Standard Connection: ELA.SL.PK4.6 M.MD.PK4.2 S.T.PK4.1 PD.FM.PK4.3 VA.CR1a.2.PK VA.CR2a.2.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
Dreams	accurate: exact details	Droams
white paper	shadow: the dark shape	
 black drawing utensils (pencils, crayons, markers) 	made when something blocks light	
images of shadows (see Resource)variety of objects (to cast a shadow)	shape: a form/outline	
• flashlight	size: the measurable part of a thing	EZRA JACK KEATS

Intro to Centers		
Preparation: Set up materials		
"In <i>Dreams</i> , Roberto's paper mouse created a shadow . How is the paper mouse similar to or different from its shadow ?"	Show illustrations. Children respond.	
"The paper mouse and its shadow have a similar shape , but the paper mouse and its shadow are different colors and sizes ."		
"Here are images of objects and their shadows . What do you notice?"	Show images. Children respond.	
"I want to create an illustration of this (object)'s shadow . First, I will draw the (object) as accurately as possible. Then, I will draw a similar, but bigger/smaller, shape . What color should I use to show this is a shadow ? Why?"	Model. Children respond.	
"Today in Creative Writing, you can create shadow illustrations using these materials."	Show materials.	



During Centers:

Encourage children to collaborate, e.g., one child holds the flashlight to create a shadow, and another child draws the shadow. Compare and contrast the sizes and shapes of objects and shadows. Encourage children to label their illustrations.

Guiding Questions during Centers:

- How is an object's shadow similar to or different from an object's reflection/self-portrait?
- How is your shadow illustration similar to or different from how Ezra Jack Keats illustrated shadows in *Dreams*?
- How can you use Beautiful Stuff to illustrate a shadow?
- How can you create the colors you need to illustrate your shadow?

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:

Encourage children to document the difference in their shadow's size/shape at different times of day.

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, support children with fine motor challenges by providing templates of objects and/or shadows. Strategically partner children together for collaboration.

