

Leal Mad Scientists – Supply and Activity List for the Foaming, Fizzing and Oozing Experiments

Make sure to bring:

- pitcher to hold water – for easy dispensing.
- large bowl to collect liquid waste
- measuring cups – at least 2 cup size

1) Volcano

Materials: (done as a class)

Plastic Volcano

8 oz plastic dressing bottle (without lid)

Red food coloring tablet

Vinegar

Baking soda

Liquid dishwashing soap

Tin Pan

Square of tissue paper

(Before class dissolve the food coloring tablet in vinegar)

Set up:

This is done as a group.

Activity:

Have students draw picture of what they observed

2) I heard it through the grapevine

Materials: (work in pairs)

Tall clear (plastic) glass

Raisins (cut in half)

Fresh club soda (1 bottle will fill 3 glasses sufficiently)

Set up:

Each child will have their own glass and one half of a raisin. Fill glass half way with club soda.

Activity:

Each child will drop in raisin and observe

3) Baking Soda Raisin Dancing

Materials: (per group – 2 or 3 groups total)

Tall clear glass (needs to hold 2 cups of liquid)

Raisins

Water

Vinegar

Baking soda

Set up:

Divide children into 2 or 3 groups.

Each group gets glass, a few raisins, one cup of water, one heaping teaspoon of baking soda, and one cup of vinegar.

Activity:

One child in the group will pour the water into the glass

Another child adds a heaping teaspoon of baking soda to the glass.

Third child adds five raisins to the glass.

Fourth child will slowly add 1 cup of vinegar.

4) Make your own lava lamp

Materials: (for each child)

One plastic soda bottle or test tube (with lid)

Vegetable oil

Food coloring

Water

Alka-Seltzer tablet –divided into 8 pieces (regular Alka-Seltzer contains aspirin, if worried about ingestion use Alka-Seltzer Gold, which does not contain aspirin)

Tall clear glasses or test tube holders if using test tubes.

Set up:

Before class prepare for each child a bottle/tube with oil, and food coloring (5-10 drops food coloring, $\frac{3}{4}$ oil, $\frac{1}{3}$ water). In class show the whole class how you prepared their individual bottles by combining oil, water and food coloring (and discuss what they are seeing).

Open the bottle for the children. Place the tubes in the glasses so they will not fall over.

Activity:

Each child will drop the tiny pieces of Alka-Seltzer into the oil and water (wait for the bubbling to stop before putting in another piece). After all the bubbling has stopped help each child to screw the cap back on. Let them tip the bottles/tubes. The tubes/bottles can be taken home.

DO NOT SHAKE, SLOW TIPPING IS MUCH COOLER!

5) Lemon twist

Materials: (for each child)

Plastic 8 oz. cups

Baking soda

Liquid soap

Half a lemon

Measuring spoon

Straws

(Before class cut the lemons into halves or fourths so that you do not have to bring a sharp knife)

Set up:

Each child will have their own cup, a straw and half a lemon. In the middle of the table place a bowl of baking soda (plus measuring spoon), and a bottle of soap.

Activity:

Each child will add 2 teaspoons of baking soda into the empty cup. They then add a big squirt of liquid soap to the cup. The ingredients are then mixed with a straw. Each child will then squeeze half the lemon.

They can then use their concoction to wash their hands and end the class.