Hypothesis:

2. Does the color of the recycling bins, red or blue, affect the number of cans recycled at school?

MV: _____

RV: _____

Hypothesis:

3. Does the temperature of water affect how quickly food coloring spreads through it?

MV: _____

RV: _____

Hypothesis:

4. Is the number of eggs a chicken lays affected by the hours of daylight?

MV: _____

RV: _____

Hypothesis:

5. Will a rubber band or string hold more weight without breaking?

MV: _____

RV: _____

Hypothesis:

6. Which type of gum contains the most sugar: Brand A, Brand B, or Brand C?

MV: _____

RV: _____

Hypothesis:

