Mix it Up!

Pre and Post Visit Materials

The goal of this program and its pre and post-visit activities is to learn about different areas of science.

Pre-Visit Activities

1. Go over new vocabulary words as a class. (some words may have multiple definitions but the ones pertaining to the program are listed)
    - Acid: a compound having a PH level lower than 7
    - Base: a compound having a PH level greater than 7
    - Chemical Change: irreversible change where two or more elements combine to create a new substance
    - Chemistry: the science of studying elements and what they are and what you can do with them
    - Compound: the combining of two or more elements
    - Element: a chemical substance which cannot be broken down any further.
    - Endothermic reaction: a chemical reaction that absorbs heat from its surroundings
    - Exothermic Reaction: a chemical reaction that produces heat
    - Molecule: the smallest physical unit of a compound
    - Non-newtonian fluid: a fluid that reacts to force in unexpected ways.
    - pH: the scale with which to test acids and bases
    - Physical Change: a change in the state of matter, solid to liquid to gas. It can be reversed.
    - Polymer: a long string like molecule
    - Sublimation: solid to gas

2. Alka-Seltzer States of Matter
    - Worksheet attached.

Post-Visit Activities

1. Have the student's journal about their trip. The prompt should be, "What was your favorite part of the trip to the museum?" They can either write or draw their response.

2. Gummy Molecules
    - Materials: candy gum drops, tooth picks
    - Assign the different colors of gum drops an element
    - Have students use the tooth picks to create common simple and compound molecules.

Plop Plop Fizz Fizz

Materials: Alka Seltzer, Glass of water

Introduction: matter comes in three states: solids, liquids, and gases. Today we are going to look at a material that goes from solid to gas very quickly because of a chemical reaction.

1) Name three solids, liquids, and gases.

2) Open the foil pack of alka seltzer. Describe it.

3) Drop the tablet into the glass of water. What happens?

4) Place our hand over the mouth of the glass, what do you feel?

5) What do you think is happening and why?