



Instructor: Sushma Sharma (2003 Science Teachers Workshop participant)

School District: Hazlet

Lesson Title: Nuclear Radiation

Grade: 8

Subject: Science

Objective: To compare and contrast properties of nuclear radiation

Materials and Resources:

- Index cards with the description of various nuclear particles,
- Sheets of paper
- Aluminum

Lesson:

- After introducing radiation and radioactive elements to students, class will be divided into two groups.
- One group will be separated from the rest of the class. These students will be given the properties of alpha, and beta particles. Some will be given the properties of gamma rays.
- Second group of students will be given materials to stop the radioactive particles.
- Students acting as radioactive particles will be released from a given location in a particular direction. Second group of students will try to survive the attack of radiation. If they put up the right shield they radioactive particle will stop, and go to the back of the classroom (out of this game), or the student with the wrong shield will go back to the room.
- At the end of the activity energy level of each particle and ray will be discussed. It will be concluded with students preparing the chart with the composition and shields that can stop these particles.