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?