UNIT 5: SHADOWS AND REFLECTIONS / WEEK 4

Shadow Search

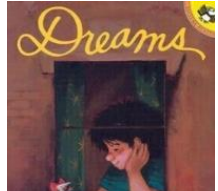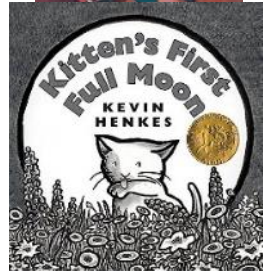**Enduring Understanding(s):**
- Shadows and reflections are products of light.

Essential Question(s):
- How does light affect the way things look?

Materials	Vocabulary	Books
- *Dreams* - *Kitten's First Full Moon* - children's Classroom Maps from Unit 5, Week 1 - paper - clipboards - writing utensils - flashlights	**block:** to put in the way/close off **label:** to name a specific object **light source:** a form of energy (artificial or natural) that helps us to see all the things around us **map:** an image that shows the location of places/things **search:** to look for **shadow:** the dark shape made when something blocks light **shine:** bright **surface:** the outside of anything	

Intro to Centers

Preparation: *Set up materials*	
"In *Dreams*, Roberto's paper mouse fell from the windowsill. What do you notice?"	Show illustrations. **Children respond.**
"The mouse **blocked** the light **shining** from the streetlight. What do you notice?"	Show illustrations. **Children respond.**
"The mouse's **shadow** grew bigger as it fell further away from the **light source**. Where did the snarling dog see the mouse's **shadow**?"	**Children respond.**
"In *Kitten's First Full Moon*, the kitten **blocked** the light from the moon. What do you notice?"	Show illustrations. **Children respond.**
"Kitten's **shadow** is on the ground behind her."	Show illustrations. **Children respond.**
"Today in Creative Writing, you can search for shadows in the classroom using these materials. How can your Classroom Maps be helpful to you?"	Show materials. **Children respond.**
"You can **label** where you found **shadows** on your classroom **map**."	Model.

During Centers:

Encourage children to collaborate (one child creates shadows with the flashlight, another child labels the map). Encourage children to experiment with changing shadow size by holding the flashlight closer and further away. Encourage children to create graphs to document their search (how many shadows were created with a natural/artificial light source, how many shadows were found in the different classroom areas, etc.). Encourage children to search for shadows in other Read Alouds (Corduroy's shadow when the night watchman found him, the cat's shadow in *One Dark Night*, etc.).

Guiding Questions during Centers:

- How many more/less shadows were created with a natural/artificial light source? How do you know?
- What part of the classroom had the most/least shadows? Why?
- How is searching for shadows similar to or different from searching for colors/reflections?
- How are the shadows you found similar to or different from the illustrations of shadows in *Dreams/Kitten's First Full Moon*?

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:

Document a school/neighborhood Shadow Search with child-made maps.

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, strategically partner children together. Provide a variety of materials for children to use for labeling maps and creating graphs. Manipulatives may be needed to help children make the graph.