



Observing Fish

Standard Connection:
ELA.W.PK4.5
ELA.L.PK4.2c
S.LS.PK4.4a, b
S.T.PK4.1
PD.FM.PK4.3, 4

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
<ul style="list-style-type: none"> • <i>Swimmy</i> • <i>Mister Seahorse</i> • <i>A Swim Through the Sea</i> • live fish • bowl/tank for fish • pencils • thin black markers • science journals • chart paper • marker 	<p>notice: to be aware of or observe</p> <p>observe: to watch closely</p> <p>data: information used to learn about something</p> <p>characteristics: specific qualities of a person or thing</p> <p>structure: an item made up of parts joined together</p> <p>function: the purpose of an object</p> <p>fish: an animal with fins and gills that lives in the water</p>	

Intro to Centers	
Preparation: Set up materials.	
<p>“In the book <i>A Swim Through the Sea</i>, we saw many different types and colors of fish. How were all these fish the same? How were they different?”</p>	<p>Show illustrations. Children respond.</p>
<p>“We have learned that fish have some special characteristics that help them live underwater. Can you name some of the parts of a fish?”</p>	<p>Children respond. Record answers on chart paper.</p>
<p>“As scientists, how can we write down, or record, characteristics of fish? Could we draw pictures to record our data and observations – what we notice?”</p>	<p>Children respond.</p>
<p>“Today in the Science Center, you can observe live fish! We will observe their bodies and how they act, and you will record what you find by creating scientific illustrations in your journal.”</p>	<p>Show materials. Children respond.</p>

During Centers:

Write the focus question on a piece of chart paper, “What do you notice about the body structure of a fish?” During Intro to Centers, discuss with the children: “As scientists, you will investigate the focus question written on the chart paper. “What do you notice about the body structure of a fish?” What will we do as scientists to answer the focus question?... As scientists in the Science Center, you will carefully observe the fish’s body. You will record what you find by creating scientific illustrations in your journal.”

Throughout the unit during Centers, children will make observations of the fish. They will create careful, scientific illustrations. Remind children that when you record like a scientist, you draw what you see, not what you think you know. Encourage children to color and label their sketches. Have children share their recorded data with a partner.

Guiding Questions During Centers:

- What do you see/notice about the fish’s body?
- What details can you capture on your paper?
- What questions do you have?
- What did we learn this week as scientists?

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 draw fish in 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 children answer Guiding Questions. During Centers, provide a variety of materials to meet the children’s fine motor and sensory needs. Provide realistic photographs or illustrations for children who need additional support to record in their science journals.