



# Molding Sand

Standard Connection:

ELA.RL.PK4.2  
ELA.SL.PK4.1a  
M.MD.PK4.3  
M.G.PK4.4  
S.PS.PK4.2  
SS.FC.PK4.6a  
SS.FC.PK4.6b  
PD.FM.PK4.1  
PD.GM.PK4.5

## Enduring Understanding(s):

- Friends usually share and help one another.

## Essential Question(s):

- How can you find the resources, strategies, and people to solve your problems?

Materials	Vocabulary	Books
<ul style="list-style-type: none"> <li><i>The Little Red Hen (Makes a Pizza)</i></li> <li>sand</li> <li>spray bottles with water</li> <li>variety of molds (plastic molds, castle molds, cans, gelatin molds, funnels, measuring cups, muffin tins, etc.)</li> <li>shovels or scoops</li> <li>plastic spoons</li> <li>smocks/gloves</li> </ul>	<p><b>mold:</b> a container used to make a shape</p> <p><b>moist:</b> a little wet</p> <p><b>pat:</b> press gently</p> <p><b>wet:</b> not dry</p> <p><b>crumble:</b> break into small pieces</p> <p><b>fill:</b> to put as much as possible into</p>	

Intro to Centers	
Preparation: Set up materials.	
In <i>The Little Red Hen (Makes a Pizza)</i> , the hen used these materials to shape her pizza. What do you notice?"	Show illustration. Children respond.
"Today at Science, you can <b>mold</b> sand with these materials that we learned about in Let's Find Out About It. What do you notice?"	Show materials. Children respond.
"How are these materials similar to or different from the materials the hen used?"	Children respond.
"First, I will <b>fill</b> the <b>mold</b> with sand and turn the <b>mold</b> over. What do you think will happen when I lift the <b>mold</b> off the sand?"	Model using dry sand. Children respond.
"My sand <b>crumbled</b> - it broke into small pieces. How could I prevent the sand from <b>crumbling</b> ?"	Children respond.
"I will spray a small amount of water and <b>moisten</b> my sand - make it a little bit <b>wet</b> . I'll <b>fill</b> my <b>mold</b> with <b>moist</b> sand and <b>pat</b> it - press it gently. What do you think will happen now when I turn the <b>mold</b> over?"	Children respond.

### **During Centers:**

Compare and contrast molding sand to making dough letters or playing with Play-Doh. If children need a smaller workspace, set up bins of sand and materials on tables. Encourage children to notice how differently shaped molds create differently shaped sand creations.

### **Guiding Questions During Centers:**

- In *The Little Red Hen (Makes a Pizza)*, the hen used a pizza pan to shape her round pizza. Why are different shapes and sizes of pans and tins useful for making different kinds of food?
- What mold would you use to make \_\_\_\_\_? Why?
- If I add a small amount of water, I can moisten the sand. What would happen if I added a lot of water?
- What other materials in the classroom could we use as molds?

### **Thinking and Feedback:**

Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

### **Documentation:**

Take photographs of children during the activity and display them with captions of the children's words describing their processes.

### **Provocation:**

Encourage children to find other materials in the classroom that can be used to create shapes that are similar to those made with the cooking pans and utensils.

### **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, provide a variety of molds and/or clay/Play-Doh/Thera-Putty of different hardness to meet the fine motor needs of individual children.