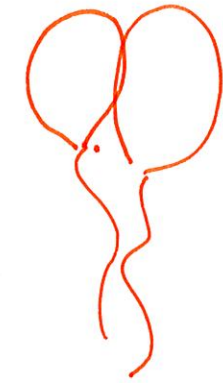


# Scientific Method

1) Observation - using 5 senses to notice some phenomena

2) Hypothesis - testable explanation of your observations



inside



outside

Colder temps. cause the volume of the balloon to decrease

Colder temps cause the helium to act differently

3) Experiment - step by step procedure for testing your hypothesis (repeatable)

A) dependent variable - affected by I.V.

B) independent variable - the one the experimenter can change

C) control(s)

- variables held constant to not interfere w/ the experiment

warm



cold



hot



4) Data - information gathered during an experiment

A) quantitative - measurements (numbers)

B) qualitative - descriptions

5) Analysis - mathematical calculations or reasoning done on the data

6) Conclusion - summary of the experiment & results

Theory  
explains why the phenomena occur

or

Scientific Law  
explains what phenomena occurred.

Mythbusters full episode

Discovery

