

## Science

### Quiz Review



Look at the picture above.

1. List one observation: Flag, school, people, bus
2. List one inference: kids are going to school
3. List one prediction: The kids on the bus will get homework

Read the passage below and identify the independent and dependent variables.

*Mrs. Uhrlass loves to have a bowl of ice cream every night after dinner. However, she fears that too much of it has made her gain some weight. She wonders if switching her ice cream to a bowl of fruit would make a difference. Does my desert effect my weight gain? She decides to trade in her ice cream for fruit for one month to determine if there is any change.*

4. Dependent variable: weight
5. Independent variable (aka: the control): food eaten
6. On which axis would you place your independent variable? X-axis
7. On which axis would you place your dependent variable? Y-axis

Define the following terms:

1. Classifying: *The process of grouping things together that are alike in some way.*
  2. Observing: *When you use one or more of your senses to gather information*
  3. Models: *A visual representation of complex objects or processes*
  4. Inferring: *When you explain or interpret the things you observe.*
  5. Predicting: *Making a forecast of what will happen in the future based on past experience of evidence*
- What is the difference between inferring and predicting? *An inference is based on what you observe. A prediction is what will happen in the future based on past experience.*
  - The scientific method always begins with what? *A question*
  - Scientists always make conclusions from their experiments based on what? *Data from trials of the experiment.*
  - If a scientist realizes that data does not support their original hypothesis, what should they do? *Form a new hypothesis*
  - When designing an experiment, **ALL** parts of the experiment should be the same except for the *Control* (what you are testing).