



Name: ..... Date: .....

**3 Kinds of Variables**

**Independent Variable**

something that is changed by the scientist

- What is tested
- What is manipulated

**Dependent Variable**

something that might be affected by the change in the independent variable

- What is observed
- What is measured
- The data collected during the investigation

**Controlled Variable**

a variable that is not changed

- Also called constants
- Allow for a "fair test"

*Use the simulation to prove Newton's Second Law of Motion*

*els724.com > K7-8 Physics > 5 Mechanics > Sim: Force and Motion*

**Experiment Title:**

1. Define what you mean by \_\_\_\_\_:

2. Write a research question using the word "affect":

3. Identify the **independent variable** in your question:

4. Identify the **dependent variable** in your question:



5. Identify the **controlled variable(s)**:

6. Write a hypothesis using an ***if... then*** statement:

7. **Materials/Diagram**

8. **Procedure or Method:**

Design an investigation to test your hypothesis.  
Write the steps of the procedure in order.

