Ocean Stacking Jars

Teacher run station- 10 to 15 minutes

Materials: plastic animals, three jars filled with varying degrees of food coloring and plastic marine creatures.

Teacher Talk Opportunities
Talk about transparent, translucent, opaque while showing the water filled glass jars. Talk about saltwater in solution.
The three jars represent the three layers of the ocean water column.

EQ: Where in the ocean do marine organisms live?

Possible Teacher Script

"Scientists, today you will make observations on the three layers of the ocean water column, and stack them in order, representing the ocean water column.

What observations can you make right now about the three jars?"

(Students handle jars, elicit comments, get them talking. *In their science notebooks, have them label a new page,*
"Ocean Stacking Jars"
With a subheading
"Observations"
Now prompt students to write what they said during their observations.

Text in italics you either say or use as a direction for student cueing and prompts.

“Now look at your pictorial input chart for reference, for layers of the ocean, and stack the jars in the order that matches the pictorial input chart… what do you notice about the animals in the different layers?”

(Prompt students to draw the ocean stacking jars in the order they stacked and label their drawing like a diagram, with color of the water, how well they can see each animal, how many animals for example are in each layer, so on)

As a group, discuss orally then have students write what they or classmates said, in answer to these questions.

1. Which animal experiences the most pressure? Explain why?

2. Does an equal amount of light pass through each layer?

3. In which layer would plants be able to grow?

4. How many animals are in each layer? Why do you think there are more animals in one layer compared to another?

5. What are the names of some of these animals you see?

6. What structural adaptations would these animals need for these different layer conditions? (think cold and pressure for greater depth)

Text in italics you either say or use as a direction for student cueing and prompts.