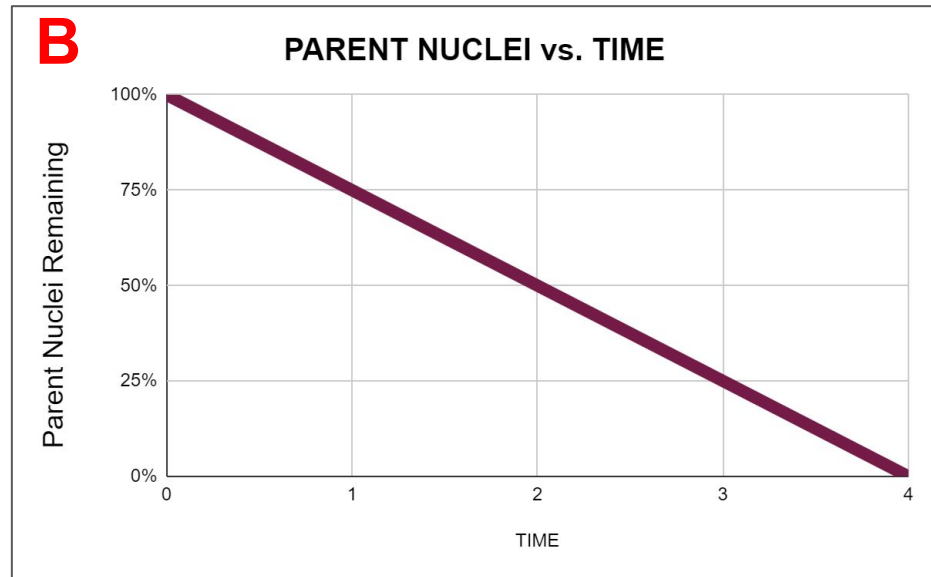
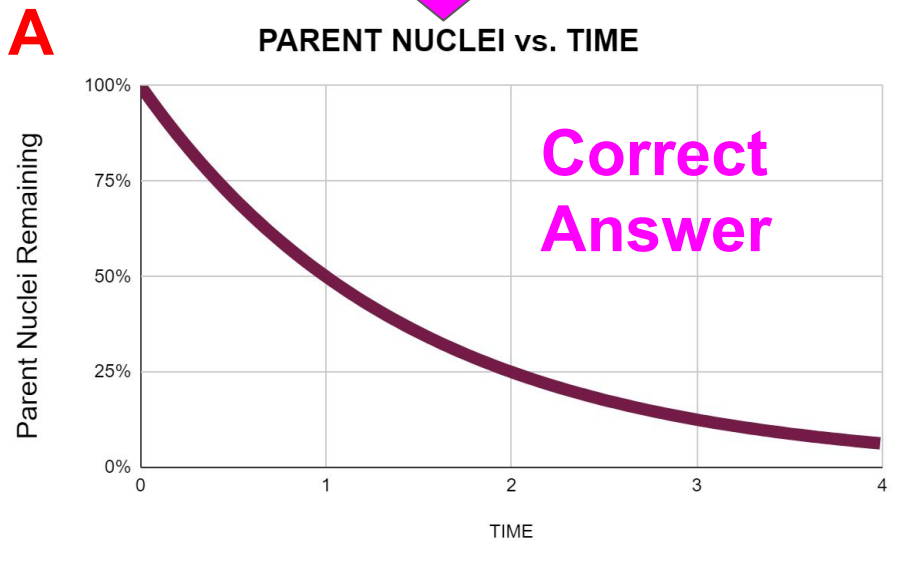
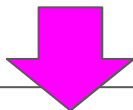


Half-life:

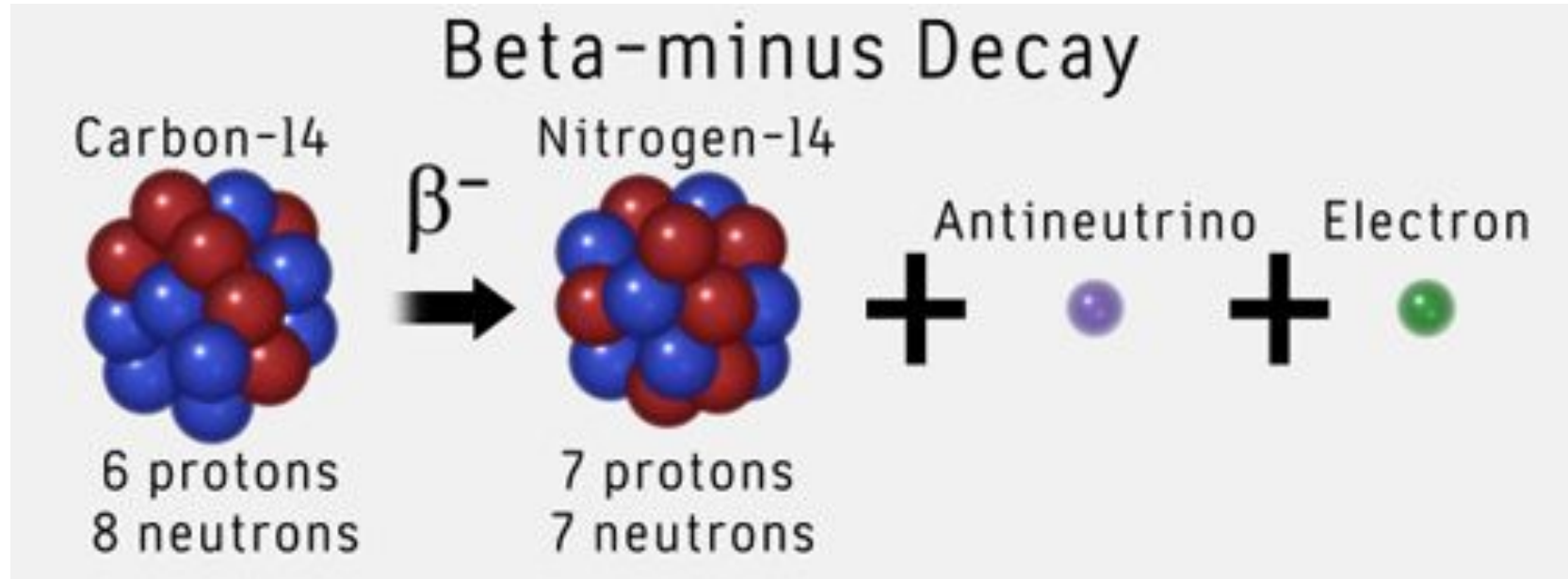
The time it takes for half a sample of radioactive nuclei to decay.

Bellwork: (Send your answer by chat)

Which chart shows the amount reducing by half over each time interval?



Radioactive decay of Carbon-14



Carbon Dating

- Most carbon is Carbon-12
- Cosmic rays make Carbon-14 in the air
- Living things use carbon from the air
 - While alive, everything has about the same amount of Carbon-14
- After something dies, half the Carbon-14 has turned into Carbon-12 every 5,730 years
 - By measuring the amount of Carbon-14 left, we can determine how long ago something died!

PhET Simulation:

<https://phet.colorado.edu/en/simulation/legacy/radioactive-dating-game>