## 6<sup>th</sup> Grade Study Guide: "What is Science?"

## Vocabulary:

Science: the process of trying to understand the world around us
Observation: careful watching that can include measurements and descriptions of drawings of what is seen
Inference: an explanation of why something happened; how you explain what you observe
Hypothesis: statement that can be tested about a problem
Experiment: test of a hypothesis
Variables: factors in an experiment that can change
Independent Variable: variable that is changed from one trial to the next; "what 'I' control"
Dependent Variable: variable that changes as the IV changes; "what NATURE controls"
Control Group: a group that receives no treatment during an experiment
Trials: how many times you repeat the experiment
Data table: chart that organizes info into columns/rows to record your observations during the experiment

## Know:

- -Steps of scientific method
- -Why you change only one variable at a time
- -The 3 branches of science and examples of each
- -How to identify control groups, independent variables, dependent variables
- -How to read data in experiments
- -How to draw conclusions in experiments
- -How to identify and write an experiment