Lesson plan for <u>Beta Decay:</u>

http://phet.colorado.edu

Learning Goals: Students will be able to:

- Describe the process of beta decay
- Differentiate between Alpha and Beta decay
- Compare the meaning of "Half-life" for Alpha and Beta decay.

Background: This is written to follow <u>Loeblein's activity for Alpha Decay</u>. This activity could be used for homework. My students have likely heard about nuclear decay. They are high school seniors. I have written this activity to be used with a substitute teacher near the end of the school year. They have done many PhET activities throughout the year in class and as homework.

Beta Decay Introduction:

Because this sim is similar to <u>Alpha Decay</u>, I do not expect the students to have difficulty using the sim without guidance.

Lesson: My students will work in pairs in a computer lab.

Post-Lesson: I plan to write clicker questions, but have not done so yet.

Follow-up sims: Nuclear Fission (I plan to use Chasteen's activity http://phet.colorado.edu/en/contributions/view/3335), Radioactive dating (I plan to write a homework activity for next year)