



Small Groups:

Kaleidoscopes (*High Support*)

Standard Connection:

ELA.RL.PK4.1

ELA.SL.PK4.4

M.MD.PK4.3

M.G.PK4.4

PD.SHS.PK4.4

VA.CR1a.1.PK

VA.RE8a.1.PK

Enduring Understanding(s):

- Shadows and reflections are products of light.

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>kaleidoscopeBingo dabbers, markerstapeMylar or aluminum foilheavy paper (tagboard, cardstock, etc.)tissue paper to create designsimages of kaleidoscopes (see Resource)	<p>kaleidoscope: a tube with small bits of colored glass and mirrors inside</p> <p>mirror: shiny, smooth surface</p> <p>rectangle: a shape with four sides and four right angles</p> <p>reflection: an image that bounces off a surface</p> <p>triangle: a shape with three straight sides and three angles</p>	

Procedure

Preparation: Children will make kaleidoscopes by taping 3 rectangles together to form a triangle (see Resource for this activity). To prepare rectangles, cut rectangles from heavy paper. Adhere Mylar/aluminum foil to the rectangles. Children will create pictures with bingo dabbers and markers to look at through their kaleidoscopes.

Procedure: Show the illustration of Raccoon's reflection in *Raccoon on His Own*. Review that reflections are formed by light on a shiny surface. Show children a kaleidoscope, model using it, and allow each child to take a turn. Encourage children to describe what they see in the kaleidoscope. Explain that kaleidoscopes have mirrors inside that create reflections of the materials in the cap at the end.

- Tell children they can create their own kaleidoscopes. Show materials. Model.
- Give each child three rectangles, shiny side down. Assist children in taping the sides together to make a triangle.
- Hold the contact paper collage at one end and turn as children look through the kaleidoscope. Compare and contrast the reflections in their kaleidoscopes to the reflections in the example kaleidoscope.