1. Orchids were studied to determine if the amount of humidity affected the flowering of these plants. What is the independent variable in this study?

2. An entomologist (bug scientist) wants to determine if temperature changes how many times a cricket chirps. What is the dependent variable?

3. A soap manufacturer wants to prove that their detergent works better to remove tough stains. What is the independent variable?

4. You think that a certain part of your brain is important in memory. To test this, you will remove this part of the brain from rats and see if they remember how to get through the maze. What is the dependent variable in this experiment?

5. You want to see if playing music makes plants grow taller. What is the independent variable in this experiment?

6. You want to measure the effect of different amounts of oxygen on the rate of yeast growth. What is the independent variable?

7. A florist wants to see if Product X will extend the life of cut flowers so that they last longer. What is the dependent variable?

8. A florist wants to see if Product X will extend the life of cut flowers so that they last longer. What is the independent variable?

9. You want to see if playing music makes plants grow taller. What is the dependent variable in this experiment?

10. A soap manufacturer wants to prove that their detergent works better to remove tough stains. What is the dependent variable?

1. Does heating a cup of water allow it to dissolve more sugar? Temperature of the water is measured in degrees Centigrade. Amount of sugar is measured in grams.

Independent	
Dependent	
Constants	

2. Does fertilizer make a plant grow bigger? Amount of fertilizer measured in grams, quantities of water measured in milliliters.

Independent	
Dependent	
Constants	

3. Does an electric motor turn faster if you increase the voltage? Voltage of the electricity used is measured in volts. Speed of rotation measured in revolutions per minute (RPMs)

Independent	
Dependent	
Constants	

4. How fast does a candle burn? Time measured in minutes. Height of candle measured in centimeters at regular intervals of time (for example, every five minutes)

Independent	
Dependent	
Constants	

5. Dr. Smith wants to examine whether a new drug increases the maze running performance of older rats. Just like aging humans, older rats show signs of poorer memory for new things. Dr. Smith teaches two groups of older rats to find a piece of tasty rat chow in the maze. One group of rats is given the new drug while they are learning the maze. The second group is not given the drug. One week after having learned the maze he retests the rats and records how long it takes them to find the rat chow.

Independent	
Dependent	
Constants	