

SECTION
2

Reinforcement

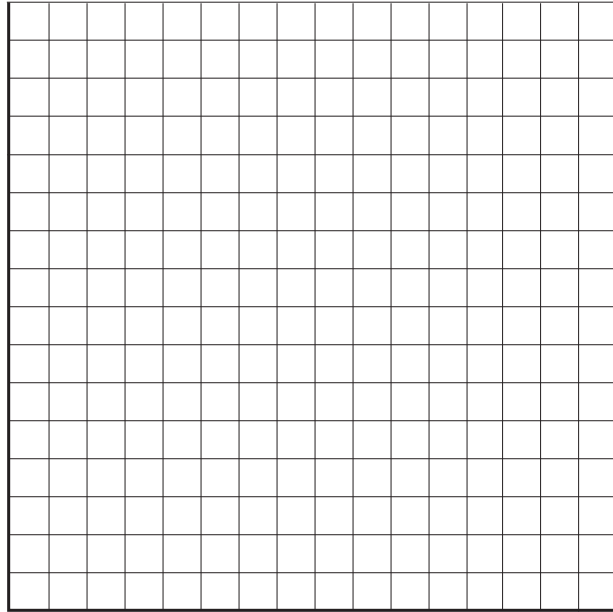
Nuclear Decay

Directions: Element Z has a half-life of one week. Use the graph grid and the directions below to trace the decay of a 256-gram sample of element Z over a 10-week period. Each box on the grid represents one gram of element Z. After you complete each step, answer the question.

1. Use a pencil to draw a large X through all of the boxes on the left half of the grid. How many grams of element Z decayed?

2. Use a different color pencil to draw a large X through 1/2 of the remaining boxes. How many grams of element Z remain after two weeks?

3. Use a pencil to shade 1/2 of the remaining boxes. How much of element Z is left?



4. Repeat step 3 using the colored pencil. How many grams of element Z remain? _____
5. Use a pencil to draw an X in 1/2 of the remaining boxes. How many grams of element Z remain?

6. Repeat step 5 using the colored pencil. How many grams of element Z remain? _____
7. Use your pencil to draw a circle in 1/2 of the remaining boxes. How many grams of element Z remain? _____
8. Repeat step 7 using the colored pencil. How many grams of element Z remain? _____
9. Shade in 1/2 of the remaining box with a pencil. How much of element Z remains?

10. Repeat step 9 using the colored pencil. How much of element Z remains? _____

Directions: On a separate sheet of graph paper, make a line graph or a bar graph that shows the decay of element Z over a 10-week period. Use your answers to questions 1–10 as your data.