

# Independent and Dependent Variables Practice Worksheet

## Topic: Developing Investigations Homework

**Review:** Fill in the vocabulary term on the left for each description on the right.

<p>_____</p>	<ul style="list-style-type: none"> <li>● I can make changes to this variable.</li> <li>● This is the only thing that should be changed in an experiment.</li> <li>● It is like the cause in cause and effect.</li> <li>● To find the IV, I can ask, "What am I changing?"</li> </ul>
<p>_____</p>	<ul style="list-style-type: none"> <li>● I will collect data from this variable.</li> <li>● It is like the effect in cause and effect.</li> </ul> <p style="margin-left: 40px;">To find the DV, I can ask, "What am I measuring or looking for?"</p>
<p>_____</p>	<p>An educated guess, or prediction</p> <p>Should be written as an "If, Then, Because" statement.</p> <p>○ If the _____ is _____ ,  <small>(independent variable) (Increased/decreased)</small></p> <p>then the _____ will _____  <small>(dependent variable) (increase/decrease)</small></p> <p>because _____.</p>

**Practice:** Read the information about each experiment and record the independent variable (IV) and dependent variable (DV). Then write a hypothesis for each experiment. Be sure to use an "If, Then, Because" statement.

**1. Will an egg float higher in water with more salt?**

IV:

DV:

Hypothesis:

**2. Ivan and Braxton want to know if stretching a rubber band at different lengths affects how far the rubber band will fly. They will use centimeters for all measurements.**

IV:

DV:

Hypothesis:

TURN OVER FOR MORE PRACTICE

**3. Will a paper airplane with longer wings fly farther than shorter wings?**

IV:

DV:

Hypothesis:

**4. Will a plant grow higher with more light?**

IV:

DV:

Hypothesis:

**5. Billy and Bob want to know if the amount of baking soda added to vinegar will affect the height a rocket will launch. They will measure the baking soda in milliliters. They will measure the height of the rocket launch in meters.**

IV:

DV:

Hypothesis:

**6. Carrie and Heather wanted to know if the size of a coin will affect the number of drops of water it can hold. So they used a dropper to place water on a quarter, nickel, and penny.**

IV:

DV:

Hypothesis:

**7. I wonder if the amount of homework I complete has an affect on my science test scores?**

IV:

DV:

Hypothesis: