

Chemistry Content Standards:

Nuclear Processes are those in which an atomic nucleus changes, including radioactive decay of naturally occurring and human-made isotopes, nuclear fission, and nuclear fusion.

Standard 11c: Students know some naturally occurring isotopes of elements are radioactive, as are isotopes formed in nuclear reactions.

Standard 11d: Students know the three most common forms of radioactive decay (alpha, beta, and gamma) and know how the nucleus changes in each type of decay.

- 25.2.1 Describe the type of decay a realoisotope undergoes
- 25.2.2 Solve problems that involve half-life
- 25.2.3 Identify two ways transmutations can occur.

Stamp:

Worksheet: Radioactive Decay 1-4 Practice Problems 25.1 Page 802, 1-6 WB 25.1 Voc Chapter 25

- Notebook Check: Peer Review (2 students)
- Pre Write: Chernobyl Disaster (NB Page 25)
- Lecture: Fission and Fusion: Part 2 Nuclear Chemistry
- **Review:** Nuclear Decay Work Sheet (Done in lab setting)
- Lab: Lab # 6 Decay (<u>NB Page 26</u>)
 - Students will play decay game, keeping track of attempts before reaching a stable element.
 - They will answer all concluding questions
 - They will determine the difference between alpha, and beta particles

Classwork:

WB 25.2

Home Work: **Page 808, 9-14**