Half Life Calculations
Directions: Use the information to solve the following problems. YOU MUST SHOW YOUR WORK LIKE WE DID TOGETHER IN CLASS! Put a box around your final answer!

1) After 5 half lives, 90 grams of an original sample remain unchanged. What was the mass of the original sample?

2) If 58.4 grams of a sample are left after 8 half lives, what was the mass of the sample you started with?

3) If 15 grams of a sample are left unchanged after 4 half lives, what was the mass of the sample you started with?

4) How many grams of a 13.5 gram sample will remain after 40 days if the half life is 4 days?

5) After 7 half lives, 13.8 pounds of an original sample remain unchanged. What was the mass of the original sample?

6) How many grams of a 72 gram sample will remain after 300 years? Half life = 100 years

7) If the half life is 1 month, and you started with 120 grams of a sample, how many grams are left after 3 years?

8) A radioactive isotope has a half life of 15 days. How many grams of the original mass will remain after 60 days if you start with 3.5 kg?

9) If you start with 40 grams of a sample and it has a half life of 1,000,000 years, how much of the sample will be left after 4,000,000 years?

10) Draw a visual that represents half life.