



Name _____



Developing a Hypothesis

Purpose: To practice making hypotheses using *If..., Then... statements*.

Background Information: Sometimes scientists use a ***HYPOTHESIS*** to help guide an experimental investigation. A hypothesis is a special kind of ***PREDICTION***. It is an educated guess about the relationship between the independent and dependent variable.

A hypothesis is testable; an experimental investigation can be done based on the hypothesis.

One way to write a hypothesis is to use an "If..., Then...." statement. An If, Then statement shows cause and effect.

In other words, what **effect** does the independent variable have on the dependent variable? Or what does the independent variable **cause** the dependent variable to do?

Write an If, ...Then... hypothesis using this format:

IF the *independent variable* changes, **THEN** the *dependent variable* will change.

Of course, in a real hypothesis, you will state the actual variables and describe the type of changes you expect.

Given this question: What does the temperature of water have to do with how long it takes the capsule to dissolve?

1. Re-write the question using the word effect:

2. Re-write the question using the word affect:

Write a hypothesis for the research question using an If, Then statement.
