



Bubbles

*Explore. Experiment.
Question. Integrate.*



Quick and Fun



Copyright © 2019 by University of Rochester and ScienceStart! LLC

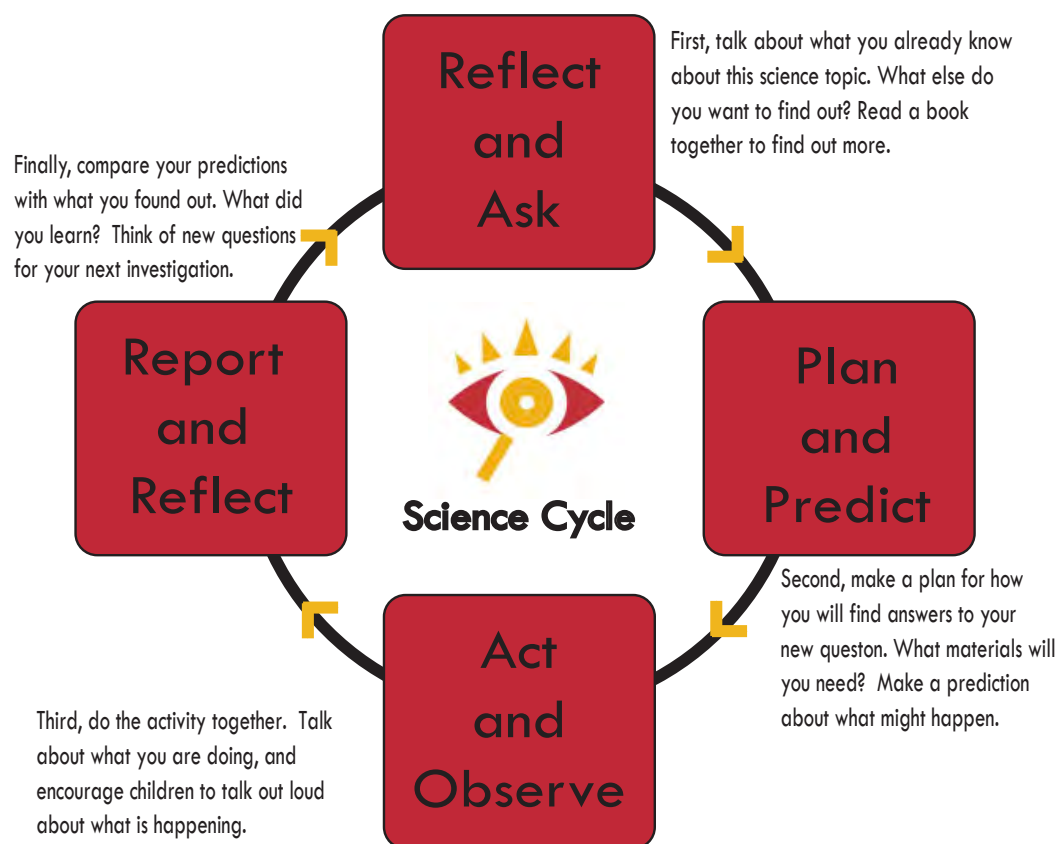
Visit us at www.ScienceStart.com

Using Quick and Fun Activities

Activities in the *Quick and Fun Series* are open-ended explorations. There are no right or wrong ways to do them. What is most important is having conversations with the children. The guidelines suggest ways to talk about the activities that will stimulate creativity and support problem solving.

Focus on the Science Inquiry Cycle

Research shows that young children are eager to learn more and more about the world they experience everyday. The *Quick and Fun* activities support this learning through structured inquiry that is modeled on the methods scientists use in their investigations. The four steps of the science cycle are *Reflect & Ask*, *Plan & Predict*, *Act & Observe*, and *Report & Reflect*.



Extension Activities

The third page of this Activity Guide suggests ways to extend the main activity. These extensions enrich children's learning and support different ways/styles of approaching the same concept.

Background Information:

Bubbles

Air is all around us.

We cannot see air because it is an invisible gas. But we can recognize air when it moves things and when it fills things up.

Air can fill up a balloon, or a plastic bag.

Air is what fills up bubbles.

Topic: Bubbles

Learning Goals:

- Observe how air fills a bubble.
- Manipulate and compare the sizes of bubbles being blown.
- Experiment with the shape of the bubble wand to notice if it has an effect on the shape of the bubble being blown.

Materials:

- Empty plastic bags
- Bubble solution
- Bubble wands
- Pipe cleaners (optional)

Inquiry Cycle:

Depending on your children's age, interest level, and attention span, this cycle can be accomplished in one session or over several sessions. Adjust the experience for your group!

Part One: Reflect and Ask

Give each person an empty plastic bag. (Larger bags make the activities easier.) Talk about what is in the bag. At first, most people will say the bag is empty.

Close the top of the bag by twisting, knotting, or just holding it closed. Push against the bag. How does it feel? Talk about what might be in the bag.

Open the bag again and hold the sides out. Spin around and collect as much air as you can. Quickly close the top and feel again.

Part Two: Plan and Predict

Talk about blowing bubbles. What is in the bubbles? What creates the outside of the bubble? How does the air get inside the soap?

Think about how a bubble gets bigger or smaller. What do you have to do to make a bubble bigger or smaller? Is that easy or hard?

Work together to gather materials to blow bubbles. You might have bubble liquid and wands, or you might make your own bubble solution using the recipe found in this activity guide.

Think about a location for doing this activity. Soap bubbles can make the floor slippery, so choose a safe place.

Part Three: Act and Observe

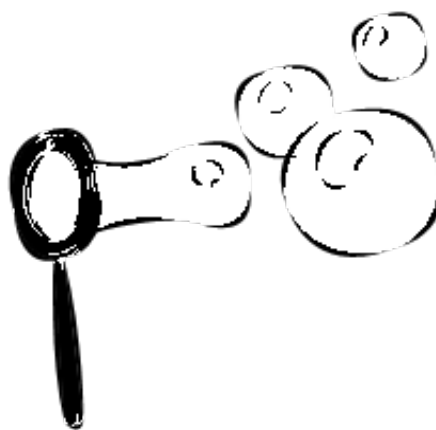
Blow bubbles together.

See who can blow the biggest bubble and smallest bubble.

Part Four: Report and Reflect

Talk about how you used your breath to make the bubbles bigger or smaller.

Talk about the shape of the bubbles. If the bubble wand is not a circle, will the bubble still be a sphere?



Use pipe cleaners to make bubble wands of different shapes: squares, triangles, stars, and more.



Extension Activities



Let's See It

Make bubble prints.

In a cup make a mixture of half water and half dish detergent. Then add small amount of Tempera paint. Place a piece of white drawing paper under the cup.

Use a straw to blow air in the cup and let the bubbles overflow onto the paper. (If you are worried your child might suck this mixture in, put a small pin hole through the top of the straw.)

Let the artwork dry. As it dries the bubbles will pop, leaving colorful circles on the paper.

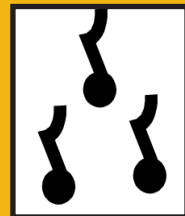


Let's Hear It

Sing *Ten Little Bubbles* to the tune of *Ten Little Indians*.

1 little, 2 little, 3 little bubbles,
4 little, 5 little, 6 little bubbles,
7 little, 8 little, 9 little bubbles.
10 little bubbles go POP!

Pop those, pop those, pop those
bubbles, (repeat line 2 more times)
10 little bubbles go POP!



Let's Move It

Bubble Chase

Take the materials for blowing bubbles outside. Decide who will blow bubbles and who will either pop them or catch them.

One person blows the bubbles. Other team members run to catch bubbles on a bubble wand or pop bubbles by clapping their hands. Repeat, changing roles.



Let's Make It

Bubble Solution Recipe

5 cups of water

1/2 cup good dish detergent

2-3 Tablespoons light corn syrup

Slowly stir ingredients together.

This recipe only gets better with age. You can use it right away or make it a few days before you plan to use it.



Let's Read It

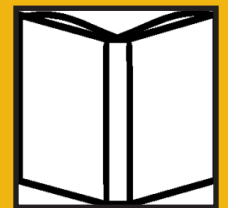
The Bubble Factory by Tomie dePaola

Bubbles, Bubbles by Mercer Mayer

Bubbles, Bubbles by Kathi Appelt

Air is All Around You by Franklyn Branley

Pop! A Book About Bubbles by Kimberly Brubaker Bradley



Let's Look It Up

Web addresses are always changing. Different ages will find different media appropriate. Please preview these suggestions and choose suitable options for your family.

How to make Bubble Prints
<https://www.youtube.com/watch?v=T6k-zYXGsaU>

Song: Let's Blow Bubbles
<https://www.youtube.com/watch?v=ziUFR8TKjmo>

