Grades K–12: Bubbles

Continuum Activities

Bubble Art (Post) Activity #1

Students create a unique piece of bubble art. This will reinforce the science concepts of bubbles while integrating their knowledge with art.

Time: 1 - 30 minute session

Materials

- One 2-liter bottle of blue tempera paint mixed with bubble solution (water, soap and glycerin)
- One 2 -liter bottle of red tempera paint mixed with bubble solution
- One 2-liter bottle of green tempera paint mixed with bubble solution
- Piece of thick paper per each student
- One straw per student
- 6 plastic cups for each table of students

Preparation/ Setup:

- Protect tables with newspaper or other materials that may absorb soap.
- Pour bubble paint into cups, filling less than 1/4th.
- Make a slit in the middle of each straw using a scissor. (This is to prevent students from sucking up the bubble paint solution.)
- Set the cups of paint on the tables. Each table should have 2 cups of each color so the students can share colors, but not wait.

Procedure

1. Review what a bubble from soap solution is. Imagine bubbles that are not float in the air, but are stacked up on top of each other.
2. Ask if anyone has ever blown bubbles in a drink they were drinking, like milk or water. What happened? The bubbles stacked up and may have even overflowed. We will apply the same idea today.
3. Pass out the thick piece of paper. Have the students write their name on the paper. Pass out the straws.
4. Each student should have one of the cups of the bubble paint solution on their paper, right in the middle.
5. Student can place the straw into the cup and blow gently. Keep blowing until the bubbles in the cup are over flowing on to their paper.
6. Very gently, using the straw, brush the rest of the bubbles on to the paper.
7. Repeat these steps with a different color. It is important that they do not use too much bubble solution because the honeycomb pattern that is created will be lost.
8. Allow the bubbles to pop on their own and dry by themselves.

Background information

The soap and glycerin hold the water molecules present in the bubble paint in an orderly pattern, thus creating the honeycomb effect. You can see this when more than three bubbles meet.

Grades K–12: Bubbles

Bubble Ring (Post) Activity #2

Students will be able to create a large bubble with using common materials.

Time: 1–20 minute session

Materials

- 2 straws per student
- I- 3 foot string (or yarn) per student
- Aluminum pan filled with soap solution

Preparation/ Set up

- Have the pan filled with soap solution already on the tables.

Instructions

1. Each student should have the materials laid out in front of him or her.
2. Thread the string through both straws.
3. Tie the end of the string together.
4. Use the straws as a handle for each hand.
5. Dip into pan
6. Make sure straws right next to each other as you pull it out of the pan. They should be touching the same way crayons touch in the crayon box.
7. When the straws and string are out, pull the straws apart gently.
8. If you do not have a film of soap, try it again.
9. When you do have a film of soap, experiment.

National Standards (K)

Ns.K-4.2 Physical science

As a result of the activities in grades K-4, all students should develop an understanding of

- Properties of objects and materials.

Ns.K-4.1 Science as inquiry

As a result of activities in grades K-4, all students should develop

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry

Ns.K-4.5 Science and technology

As a result of activities in grades K-4, all students should develop

- Abilities of technological design
- Understanding about science and technology

Ns.K-4.4 Earth and space science

As a result of their activities in grades K-4, all students should develop an understanding of

- Properties of earth materials