The act of asking a "good" science question can be easily achieved with a little practice, and familiarity with what makes a good question.

We will limit our questions to two variables, the independent variable, and the dependent variable. The independent variable is the quantity we will control and can measure, and the dependent variable is the measurable result or consequence of us changing the independent variable.

For example, the independent variable is the position of the light switch on the wall, the dependent variable is whether the lights are on or off. When the light switch is toggled up, the lights come on, when the light switch is toggled down, the lights go off. Our question for this simple example could look like the following;" What is the effect of changing the light switch position on the brightness of the lights?"

A good question could read like the following:

## What is the effect of changing the (independent variable) on (the dependent variable)?

Examples: (underline the independent variable, circle the dependent variable)

What is the effect of changing the temperature of the soil on the height of a bean plant over a 20 day period?

What happens to the brightness of a lightbulb as the length of the extension cord is made larger?

How does the time of flight of a dropped baseball change as we increase the mass of the baseball?

What is the impact of changing the room brightness on the reaction time of catching a dropped ruler?

Your task is to generate THREE good questions that have a clear independent and dependent variable stated. Be prepared to share your questions with the class.

1.

2.

3.