

**Project FOCUS
Best Lessons
KINDERGARTEN**

Title of Lesson: Bubbles

Theme: Physical Science

Unit Number: 1 **Unit Title:** Physical Properties of Matter

Performance Standard(s) Covered (enter codes):

SKP1

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Bubbles

Learning Activity (Description in Steps)

Abstract (limit 100 characters): This lesson teaches kids about the unique properties of bubbles.

Details: Prior to class, I made wands for the kids out of pipe cleaners. I made various shapes like hearts, circles, triangles, rectangles, and squares. Take the kids outside because it will get a little messy and distracting to other groups. Allow them to pick out a shaped wand and predict what shape the bubble will be. Let them take turns experimenting with the different shapes and blowing bubbles. Soon they will discover that no matter what shape the wand is, the bubbles will always form a sphere. Explain to them that bubbles, like balloons, are minimal surface structures and the geometric form with the least surface area for any given volume is a sphere. Now add some paint to your bubble mix. For example, add the two colors red and blue. The kids should predict that the bubble will be colored purple; however they will soon discover that the bubble appears multi-colored. Our eye sees all of these colors through the reflection and refraction of light waves off its inner and outer surfaces. You can't "color" a bubble because its wall is only

Materials Needed (Type and Quantity):

Pipe cleaners

Straws

Bought bubbles or liquid Dawn or Joy plus water to make your own "bubble mix"

Poster or tempera paint

Bowl or big container to put bubble mix in

Notes and Tips (suggested changes, alternative methods, cautions):

Make sure they don't eat the bubbles or get it in their eyes. Make sure younger ones don't poke each other with the pipe cleaners.

Sources/References:

- 1)
- 2)
- 3)