

Science Explorers: Water Table Exploration

Science Category:

Matter and Energy

Activity Goal:

Students explore the concepts of sinking, floating, and cause-and-effect relationships through a play-based science exploration activity.

Embedded Skill Targets:

Curricular Area	Learning Spectrum	
	Increased support needs	Extended learning
Social Communication and Play Skills	Sharing Turn-taking Imitating actions in play Following one-step directions in play	Imitating multiple-step actions in play Following two-step play directions Commenting with one or two words Answering questions

Materials:

Provided:	Needed:
• "My turn" and "finished" cards	• Large transparent plastic bins (2) or water/sensory table (1)
	Small container
	• Water
	Various sizes of bowls and/or cups
	Measuring cups or scoops
	 Items that float: small plastic toys, foam shapes, rubber ball, plastic bottles with tops, plastic straws, toy boats, sponges, etc.
	 Items that sink: golf balls, marbles, rocks (large and small), metal toy cars, etc.

Preparation:

- I. Print, laminate, and cut out the "my turn" and "finished" cards (I set per student).
- 2. Create a science exploration bin:
 - a. Fill the first bin with lukewarm water.
 - b. Add bowls, cups, and measuring cups or scoops.
- 3. Organize and place items that float and items that sink in the second bin.
- 4. Place the two bins next to each other on a large table.

Note: This activity might create a mess. Use a clearly designated area that is easy to clean. Consider placing a tarp or towels on the floor.

5. Prepare an alternate activity for students to do while they wait for their turn.

Helpful Learning Tool

• Review the Learning Differentiation Guide to individualize this lesson for each student's learning level.

Instructions:

- I. Divide the class into small groups of 2-3 students.
- 2. Hand the first group of students the "my turn" card, and transition them to the science exploration table. Have the students put their "my turn" card in a small container, and set the timer for 5–10 minutes.
- 3. While the first group works at the table, have the other groups engage in an alternate activity.
- 4. Meanwhile, encourage students at the science exploration table to engage in cause-and-effect exploration and observation:
 - Model simple actions such as placing items that sink and float in the water, adding rocks or marbles to floating items, scooping small items, etc.
 - Encourage students to imitate your actions.
 - Give simple one-step directions such as, "Put the car in the water" or "Put the rock on the boat."
 - Comment on your own actions, and encourage students to make comments as well.
 - Comment on the items that float and the items that sink. Point out when adding an item causes a previously floating item to sink. Encourage students to comment as well.
- 5. Once the timer goes off, hand the students at the activity area the "finished" card, and have them transition to the alternate activity.
- 6. Transition the next small group of students from the alternate activity to the science exploration table.
- 7. Repeat Steps 2–6 with each group of students.



