

Learning Through Water Play

From the National Association for the Education of Young Children website at www.naeyc.org

Nice weather brings many opportunities for fun and learning through water play. Puddles, spray bottles, garden sprinklers, water tables, and wading pools naturally fascinate young children, and water is one of the basic raw materials for learning mathematics and science, developing language, and fostering social skills.

While playing with water is developmentally appropriate regardless of the child's age or abilities, family members should always consider safety factors when children are anywhere near water. Children can enjoy water play with great abandon, but adults need to be aware that young children can drown in less than an inch of water.

It's always a good idea to reinforce the "walk, don't run" rule—especially around slippery areas. When children play near water, there must be constant adult supervision, with at least one adult certified in water safety and infant/child CPR. It is also recommended that parents and family members take child CPR instruction and learn about the safety hazards in and around pool areas.

Following are some ideas for safe, fun and educational water play:

- Mathematic concepts can be learned using a variety of inexpensive materials. Assorted containers and funnels can help children develop concepts such as empty/full, before/after, shallow/deep, and heavy/light.
- Individual water tubs at a table are great for enhancing fine motor skills. For younger children, eye-hand coordination can be practiced by retrieving objects with tongs, aquarium nets, scoops, and fingers. Small muscles get a workout as plastic tubes are fitted to funnels and sponges are wrung dry. Very young children may also get many happy moments repetitively filling and emptying containers.
- Children can learn about measurement by using measuring cups or discovering the best way to squirt long and short distances using squeeze bottles or plant misters filled with water.
- A child's vocabulary is enriched as she uses words such as funnel, surface, float, and strain.
- Adults can promote language acquisition by adding foam or rubber alphabet letters or number to a container filled with water to be fished out with nets. Name the letters or numbers they catch, spell out their names, or see who can catch the highest or lowest number.
- Make cleaning up part of the learning experience using rags and short-handled mops to do "grown-up" work.
- Create a dramatic play area for children to wash doll clothes in a tub of sudsy water and hang them up with clothespins to dry in the sun.
- Even on cool days, children can "paint" outdoors with water. Set up a paint shop by providing a large paintbrush and partially fill a large can or small pail with water. They

can pretend to “paint” the sidewalk, fence, slide, and other outdoor equipment.

- Provide a water tub for experiments and projects. Boats can be made from found objects or heavy aluminum foil. Older preschoolers can try out predictions by determining which of a variety of seeds and assorted items will float.
- On a hot, sticky afternoon a lawn sprinkler can bring relief. Wading pools are another hot weather friend (with adult supervision) and children can incorporate sand box and bath toys into the water play.

- Turn the cup right side up, insert the straw in the hole punched in the cup and blow.

The first bubbles will be very small and will continue to grow larger. Because of the solution, the bubbles will flow over the top of the cup but will hold together and cascade down the side of the cup and continue as long as you blow.

Lakeshore Science Safari Professional Development Resources

Plastic Cup Bubbles

Materials needed:

Plastic cup (size does not really matter)

1/4 of a paper towel

1 ordinary drinking straw

Hole punch

Rubber band

Liquid dish detergent (about 1 tablespoon)

Small bowl or container to put dish detergent in

- Using the hole punch, punch a hole under the rim of the plastic cup approximately 1/2” down.
- Place the 1/4 paper towel over the top of the cup and secure it tightly with the rubber band, making sure that the cup opening is completely covered.
- Mix a very small quantity of water (1/2 teaspoon or less) with the liquid detergent. Stir and mix with finger. If too much water is used, bubbles will not appear.
- Turn the cup upside down and completely saturate the top of the paper towel with the detergent mixture.