



Clay Boats

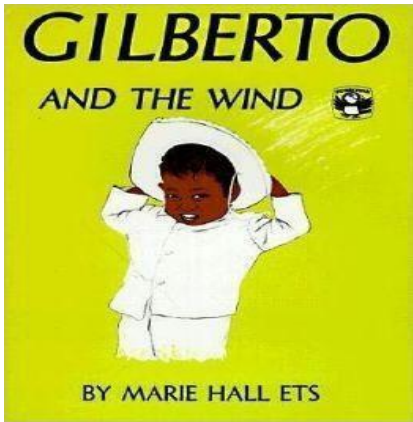
Standard Connection:
ELA.RL.PK4.4a
ELA.RI.PK4.3
M.MD.PK4.1
M.MD.PK4.2
S.PS.PK4.2
PD.FM.PK4.1
PD.FM.PK4.4
VA.CR1.1.PK

Enduring Understanding(s):

- Gathering information helps us make decisions.

Essential Question(s):

- How do you develop the skills, strategies, and capacity to respond appropriately to varied situations?

Materials	Vocabulary	Books
<ul style="list-style-type: none"> <i>Gilberto and the Wind</i> plasticine clay /plas-tuh-seen/ Beautiful Stuff clipboards pencils trays images of clay boats (see Resource) children's sailboats from U3W1 Center: <i>Making Sailboats</i> 	<p>float: stay on top of the water</p> <p>sink: go underwater</p> <p>buoyancy: how well something floats</p> <p>experiment: try something</p> <p>plasticine: soft clay</p>	

Intro to Centers	
Preparation: Set up materials.	
"In <i>Gilberto and the Wind</i> , when the wind blew Gilberto's sailboat, it floated and did not sink ."	Show illustrations.
"The sailboats that you built and experimented with in Science last week also floated . What do you notice?"	Show children's sailboats from <i>Making Sailboats</i> . Children respond.
"Today, in Creative Arts, you can construct boats again, using only a waterproof clay called plasticine ." "How is plasticine similar to or different from Playdoh?"	Show plasticine. Children respond. Guide children to notice that plasticine is less malleable /'ma-lē-ə-bəl/ than Playdoh.
"You can test your boat's buoyancy – how well it floats – in Science. 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. Supports 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 be transport passengers/cargo?
- How many passengers/ how much cargo can your boat transport?

Thinking and 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 processes; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Take a field trip to the seaport/Boston Harbor so that children can observe a variety of real boats. Compare and contrast how wind could propel a sailboat vs. a clay boat.

Differentiation/Accommodation:

For Intro to Centers, children with limited verbal skills can use a pre-programmed voice output device to answer questions about the story. (Keep in mind these will likely be closed-ended questions, as those are easiest to program into devices.) This can also be used to help students answer Guiding Questions. During Centers, scaffold appropriately - some children will be able to sound out words, some children will need word cards, etc.