

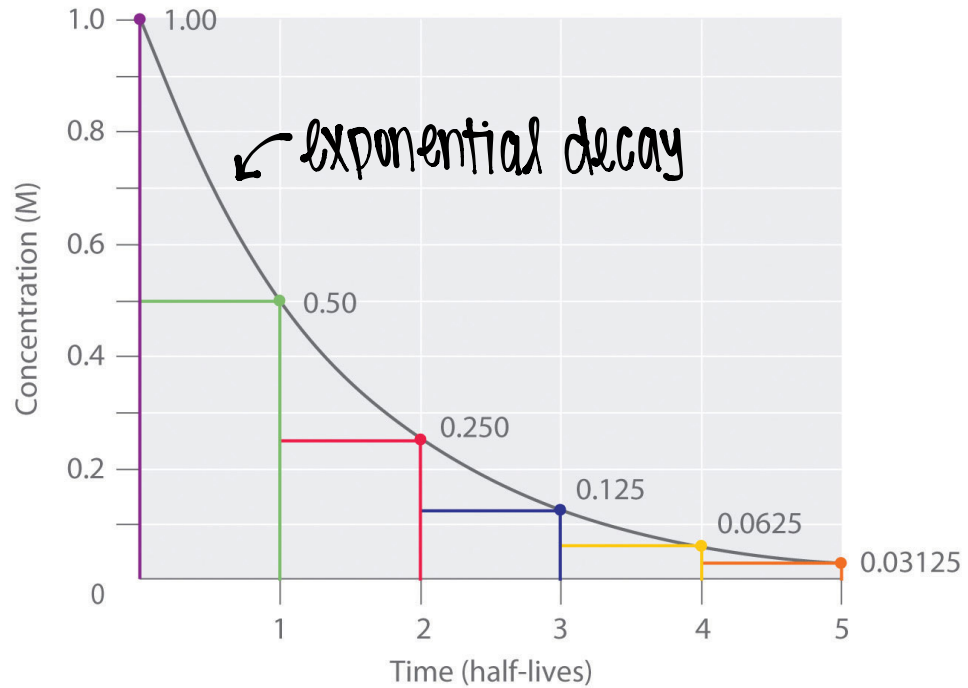
NUCLEAR CHANGE

Half life: ($t_{1/2}$) The time it takes for half of a given amount of a sample to decay

- The longer the half life... the more stable the isotope

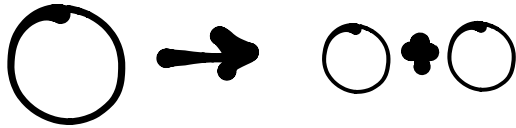
NUCLEAR CHANGE

Half Life

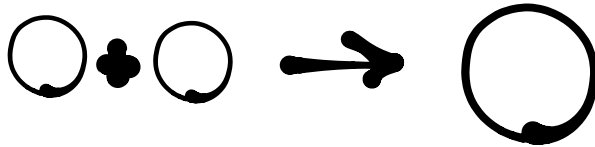


NUCLEAR CHANGE

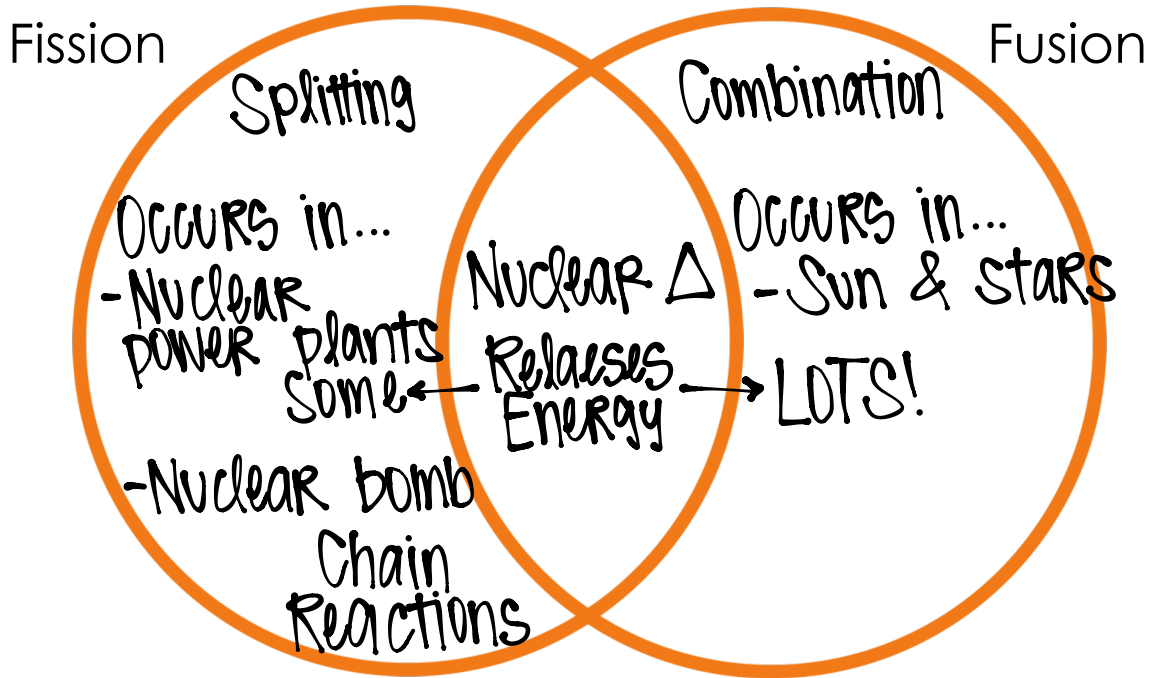
Fission: Splitting a nucleus into smaller nuclei.



Fusion: Combining of nuclei into one larger nucleus



NUCLEAR CHANGE



NUCLEAR CHANGE

↳ Applies to fission

Chain Reaction: The release of one neutron causes the next reaction to start.

Nuclear power plant is a controlled chain reaction



Nuclear bombs are uncontrolled chain reactions