Half-life Lab
You will be given 50 pennies. You are to use them to create a model of radioactive decay over time. (We will name the element that we are modeling decay for "Pennyium".

Place all the pennies in a can and dump them. The pennies that show "heads" will be considered to be the part of the sample that went through radioactive decay. Count, record, and set these aside. This is considered the first "half-life".   The pennies that show "tails" will be returned to the can, and the process repeated until all of the "sample" has decayed. Record the number of the half-lives necessary for the total decay of the "sample". Run ten trials.
Report on you experiment using a lab report formatted as in your journal.

Provide a hypothesis before you begin trials (the number of "half-lives" necessary to decay the entire "sample").

Present your data.

Announce the Mean, Median, Mode, and Range of the number of half-lives found in your experiment.

Make a bar graph depicting the number of half-lives required to decay the sample in each trial.

Make a line graph depicting the amount of the sample that decayed after each half-life in three situations: the trial with the highest number of half-lives, the trial with the lowest number of half-lives, and the mean of all the trials.

Attach your data sheet to your graphs.