Honors Chemistry Hour\_\_\_\_\_\_ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Dr. Wexler  
Radioactive Decay Half-Life Formula Worksheet 1  
Date assigned:

1. What is the half-life formula? (solved for the final amount)

2. Potassium-42 has a half-life of 12.4 hours. How much of an 848 g sample of potassium-42 will be left after 62.0 hours? Show all calculations.

3. Carbon-14 has a half-life of 5730 yr. How much of a 144 g sample of carbon-14 will

remain after 1.719 x104 yr? Show all calculations