

3-23-16 Radioactive Atoms

Some radioactive atoms change to stable very quickly and other radioactive atoms take longer. The radioactive atoms we tested yesterday, every 10 seconds about half of their radioactive atoms change to stable. Today, we will test other radioactive atoms.

Rad X: 5 seconds

Rad Y: 20 seconds

Rad Z: 45 seconds

Question:

What is the effect of type of radioactive atom on # radioactive and # stable atoms?

Hypothesis:

If type of radioactive atom changes then ~ half of radioactive atoms will change to stable atoms at a predictable rate (time).

Plan:

IV: Type of radioactive (rad) atom

Levels: 3

List Levels: Rad X, Rad Y, Rad Z

DV: # radioactive, # stable
#Trials: 6 shakes

Constants: clipboard tightly on pan,
shake pan gently,
50 plain M&M's with an "M",
...

Data: (results)