Literacy Activities

Summary
These "mini-activities" use literacy to support Standard 1, Objective 1.

Main Core Tie
SEEd - Grade 6
Strand 6.2: ENERGY AFFECTS MATTER Standard 6.2.1

Time Frame
1 class periods of 45 minutes each

Group Size
Individual

Materials
- Pencil
- Paper
- Computer with Internet access (optional)
- 2.5 meters adding machine tape
- Colored pencils
- Textbooks
- Metersticks

Instructional Procedures
Activity 1: (Recognize that atoms are too small to see)
Ask students to write riddles based on the fact that atoms are too small to see. The answer to the riddle should be "atom".
Require that students use factual information from their text to support the riddle. Ex. What is invisible, but all around us? Answer: atoms
Ask students to share their work in a group and then read the riddles they would like to share with the class.

Activity 2: (Relate atoms to molecules)
As students to write analogies that illustrate how atoms are related to molecules. Explain that an analogy is a way to compare two processes by using a format "A ________ is to __________ as a ___________ is to ____________.
Ex. An atom is to a molecule as a cell is to an organ.
Have students work in pairs to review the analogies and then write them on an overhead to share with the class.
Have the class read the analogies from the overhead and make sure that they are all accurate.

Activity 3: (Describe the limitations of using models to represent atoms)
Ask students to choose a model of something they are familiar with (globe, car, doll, toy) Have them list 3 ways the model is accurate and 3 ways it is inaccurate.
Have students use their textbooks to find characteristics of our current model of the atom and list three ways the model is accurate and inaccurate.
Ask students to write a short paragraph describing what a perfect model of the atom would look like.
Activity 4: (Investigate and report how our knowledge of the structure of matter has been developed over time.)

Materials: 2.5 meters adding machine tape, colored pencils, textbooks, metersticks

Tell student that they will be creating a time line to show the development of our understanding of the structure of atom.

Ask students to research the development of atomic theory and write down the development and the year in which they occurred.

Give students the metersticks and adding machine tape and tell them to divide the tape into enough years to get their information on with the same distance between each year.

On the correct location of the meterstick, have students draw the model, write the name or names of the scientists that proposed the model and another interesting fact.

Display the tapes in the room and ask students to grade them based on the following:

- information on the tape is accurate scientifically
- the time tape is colorful and neat
- the tape has been correctly scaled

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

Utah LessonPlans