UNIT 7: OCEANS AND SEASHORES / WEEK 1

Exploring Water

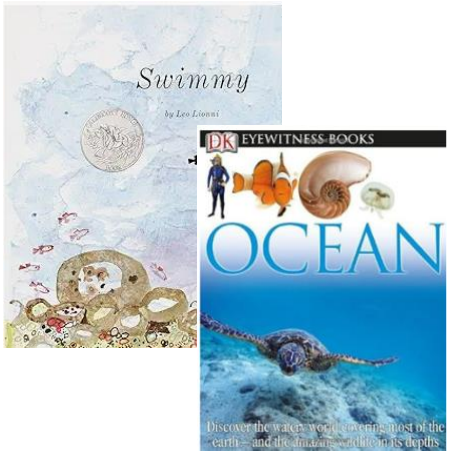
Standard Connection:
M.CC.PK4.4
M.MD.PK4.2a
S.PS.PK4.1, 2, 4
SS.OW.PK4.2
PD.FM.PK4.1-3, 5

Enduring Understanding(s):

- Animals have unique characteristics. Some of these characteristics help them to survive in their habitat.
- Like humans, animals are part of interdependent communities that are affected by and adapt to the environment that surrounds them.

Essential Question(s):

- How do animals form communities, work together, and use and adapt to their environment?

Materials	Vocabulary	Books
• *Swimmy* • *DK Eyewitness Books: Ocean* • water table/tub • water • measuring cups/spoons • smocks • boats • play ocean animals • additional water props	**float:** to stay on the surface of liquid without sinking **flow:** to move in a smooth, steady stream **pour:** to make flow in a steady stream **sink:** to fall or drop to a lower level, as in water.	

Intro to Centers	
Preparation: *Set up materials.*	
"In *Swimmy*, Swimmy and his friends explored the ocean. What do you notice?"	Show illustrations. **Children respond.**
"Today in Science, we are going to explore water so we can understand more about the ocean."	
"Can you hold water in your hand? What do you notice?" "Does the ***flow*** of the water change by moving your hands more quickly or more slowly?"	**Encourage** students to explore the water with their hands. **Children respond.**
"What do you notice about the way the water ***flows*** - moves - when you ***pour*** - stream - the water from a spoon or cup?"	**Prompt** students to explore using measuring cups/spoons. **Children respond.**

During Centers:

First, water is explored freely with materials such as cups and measuring cups. Children discover the feel and movement of water. After this open exploration period, additional materials can be added such as boats and ocean animals. Children experiment with the movement of these items in the water. In the third phase of the activity, offer items for children to experiment with sinking and floating. Encourage hands-on observations and conversations focused on scientific vocabulary.

Guiding Questions During Centers:

- How does the water feel in your hands, in between your fingers?
- What happens when you move your hands fast or slow through the water?
- What do you notice about the water movement?
- How many scoops will it take to fill this large cup?
- Why do you think this item sinks? Floats? What's your prediction about this item?
- What do you want to learn more about, how and where can you find this information?

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 of their processes; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Encourage children to mimic or build flowing water or oceans in Creative Arts, Blocks, and Dramatic Play.

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 the children's fine motor and sensory needs. Provide a non-mess way to participate for children with sensory issues by allowing them to sort items without sifting first.