

Nuclear Chemistry Study Guide

Understand the following topics:

- Fusion and fission
 - the general outcome of each
 - nuclear chain reactions
 - $E=mc^2$
 - Where these processes take place
- Alpha, beta, gamma decay
 - particles or energy
 - effect on nuclei
 - background radiation
- Half-Life
 - concept
 - the decay products don't disappear. Instead, they become other elements

Know the research procedures, findings, and atomic models associated with the following:

- Dalton
- JJ Thomson
- Robert Millikan
- Lord Rutherford
- Niels Bohr
- Erwin Schrodinger

Be able to:

- Interpret the result of the cathode ray tube and gold foil experiments
- Explain a model representing nuclear fissions
- Complete radioactive decay equations
- Complete half life calculations graphically/logically