



Mylar and Block Structures

Standard Connection:
 ELA.RI.PK4.8
 ELA.L.PK4.5c
 M.CC.PK4.6
 M.MD.PK4.2
 S.T.PK4.1
 S.ES.PK4.2a
 SS.OW.PK4.1
 PD.FM.PK4.5
 PD.SHS.PK4.3

Enduring Understanding(s):

- Light affects people, animals, and things.

Essential Question(s):

- How does light affect the way things look?

Materials	Vocabulary	Books
<ul style="list-style-type: none"> • <i>Raccoon on His Own</i> • Mylar • Beautiful Stuff • large pieces of cardboard covered with Mylar/shiny wrapping paper • flashlights 	<p>Mylar: a shiny, foil-like plastic material</p> <p>reflection: an image that bounces off a surface</p> <p>structure: anything made up of parts held together in a particular way</p> <p>sunlight: the light of the sun</p> <p>surface: the outer layer of an object</p> <p>swamp: a type of wetland where trees are common</p>	

Intro to Centers	
Preparation: Set up materials	
“In <i>Raccoon on His Own</i> , the baby raccoon looked into the swamp water. What do you notice?”	Show illustrations. Children respond.
“The sunlight shone on the swamp water and created a reflection. ”	Show illustrations.
“Today in Blocks, you can build structures with these materials. What do you notice?”	Show materials. Children respond.
“What do you predict will happen if you build structures on the Mylar surface? ”	Children respond.

During Centers:

Compare and contrast block structure reflections and raccoon's reflection. Compare and contrast reflections with the classroom lights turned off. Encourage children to experiment with moving the light source/object. Compare and contrast reflections in mylar to reflections in mirrors/other reflective surfaces.

Guiding Questions During Centers:

- How does the size of your structure affect its reflection?
- What do you predict will happen to reflections if the classroom lights are turned off?
- What do you predict will happen if you use a flashlight on your structure?
- How many blocks do you see in a reflection of your structure?

Thinking and Feedback:

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

Documentation:

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

Provocation:

Line trays or smaller pieces of cardboard with mylar for a scaled-down work area. Challenge children to place the mylar bases in different positions to create reflections. Challenge children to duplicate each other's structures by looking at the reflections.

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 materials to meet children's fine motor needs, such as different sizes and weights of blocks.