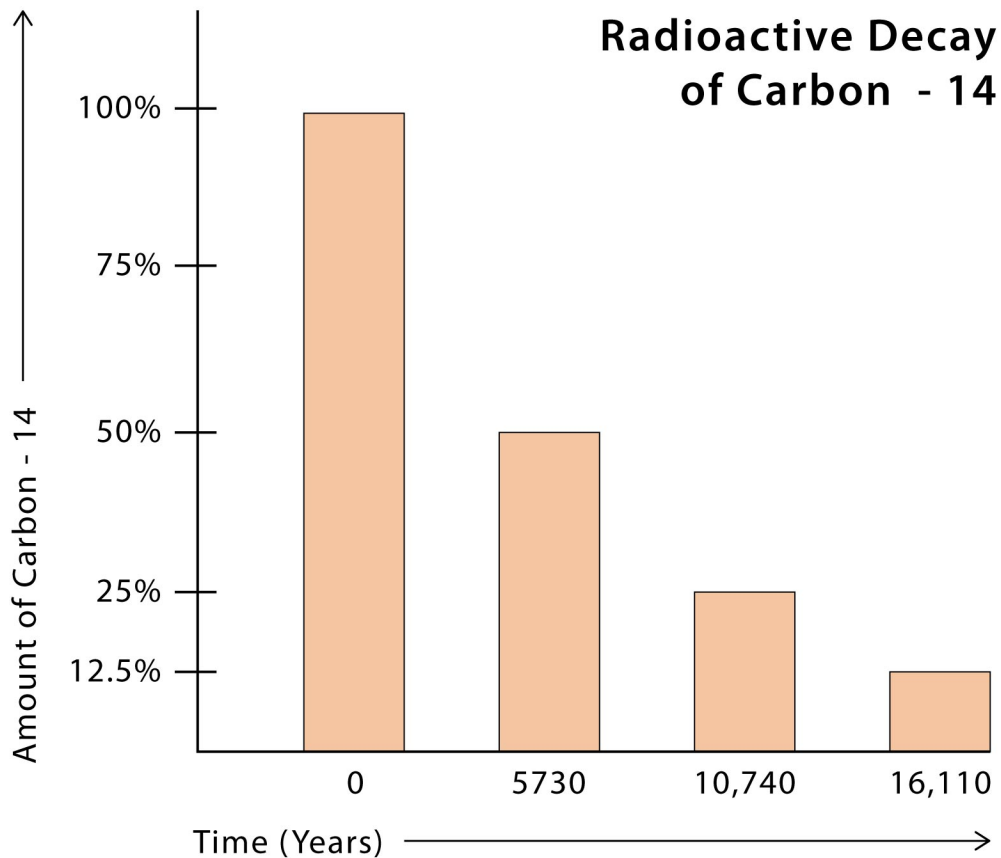


Radioactive Decay Graph

— Half-life Worksheet —



1. What is the half-life of carbon-14?

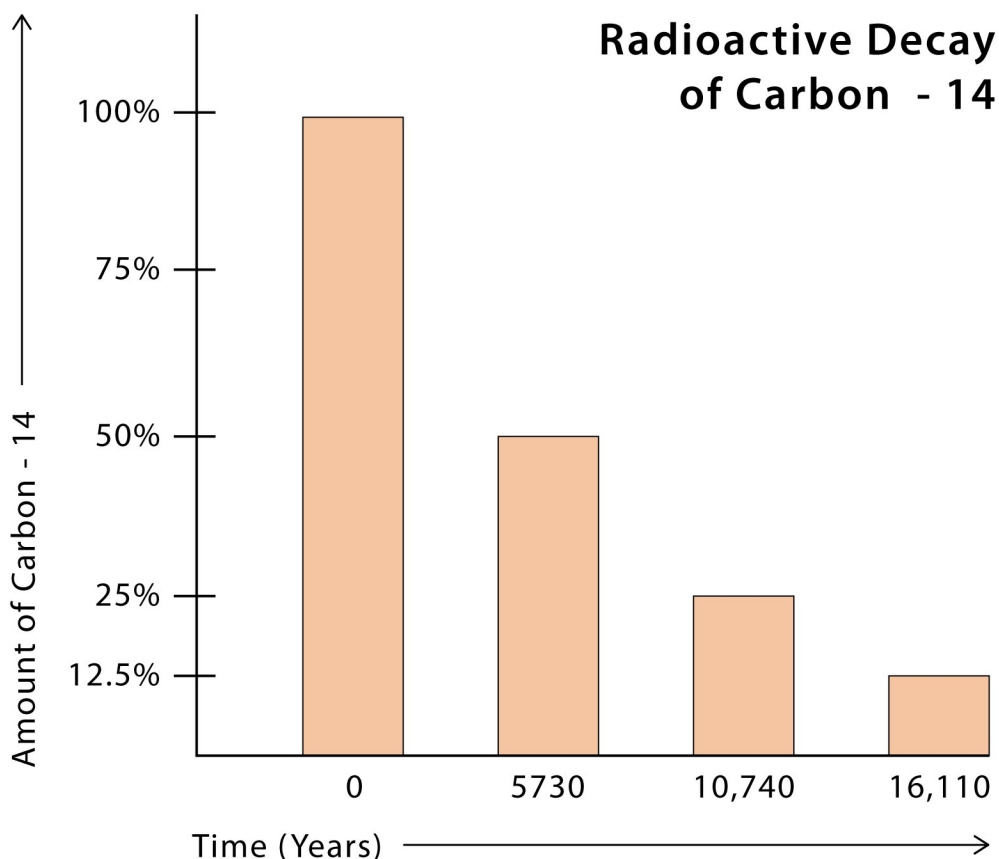
2. If only 25% of the carbon-14 remains, how old is the material containing the carbon-14?

3. If there were initially 120 atoms of carbon-14, how many atoms are left after 16110 years?

Radioactive Decay Graph

— Half-life Worksheet —

Answers



1. What is the half-life of carbon-14?

5730 years

2. If only 25% of the carbon-14 remains, how old is the material containing the carbon-14?

10740 years

3. If there were initially 120 atoms of carbon-14, how many atoms are left after 16110 years?

15 atoms

After 16110 years, 12.5% of the original sample is left, meaning that three half-lives have passed (100% > 50% > 25% > 12.5%)