



Simple Science

You don't need test tubes and chemicals to do great science projects with children. You can find a lot of materials for science right in your home or backyard. Children will love trying some of these science projects.

Changing Water

You'll need:

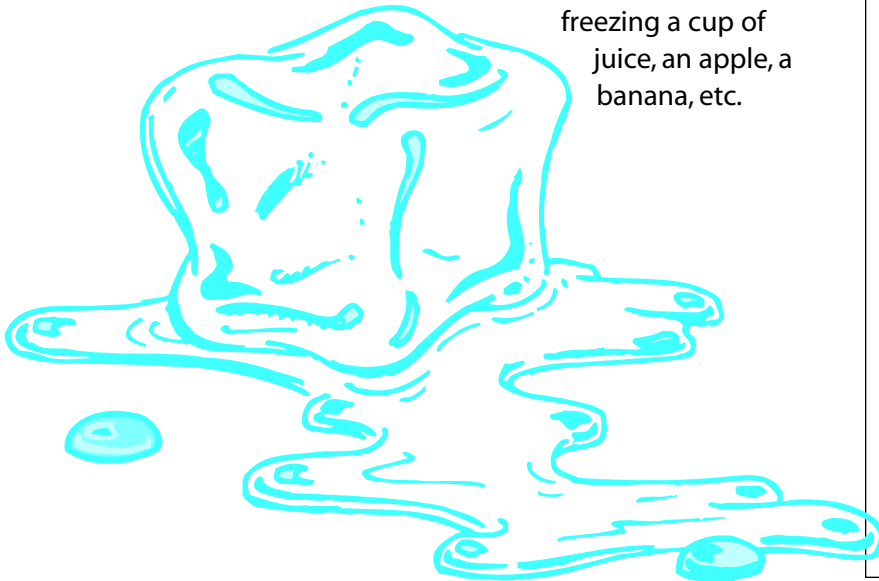
- Water
- Pan or ice cube tray

To Do:

Set out a pan of water. Let the children put their hands in the water and ask them what it feels like. Tell them you're going to make the water change. Put the pan into the freezer or pour the water into ice cube trays and freeze until solid. Show the children how the water has changed. Set out the ice so the children can watch it change back into water.

The children may like to try putting other things into the freezer to see if and how they change. You may want to try

freezing a cup of juice, an apple, a banana, etc.



Sink or Float

You'll need:

- Bowl or pan of water
- A number of different items, such as a cork, small sponge, a stone, a feather, a ball, paper clip, etc. (Make sure you have some items that will sink and some that will float.)

To Do:

Set out the pan of water. (You may want to place it on a plastic tablecloth or old shower curtain for easy cleanup.) Talk with the children about what it means to sink or float. Let them try putting the objects into the water to see if they sink or float. Have the children gather more things to put in the water. They may like to try to guess what will happen before putting them in the water.

New water safety statement:

Recently the American Academy of Pediatrics issued the following warning about summer programs — swimming pools, wading pools, etc.

“Despite the fact that kids may develop some skills and become comfortable around water, that shouldn't be considered enough to keep them safe or drown-proof. **Whenever infants and toddlers are in or around water, an adult should be no more than an arm's length away, close enough to provide “touch supervision.”**”

Drowning is a leading cause of unintentional injury and death in children under age four. It is the number one cause of death among children ages one and two in pool-popular states.

Better Kid Care:

Kids + Water = Danger

Keep 'Em Safe

Use Touch Supervision

Simple
science projects
use things that
you have around
the house.

Absorption

You'll need:

- Pan of water
- Different types of materials, such as a paper towel, writing paper, newspaper, sponge, piece of wood, etc.

To Do:

Ask the children what could be used to clean up some water that spills on the floor. Set out the materials. Let the children dip a corner of each item into the pan of water. Watch to see if the item absorbs the water or just gets wet. (If you put a few drops of food coloring into the water, you'll be able to see the color move into the material as the water is absorbed).

More on Absorption

You'll need:

- A cup of water
- Food coloring
- 1 stalk of celery

To Do:

Put several drops of food coloring in a glass of water. Stand the stalk of celery into the glass of water. Watch over time as the colored water is absorbed into the celery stalk.

Rotting

What happens to food if it sits out too long?

You'll need:

- A fresh fruit or vegetable, such as an apple, banana, pepper, tomato, etc.

To Do:

Set the fruit or vegetable on a dish or paper plate. Ask the children what they think will happen if the food sits there for a week or more. You may want to write down their answers to look at later. Watch the food over several weeks as it begins to rot. Show the children and talk about what is happening. You may want to let them use a magnifying glass to look closely at the rotting food.

More on Rotting

You'll need:

- Different types of food to compare, such as a fresh vegetable or fruit, slice of bread, some dry cereal, peanut butter, piece of cheese, hot dog, etc.
- Sandwich bags

To Do:

Have each child choose a type of food to watch. Let them put that food into a bag. Use a marker to write the name of the food on the bag. Set the bags out to watch what happens to the food over several weeks.

Baking soda and vinegar

The acid in vinegar makes a chemical reaction when it comes in contact with baking soda.

You'll need:

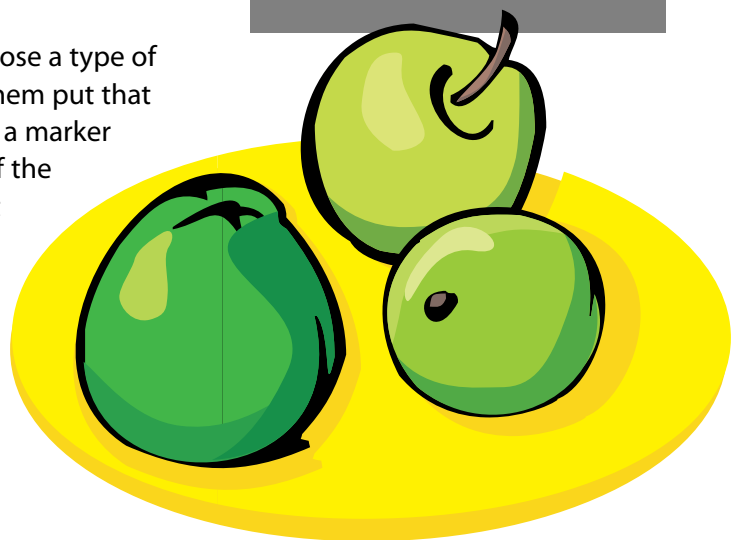
- Baking soda
- Vinegar
- Paper cups

To Do:

Cover the table or floor with a plastic tablecloth or old shower curtain to make cleanup easier. Give each child a paper cup. Pour some baking soda into each cup. Pour the vinegar into a small pitcher or measuring cup with a spout. Let each child use the pitcher to pour some vinegar into his paper cup. Watch as the mixture foams.

The children may be interested in trying this experiment with other materials. See what happens if you put flour, salt, sugar, or other materials in the cup, then add vinegar.

Children love
science projects.



Pennsylvania Pathways

Professional Development
for Child Caregivers

PENNSYLVANIA



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