FORMAL ASSESSMENT

Sharks in the Estuary

Each activity in the Estuaries 101 Middle School Curriculum is designed around specific performance tasks. A generalized set of scoring rubrics is provided to judge student progress against these performance tasks.

Distribute the attached Student Assessment handout. Use the performance assessment indicators in the table below along with the suggested answers in order to arrive at a score for each performance task.

<table>
<thead>
<tr>
<th>Performance Tasks</th>
<th>Performance Assessment Indicators</th>
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</thead>
<tbody>
<tr>
<td>The student can identify the key characteristics of sharks.</td>
<td>Low - Basic: The response is partially correct. There is also evidence of inaccurate, incomplete, or inappropriate skills or knowledge.</td>
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<tr>
<td></td>
<td>Medium - Proficient: The response is correct, and demonstrates accurate understanding of concepts. Minor inaccuracies may appear but there is no evidence of misconceptions.</td>
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<td></td>
<td>High- Advanced: Evidence of higher-level thinking and the application of the appropriate skills and prior knowledge. The response is correct and complete, and contains elaboration and extension. There is no evidence of misconceptions. Minor inaccuracies should not necessarily lower the score.</td>
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<tr>
<td>The student examined different shark species to compare and contrast body features and adaptations.</td>
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<tr>
<td>The student correlated different shark body features and adaptations to specific environmental needs such as ability to swim fast, feed along the bottom, detect prey from a distance, etc.</td>
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Questions and Answers

1. What body part does the shark use to move through the water in the estuary?
   Caudal Fin

2. What material is the backbone of the shark made of?
   Cartilage

3. Name four body features that help sharks detect their prey.
   Eyes, nose, lateral line, Ampullae of Lorenzini

4. The estuary serves as a nursery for sharks. What does this mean?
   Even though sharks are considered to be ocean animals, they come to estuaries to give birth to their young.
5. Sharks are considered to be apex predators at the top of the food chain. List two advantages for sharks hunting in the shallow water of estuaries.

Sharks use the shallow waters of the estuary because 1) they are protected from predators themselves; and 2) sharks can find abundant prey, such as fish, crabs, squid, and other sharks which use estuaries.

**Reflection Question**

[Answers will vary]
STUDENT ASSESSMENT

Sharks in the Estuary

Your challenge is to use what you know about sharks to describe the basic characteristics that allow it to survive in the estuary environment. In other words why are sharks in the estuary?

Use the image above to identify parts of the shark’s body that supports its basic characteristics to survive in the estuary.

1. What body part does the shark use to move through the water in the estuary?

2. What material is the backbone of the shark made of?

3. Name four body features that help sharks detect their prey.

4. The estuary serves as a nursery for sharks. What does this mean?

5. Sharks are considered to be apex predators at the top of the food chain. List two advantages for sharks hunting in the shallow water of estuaries.

Reflection Question

Using the information from your lesson on sharks, explain in your own words why sharks are found in the estuary!