Cosmic Jeopardy!

Suggested Grade Levels: 8-12

Estimated class time: 1 to 2 class periods if students use teacher created questions as a review at the end of other lessons; 3 to 4 class periods if students research and present their own questions.

Summary

Students will play *Jeopardy!* with questions based on the articles in the 1955 Cosmic Times. Two options are presented for this lesson:

- Students may read the 1955 Cosmic Times and then play *Jeopardy!* with the questions presented to them by the teacher. This could be a culminating activity after other Cosmic Times lessons have been completed. Or,
- Students will read the 1955 Cosmic Times and research the material to create answers and questions for a *Jeopardy!* game to be played with their class.

Objectives

• Students will demonstrate their understanding of the articles in the Cosmic Times through a series of *Jeopardy!* questions.

Knowledge Prerequisite

Students need to have read the 1955 edition of the Cosmic Times and have defined any terms that were unfamiliar to them.

Materials

- 1955 Edition of Cosmic Times
- Glossary or dictionary
- *Jeopardy!* Game this can be a poster game or PowerPoint *Jeopardy!* Game available as an attachment (sample_jeopardy.ppt) or available on the web.

National Standards

National Science Standards

• NS.5-8.1 SCIENCE AS INQUIRY

As a result of activities in grades 5-8, all students should develop

- o Abilities necessary to do scientific inquiry
- o Understandings about scientific inquiry
- NS.5-8.7 HISTORY AND NATURE OF SCIENCE

As a result of activities in grades 5-8, all students should develop understanding of

- Science as a human endeavor
- Nature of science
- History of science

NS.9-12.1 SCIENCE AS INOUIRY

As a result of activities in grades 9-12, all students should develop

- Abilities necessary to do scientific inquiry
- o Understandings about scientific inquiry
- NS.9-12.2 PHYSICAL SCIENCE

As a result of their activities in grades 9-12, all students should develop an understanding of

- o Structure of atoms
- o Interactions of energy and matter
- NS.9-12.4 EARTH AND SPACE SCIENCE

As a result of their activities in grades 9-12, all students should develop an understanding of

- o Origin and evolution of the universe
- NS.9-12.7 HISTORY AND NATURE OF SCIENCE

As a result of activities in grades 9-12, all students should develop understanding of

- o Science as a human endeavor
- o Nature of scientific knowledge
- Historical perspectives

National Language Arts Standards

(From the National Counsel of Teachers of English)

NL-ENG.K-12.3 EVALUATION STRATEGIES

Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

Teacher Background/Notes

In the 1950's the TV game show was born. At one time there were 22 game shows on the air. The \$64,000 Questions, Twenty One, What's My Line, To Tell the Truth and The Price is Right entertained audiences across the country. However, the quiz show scandals (in which the producers of the shows gave contestants the answers) led to a Congressional Investigation. In reaction to this, Merv Griffin developed a game show in which the contestants were given the answers but had to come up with the questions. Jeopardy! premiered in 1964 with Art Fleming as the host.

Jeopardy! is such a commonly used format for review in classrooms that most teachers and students are familiar with the lesson design.

Procedure:

I. Engagement

Ask your class the following three questions:

- Do you remember the size of the universe from our last poster? Is this what we know it to be today? How was that adjusted?
- If the early universe was made of hydrogen and helium, where did the heavy elements come from?
- Have you heard of the Big Bang? What is it? What is the difference between the Big Bang and a Steady State Universe.

By the end of this lesson, students will be able to answer these questions and more like it in a game show format.

II. Exploration

Students should read the 1955 Cosmic Times to answer the three questions presented above.

Students may research additional information about the three questions and additional topics in the 1955 Cosmic Times.

III. Explanation

Teacher Notes:

The level of your class and number of days you wish to devote to this activity will determine which option you will choose.

Sample questions (jeopardy_questions.doc) and a Jeopardy PowerPoint (sample_jeopardy.ppt) are available for your use. In the sample questions, most questions are intended for high school. Some categories and answers are explicitly denoted as HS (high school) or MS (middle school)

A combination of these may be used in a differentiated classroom.

Students will work on a, b, or c

- a. Make notes on the readings in the 1955 Cosmic Times to prepare for Jeopardy!
- b. Students will create questions and answers from the 1955 Cosmic Times to play Jeopardy!
- c. Students will research topics from the 1955 Cosmic Times in depth and create PowerPoint presentations to share with their classmates. Students will create questions and answers from the 1955 Cosmic Times and their research to play Jeopardy!

IV. Extension

Students may research other game shows from the 1950s. An alternative game show format may be designed and used based on this information.

V. Evaluation

Play Jeopardy!