



**Instructor:** Marlene Davidson (2003 Science Teacher Workshop participant)

**School District:** Paterson

**Lesson Title:** Radiation Jeopardy

**Grade:** 5

**Subject:** Science

**Overview:** The students have completed the unit in radiation. Before they take the unit exam, the Jeopardy game is played as a form of review.

**Objectives:** Students will review for the unit exam.

**Materials & Resources:**

- Understanding Radiation, Grade 5
  - Chem-Nuclear Systems, Inc.
  - North Carolina Low Level Radioactive Waste Management Authority
  - Materials distributed in class

**Lesson:**

1. Students are divided into teams of 4.
2. Each team has a bell to ring to answer a question.
3. Team having the closest birthday begins by choosing a category and a point value
4. M.C. takes that card out of the envelope and places it on the board. The team gets a chance to answer the question. If the answer is correct, they score that many points. If not, another team can buzz in.
5. Upon a correct answer, the winning team chooses a category and a point value, and the game continues.
6. Team with the most points at the end is the **Winner!**

**Jeopardy Board:**

POINTS	ATOMS	RADIATION	RADIOACTIVITY & ME	DICTIONARY
100				
200				
300				
400				
500				

**Suggested Category Questions:**

• **ATOMS**

- 100.The basic building block of all matter
- 200.The center of the atom

300. An atom having 3 protons has \_\_\_\_\_ electrons.
400. The number of protons and neutrons is different
500. There are 92 of us

• **RADIATION**

100. Instrument used to measure radiation
200. The way radiation travels
300. Three types of radiation
400. To check for broken bones, \_\_\_\_\_ radiation would be used
500. Ultraviolet light, infrared light, and microwaves are a form of

• **RADIOACTIVITY AND ME**

100. It's radioactive, it's in my house, should I worry?
200. I can't escape it! It's everywhere!
300. Some are smooth, some are jagged, some are big, and some are small. They have been around forever
400. My job keeps me close to those cosmic rays
500. Three ways to protect yourself from radiation

• **IN THE DICTIONARY**

100. A Branch of medicine that uses radioactive materials for the diagnosis and treatment of diseases
200. A negatively charged particle that orbits an atom's nucleus
300. Any solid, liquid, or gas that emits radiation spontaneously
400. Having a detrimental effect on humans, plants, or animals
500. High energy particles in electromagnetic radiation that originate outside the earth's atmosphere

**ANSWER KEY:**

• **ATOMS**

100. atom
200. nucleus
300. three
400. isotope
500. elements

• **RADIATION**

100. geiger counter
200. waves
300. alpha particles, beta particles, gamma rays
400. ionizing radiation
500. nonionizing radiation

• **RADIOACTIVITY AND ME**

100. smoke alarms, microwaves, teflon pots and pans
200. air
300. rocks
400. pilot
500. minimized time, shield yourself, keep your distance

• **IN THE DICTIONARY**

100. nuclear medicine
200. electron
300. radioactive material
400. toxic
500. cosmic ray