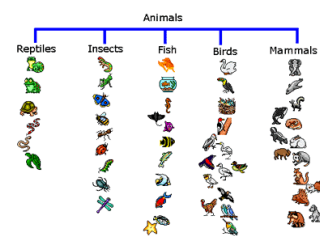


Analyze



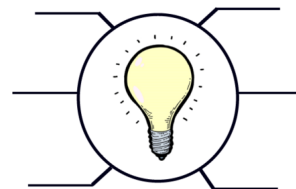
To look closely at data, noting patterns and interpreting what it means

Classify



Arrange (a group of people or things) in classes or categories according to shared qualities or characteristics.

Conclusion



A summary statement based on the results of an investigation or experiment. Includes how your results support or contradict your original hypothesis.

Constant



something that stays the same

Constants

Using cheese graph

Examples:

Same size cheese

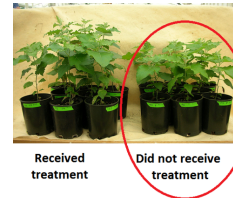
Same temperature stored

Same person checking

Same equipment

Variables that stay the same throughout the experiment.

Control Group



In an experiment, a group that is kept under normal or ideal conditions while others are changed for comparison.

Data



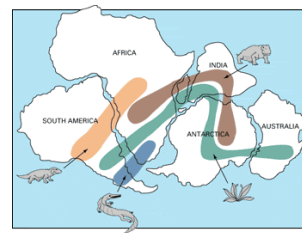
measurements or observations; analyzed to come up with a conclusion

Dependent Variable (Responding Variable)



The variable in the experiment that responds to the changed variable. The variable the scientist MEASURES.

Evidence



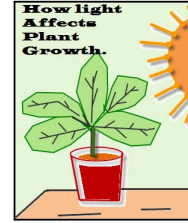
Collected body of data from observations and experiments

Hypothesis



a prediction or educated guess based on background knowledge that states what the scientist thinks will happen in an experiment; stated as an "If...Then..." statement where the If is the cause and the then is the effect.

Independent Variable (Manipulated Variable)



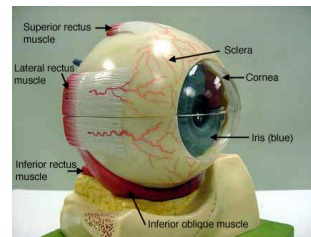
The experimental factor that the scientist changes; the variable whose effect is being tested.  
The CAUSE in a hypothesis (the IF).

Inference



A tentative explanation based on prior knowledge and experiences (schema), and observations and/or data.

Model



A representation or simulation of a real object, system, or event. Includes only the most important parts of the system. Helps to clarify explanations and demonstrate relationships.

Observation



Information obtained through the senses.

Qualitative

blue

tall

**BIG**

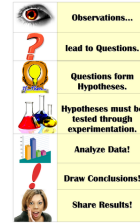
Data or observations in the form of words  
The QUALITIES of something

Quantitative

**1.0456**  
**9.087**  
**10,394.1**

Numerical data or observations  
the QUANTITIES of something

Scientific Method



A series of steps followed to solve scientific problems including collecting data, formulating a hypothesis, testing the hypothesis, and stating conclusions.

Scientific prediction



A forecast or logical statement about what will happen in the future based on factual information and principles and trends and patterns found in data.

Testable question



Can be answered by designing and conducting an experiment and collecting and analyzing evidence that is measurable. Relates to scientific ideas rather than personal preferences.  
About changing one thing to see the effect it has on another thing.

Variable



A factor that can change in an experiment