ACTIVITY:
What Does It Take To Be an Estuary Inhabitant?

Objectives:

1. Research the physical, behavioral and physiological adaptations of estuarine organisms.
2. Visit a nature center, museum, or the New Orleans Aquarium of the Americas to observe estuarine organisms.
3. Set up a simple aquarium in the classroom to facilitate observation of small estuarine organisms.

Teaching Materials:

- Library access
- Internet access
- Books about estuaries and estuarine habitats and organisms
- Ten gallon or larger aquarium
- Aquarium aeration and filtration equipment
- Copies of the handout “Choose an Inhabitant” (Page 80)
- Copies of the handout “What Makes Me So Special?” (Page 81)

Getting Ready:

1. Collect estuarine organisms to inhabit a classroom aquarium. This collection could be part of a class field trip, or the teacher may want to do this alone. The organisms should be small. They may include grass shrimp, small crabs, small minnows, etc. (Crabs are ferocious predators, so keep them separate from organisms you want to protect.)
2. Collect aquatic plants growing in the area.
3. Bring enough water from the collection site to fill your aquarium. (Remember that the water will have a salt concentration particular to the collection site.)
4. Set up the aquarium in the classroom. Include plants and animals.
5. Arrange a field trip to the Audubon Louisiana Nature Center, Aquarium of the Americas, or a local museum with an aquarium. Discuss the activity with staff at the facility prior to the trip. Also contact the Lake Pontchartrain Basin Foundation; they may offer a program that fits your needs.
6. Collect books and magazine articles about estuarine organisms.
7. Research relevant web sites and contact the Lake Pontchartrain Basin Foundation for their publication, A Guide to the Wetlands of the Lake Pontchartrain Basin.
Procedure:

1. Work as a team or individually to conduct your research.

2. Choose a plant and animal organism listed in the handout “Choose an Inhabitant.” Use books and the Internet to conduct research about the physical, physiological, and behavioral adaptations of your chosen organisms.

3. Answer the questions listed in the handout about your chosen organisms.

4. Complete the handout “What Makes Me So Special?”

5. Create a profile of your chosen organisms. Show the organisms’ adaptations to their habitat. Illustrate the profile with drawings or photographs of your organisms.

Handout Follows
Extensions:
When the research and writing is complete, the students can present their findings to the class and the illustrated profiles can be displayed in school for others to see.

Assessment Procedure:
Assess the students according to how thoroughly they research the adaptations, how relevant the chosen adaptations are to life in the estuary and how well they present their findings, both orally and in the written profile.

<table>
<thead>
<tr>
<th>Point Value</th>
<th>Research of Adaptations</th>
<th>Written Profile of Organisms</th>
<th>Orally Presented Profile of Organisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Superficially researched. No more than one kind of adaptation described.</td>
<td>Contains sketchy information, showing little relevance to life in the estuary. Few, if any illustrations.</td>
<td>No relevant detail given about adaptations to the estuary. Presentation brief and awkward.</td>
</tr>
<tr>
<td>2</td>
<td>Adequately researched. Covers more than one kind of adaptation.</td>
<td>Content about adaptations brief and shows some relevance to life in the estuary. Contains at least one illustration.</td>
<td>Few relevant details given about adaptations to the estuary. Presentation short.</td>
</tr>
<tr>
<td>3</td>
<td>Well researched. Covers all three kinds of adaptation.</td>
<td>Content adequate, showing relevance to estuary. Adequate illustrations.</td>
<td>Some good, relevant information given about adaptations. Adequately presented, but still quite brief.</td>
</tr>
<tr>
<td>5</td>
<td>Outstandingly researched. All three kinds of adaptation were covered thoroughly.</td>
<td>Detailed, well-written content, shows excellent understanding of adaptations to estuary. Excellent illustrations.</td>
<td>Presentation contains outstanding details. Presented in an entertaining and informative way. Appropriate length.</td>
</tr>
</tbody>
</table>

Maximum points: 15