

Clay Boats



Standards: CA.VA.PS.1 - 5 LA.LS.CSE.PS.1, 1a, 1f LA.LS.CSE.PS.2 - 2d PHD.FM.PS.1, 5, 6



Materials:

- Gilberto And The Wind
- plasticine clay
- Beautiful Stuff
- clipboards
- pencils
- trays
- children's sailboats from Making Sailboats

Vocabulary:

- float: stay on top of water
- sink: go under water
- buoyancy: how well something floats
- experiment: try something
- plasticine

Preparation: Set up materials.

<i>Intro to Centers:</i> "In <i>Gilberto And The Wind</i> , when the wind blew Gilberto's sailboat, it <i>floated</i> and did not <i>sink</i> .	Show illustrations. Children respond.
"The sailboats that you built and <i>experimented</i> with in Discovery also <i>floated</i> . What do you notice?"	Show children's sailboats from Making Sailboats. Children respond.
"Today, in the Art Studio, you can construct boats again, using only a waterproof clay called <i>plasticine</i> . How is <i>plasticine</i> similar to or different from playdough?"	Show plasticine. Children respond. Guide children to notice that plasticine is less malleable than playdough.
"You can test your boat's buoyancy how well it floats -in Discovery. How will you record the results of your experiment?"	Children respond.

During Centers:

Provide appropriate fine-motor support for working with clay, i.e, some children may need to exercise their fingers before manipulating clay. Support children to experiment with different clay boat shapes, sizes, and weights. Support children in recording their results.

Guiding Questions during Centers:

- How is your clay boat similar to or different from your sailboat?
- How does the size/shape/weight of the boat make it easier or harder for it to float?
- How could you design your clay boat so that it can transport passengers/ cargo?
- How many passengers/ how much cargo can your boat transport?

Thinking & Feedback: Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

Documentation: Collect samples of the children's work as well as photographs and/or video of their process; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Take a field trip to a lake or ocean so that children can observe a variety of real boats.

Compare and contrast how wind could propel a sailboat vs. a clay boat.

