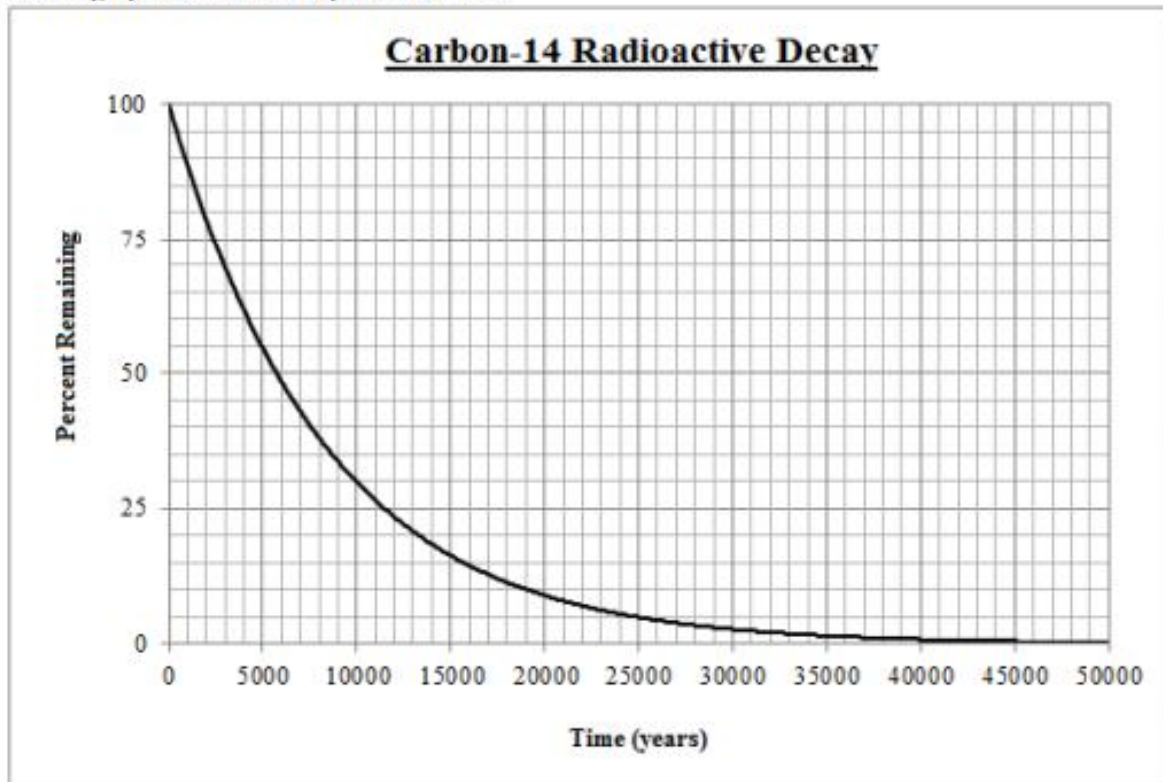


Do Now

Use the graph to answer the questions below.



- (1) The half-life of carbon-14 is 5730 years.
 - (a) What mass of a 1.0 g sample will remain after 5730 years?
 - (b) What percentage of a 1.0 g sample will remain after 11 460 years?

- (2) Use the graph to estimate the approximate age of each sample.
 - (a) A bone that has 50% of the original carbon-14 remaining
 - (b) A shark's tooth that has 20% of the original carbon-14 remaining
 - (c) A fragment of paper with 70% of the original carbon-14 remaining

- (3) Use the graph to determine the approximate percentage of the carbon-14 that would remain in each sample.
 - (a) A piece of wood that is 12500 years old
 - (b) A shell that is 30000 years old
 - (c) A piece of silk that is 5000 years old.

- (4) How long would it take for a 50.0 g sample to have 12.5 g of carbon-14 remaining?

- (5) What mass of carbon-14 would remain in a 2.00 g sample after 22920 years?