Directions
Create a hypothesis statement for each of the situations below using the *If and then format*. (If = the CAUSE → then = the EFFECT)

A **hypothesis** is an estimate or "educated guess" for solving a problem based on facts, observations, and available data.

- Example Scenario: A student wants to see if the amount of sunlight affects the growth cycle of a flower. The student places one flower on a window sill (natural light) and another in the living room (only artificial light).
  
  **Hypothesis:** *If* a pansy is placed in natural light *then* it will grow two inches higher than a pansy grown in the artificial light.

**Situation 1**
A sanitation department is nearby and a smell is coming from the same direction. (The sanitation department does a series of steps to process the sewage and waste water.) Where is the smell coming from?
Hypothesis: *If* ____________________________________________
  *then* ________________________________________________

**Situation 2**
A NASA engineer wants to see if salt will reduce the amount of ice and snow buildup on the runway. She spreads 200 pounds of salt on a test runway and simulates an airplane landing by using test equipment. She then repeats the test on a runway without applying salt.
Hypothesis: *If* ____________________________________________
  *then* ________________________________________________

**Situation 3**
The Tree House Detectives want to see if different smells travel at the same speed. They spray a can of hairspray, peppermint air freshener, and insect repellant at the same time. Six friends stand around them in a large circle, five feet from the center of the circle where the three tree house detectives stood.
Hypothesis: *If* ____________________________________________
  *then* ________________________________________________

**Situation 4**
The tree house detectives want to know if the candy making process affects the odor given off by the candy. To conduct the experiment, they help Dr. D make orange taffy candy.
Hypothesis: *If* ____________________________________________
  *then* ________________________________________________

*Continue on the back...*
Directions: For each of the following statements, create a good hypothesis. Remember to write COMPLETE SENTENCES in IF, THEN form.

1. Chocolate may cause pimples.
   Formal hypothesis:

2. Salt in soil may affect plant growth.
   Formal hypothesis:

3. Plant growth may be affected by the color of the light.
   Formal hypothesis:

4. Bacterial growth may be affected by temperature.
   Formal hypothesis:

5. Ultraviolet light may cause skin cancer.
   Formal hypothesis:

6. Temperature may cause leaves to change color.
   Formal hypothesis: