

### Hypothesis, Statement, and Variables in a Science Experiment

Question or Problem	Hypothesis	Independent Variable (What I change)	Dependent Variable (What I observe)	Controlled Variables (What I keep the same)
<b>Example 1:</b> How much water flows through a faucet at different openings?	Water will flow in larger amounts when the faucet is fully open.	Water faucet opening (closed, half open, fully open)	Amount of water flowing measured in liters per minute	<ul style="list-style-type: none"> <li>• The Faucet</li> <li>• Water pressure, or how much the water is “pushing”</li> </ul>
<b>Example 2:</b> Which fertilizer will make plants grow taller?	Plants grow taller when given “Garden Grow” fertilizer.	Fertilizer	Height of Plant	<ul style="list-style-type: none"> <li>• Amount of water</li> <li>• Amount of sunlight exposure</li> <li>• Amount of Fertilizer</li> <li>• Room temperature</li> </ul>
<b>Your turn. Directions: Hypothesis, Independent, Dependent, and Controlled Variable sections of table.</b>				
1. Does heating a cup of water allow it to dissolve more sugar?				
2. Does an electric motor turn faster if you increase the voltage?				
3. How fast does a candle burn?				

<p>4. Who listens to music the most: teenagers or their parents?</p>				
<p>5. In which month of year are the most cases of the flu reported?</p>				
<p>6. Which group of people are healthier, those who eat a low fat diet or those who eat a high fat diet.</p>				
<p>7. What improves a gymnast skills?</p>				
<p>8. Which brand of bleach whitens clothes better?</p>				