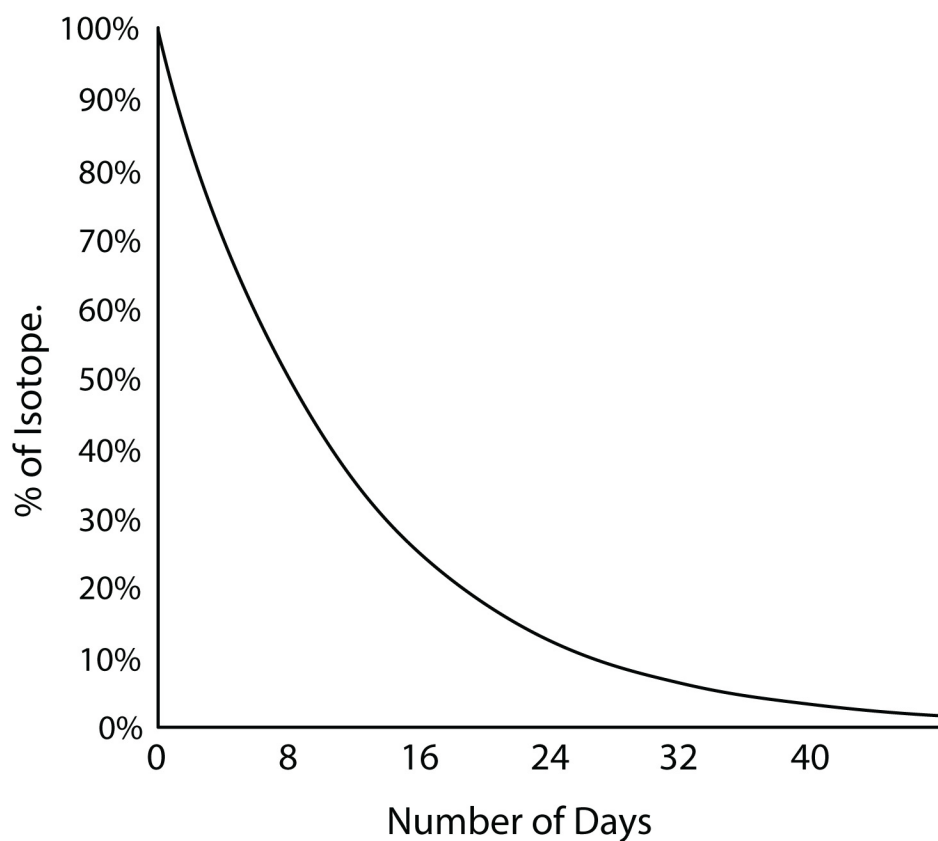Name : _____   Date : _____

# Half-life of Radioactive Isotopes Q/A Worksheet

The graph shown above depicts the decay of an isotope over time. With its help, answer the following questions.
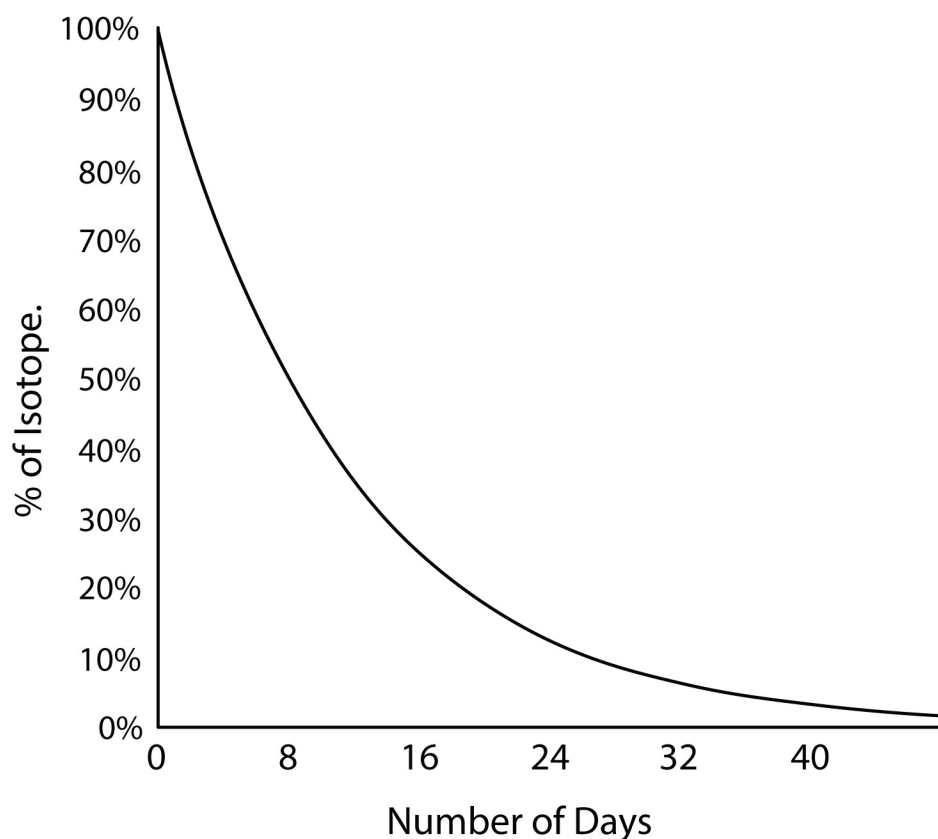


1. Determine the half-life of the isotope.

2. How much of the isotope is left after 40 days?

3. How many half-lives has the isotope passed through after 24 days?

Name : _____     Date : _____

# Half-life of Radioactive Isotopes Q/A Worksheet

The graph shown above depicts the decay of an isotope over time. With its help, answer the following questions.



1. Determine the half-life of the isotope.

   8 days
   The graph shows that around 50% of the isotope is left at 8 days. So, the half-life of the isotope is 8 days.

2. How much of the isotope is left after 40 days?

   3.125%
   This will be determined from the graph.

3. How many half-lives has the isotope passed through after 24 days?

   3 half-lives
   We have already determined that the isotope has a half-life of 8 days. So after 24 days, the number of half-lives it has passed through is = 24/8 = 3