

EXPLORING WITH WATER

The following science discovery experiences involve children by inviting their participation. Think of them as door-openers — exciting entries preceding the world of science experiments. Start by bringing out the interesting science materials listed. Most often, children will gather close, asking questions such as: “What are you doing?” or “What’s that?” Your reply might be, “Let’s find out.” To bring a reticent child into an activity, you might ask, “Can you help me with this?”

The presentation section in the activities involves you and the children working together. Note the kinds of participation that appeal to individual children. Use this knowledge to help everyone feel important, valued, and responsible during the process. (Remember, involving children reinforces these feelings.) So, as you bring out and set up materials, keep in mind all of the aspects children can do themselves, taking into consideration age and developmental levels. Let children set up as much as they can themselves and leave the materials out, giving children plenty of time to explore and experiment on their own. The following activities all involve water and are great explorations to do outdoors with children two through five years old.

1. POWER STREAMS

Materials: Plastic tempera paint jar with lid, eye dropper, nail and hammer, scissors, plastic/rubber tubing, and water.

Presentation:

1. Remove lid from paint jar.
2. Using the hammer, punch the nail through the lid.
3. Remove the nail.
4. Put one blade of the scissors into the hole in the lid.
5. Twist the scissors to form a hole just a little smaller than the eye dropper.
6. Carefully remove the rubber section

of the eye dropper.

7. Insert the eye dropper into the hole with the small end pointing out of the jar.
8. Secure the tubing over the large end of the eye dropper.
9. Make sure the tubing is hanging about 1/4 inch from the bottom of the paint jar when the lid is screwed back on.
10. Fill the paint jar about 3/4 full with water.
11. Put the lid on the paint jar.
12. Give the bottle a squeeze and a stream of water will shoot up.

Open-ended questions to pose:

- What did you do to the water?
- How high do you think you could

make the water go?

Variations: Secure a cut straw over the tip of the eye dropper (while the lid is securely on the jar) and ask children to blow into it. (Water will shoot back out.) Be sure to change the straw each time a new child tries the activity. Or, set up targets to try to hit with the stream.

Note: This is a wet activity!

2.

RUN-AWAY POWDER

Materials: Pie pan, talcum powder, water, bar of Ivory Soap, and tempera paint (if desired).

Presentation:

1. Fill the pan with water.
2. Sprinkle enough talcum powder and tempera to cover the entire surface of the water.
3. Place the bar of soap in the center of the pan.
4. Watch the powder “run away.”

Open-ended questions to pose:

- How do you think you made the powder move?
- What do you think the soap did to the powder?

3.

CRAZY CRAYON SHAVINGS

Materials: Large, clear plastic bottle; multicolored crayon shavings (2 tablespoons); and water.

Presentation:

1. Fill the bottle with water and crayon shavings.
2. Seal the bottle.
3. Shake the bottle or move it in a circular motion to create a tornado effect.

Open-ended questions to pose:

- What do you think makes the shavings move?
- How else could you make them move?

4.

RIVERS AND CANALS

Materials: Plastic drop cloth, water source, water-play canals (optional), plastic shovels, and pails.