

Enjoy A

Bubble Day

(Science and Fun at the Same Time!)

Looking for a good warm weather, outdoor, end-of-the-year activity? Try BLOWING BUBBLES! It's fun, it's inexpensive, and it encourages scientific discovery as well. Just remember, this is a day for students to HAVE FUN discovering things BY THEMSELVES. Students in grades 3-4 should be able to do this independently. For younger grades, choose some of the activities listed and set up "Bubble Stations." Ask older students or parent volunteers to assist in this "Bubble Field Day."

MATERIALS

Bubble Solution – enough for each group to have its own bucket or dishpan half full. Use 1 part liquid dish detergent to 10 parts water. Any detergent will do, but Joy or Dawn seem to work best. If your tap water is very hard, used distilled water. For best results, let solution stand overnight. Adding 1/10 part gelatin or 1/4 part sugar or corn syrup will result in stronger bubbles, but is not necessary for these activities.

Buckets or dishpans – enough for each group of 3 or 4. Buckets are easier to carry, but dishpans provide a larger surface from which to scoop solution.

Bubble-making wands – a variety of shapes and sizes. Many sizes are available commercially, but straws, plastic O-rings, rubber jar rings, thin wire, wire coat hangers, or pipe cleaners work just as well. The latter three are fun to use because they can be shaped into oval, triangular and free form shapes.

Large plastic ground covering – large plastic trash bags or plastic table covers – one for each group.
If possible, get both dark and white trash bags.

Clipboards, paper, pencils – one for each group to record observations.
If clipboards are not available, fasten paper to stiff pieces of cardboard.

by Elaine Hansen Cleary and Joni Blackman

PREPARATION

Divide Students into groups of 3 or 4 for maximum participation.

Parent letter explaining the activity and requesting children wear/bring “play clothes.”

Bubble charts – make one for each group, with columns headed *What we know about Bubbles* *What we'd like to find out*
What we've discovered

Allow time in class for groups to discuss and fill out the first two columns.

Copy activity list, one for each group. Suggestions are given below for possible “experiments” with bubbles. Add any of your own.

Make bubble solution a day ahead, an ample amount for each group.

TIME FRAME – FLEXIBLE! Allow anywhere from a half hour to a half day. *Let your time be guided by the interest of the students.*

On Bubble Day hand out the list of suggested activities, being sure to encourage students to add activities of their own, too. Remind them that they may choose any of the activities they wish and that they are not expected to do all of them. (This is where the flexible time frame comes in!) Give each group its “Bubble Chart” and pencil, choosing one student to record observations. Younger grades might need a parent or older student to help them. Then go outside and ENJOY! Later, bring all the groups together to report their observations. Write these on a master list. If time allows, let groups try each other’s different activities. (The discussion might be done indoors later, with the master list being written on the board or large easel paper.)

Bubble Activities

Do different-sized wands always make different bubbles?

Blow a bubble through a wand made by joining your thumb and forefinger.

Blow a bubble, then blow another right beside it, trying to join them.

Blow a bubble. Insert a WET straw into it. Can you make a bubble inside the bubble?

Write a story in which a bubble is the main character.

What colors do you see in the bubbles? Are they always the same?

Blow some bubbles in the shade, others in the sun. Are the colors any different?

Spread plastic trash bags or tablecloths on the ground and pour a puddle of bubble solution. Get flat on the ground and blow through straws to see who can blow a bubble the farthest. Put a ruler on the surface and blow a bubble next to it to measure its diameter. then insert a WET straw through the middle to measure the bubble's height. Be sure to look from the side light is coming from for the next two activities: What colors do you see when bubbles are blown on the dark, plastic surface? on the white, plastic surface? Is there any difference in the colors themselves?

Blow bubbles INTO the breeze, then blow some AWAY from the breeze.

Blow bubbles to see which ones go the highest, which one lasts the longest, which one is the largest and which one is the smallest.

Write a poem about bubbles.

Make up a dance imitating a bubble.

Draw pictures of bubbles using chalk or crayon.

Partly overlap two rubber jar rings. Can you make 3 bubbles?

Blow a small bubble. Can you cut it with a WET scissors and make it into two bubbles?

Are bubbles larger if you blow gently or hard? Does it make a difference?

Can you catch a bubble? What happens to the bubble if you do?

Make an acrostic poster using the letters BUBBLES.

Dip plastic rings from a 6-pack of soda into bubble solution and gently swing them through the air.

Do the same with a wire hanger that you've bent into a different shape.

Blow a tiny bubble, a medium bubble and a large bubble. Does size change the colors?

Do the colors change just before a bubble pops?

Does blowing or swinging the wand in the air make any difference in the size of a bubble?

Have a "Bubble War." Bring the whole class together and let them blow bubbles at each other. When someone is "hit" by a bubble, he/she is out. Keeping playing until only one child is left