Conclusion Questions:
Please answer the following questions on the notebook paper in your binder.

1) Define half-life.
2) Can you predict when a particular "Candium" atom will decay?
3) Is your graph of the class data a straight line?
4) What does the shape of the line tell you about how a radioisotope decays?
5) Would the *shape* of your graph change if you started with more pieces of candy? Why or why not?
6) Would the *data points* change if you started with more pieces of candy? Why or why not?
7) In the experiment what was the length of the half-life of the element Candium?
8) Would the length of the half-life change if you started with more or less pieces of candy? Why or why not?
9) At the end of 2 half-lives what fraction of the atoms had *not* decayed?
10) If you allowed 3 minutes between each trial instead of 10 seconds, how long would the half-life be?
11) The half-life of sulfur-38 is 2.87 hours. After 8.61 hours, what *percent* of the original radiation is left?
12) Iron-59 is used in medicine to diagnose blood circulation disorders. The half-life of iron-59 is 44.5 days. How much of a 2.000 mg sample will remain after 133.5 days?
13) Germanium-66 has a half-life of 2.5 hours. You have 35 grams of the radioactive material. After 16 days how much radioactive material remains?