MAP OF MOBILE BAY
To be completed BEFORE your visit.

*Label North, South, East, and West.*

*Label these locations around coastal Alabama:* Dauphin Island, Gulf of Mexico, Mobile Bay, Ft. Morgan Peninsula, Mobile Delta

*Label where you would find these salinities:* freshest water, saltiest water, brackish water.
6th - 8th Grade Activity

Name: ____________________________

The Alabama Aquarium exhibits plants, animals Alabama’s coastal ecosystems. An estuary is a place where freshwater from land mixes with saltwater from an ocean. Your visit will take you from the freshwater Mobile-Tensaw River Delta to the salty Gulf of Mexico waters.

This worksheet is divided into the galleries that you will find as you tour the aquarium. Read the panels, observe the tanks, and ask docents and staff to help you find answers.

**Entrance**

1. Mobile Bay has the ________________ largest watershed in the United States.

**Mobile-Tensaw River Delta**

1. At the largest tank in the Delta Gallery, you will observe a swamp scene. Swamps are dominated by trees. Name one common tree in the swamp. ________________

2. Name two benefits of the wetland filtration system. ____________________________

   ____________________________

   ____________________________

3. What are invasive species? ____________________________

   ____________________________ Name two invasive species that have been introduced into the Southeastern U.S. ____________________________

   What is the approximate dollar value of the damage done by invasive species?

   ____________________________
Mobile Bay Estuary

1. Name a vertebrate and an invertebrate you found interesting on the Touch Table. What did you find interesting about each of these animals?
   Vertebrate: ____________________________________________________________
   ____________________________________________________________
   Invertebrate: ____________________________________________________________
   ____________________________________________________________

2. Find the largest tank of the Mobile Bay Gallery. The poles in this tank represent what structure? ________________________________

3. What happens during a jubilee? ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   ________________________________________________________

4. Why are sea grass meadows shrinking? ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   What impacts can this loss have on humans? ________________________________________________________
   ________________________________________________________
   What can humans do to help halt this loss? ________________________________________________________
   ________________________________________________________
1. Below is a cross section of a barrier island. Label the following habitats:

beach  dune  maritime forest  salt marsh

Label one plant or one animal that can be found in each of the above habitats.
Northern Gulf of Mexico

1. What is the name of the heaviest bony fish? ________________________________
   What is unusual about its body? _______________________________________

2. Observe the octopus. The large, bulbous mantle above the octopus’ eyes contains what? __________________________________________________________

3. What is sargassum? __________________________ How does it serve as a “mobile home?” _____________________________________________

4. Look above you. What three things are carried by the pipes running throughout the Aquarium? ________________________________ Where do the pipes deliver what they are carrying? ________________________________

1. **ARCOS Weather Stations:**
   Record these current weather conditions for the Dauphin Island station:

<table>
<thead>
<tr>
<th>Air Temperature</th>
<th>Water Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dissolved Oxygen mg/L</th>
<th>Salinity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

   * Don’t forget to include units of measure.

Would you expect the salinity to be higher on the north side of Dauphin Island, or on the south side? _______________ Why? ____________________________
The Living Marsh Boardwalk

The Living Marsh Boardwalk is located outside the Alabama Aquarium. This area was once the site of a sewage-septic tank used by the Air Force. In 1993, the Dauphin Island Sea Lab removed the septic tank and rebuilt the marsh. Use the panels and audio kiosks on the boardwalk and your own observations to answer the following questions.

1. What are the two dominant plants in the salt marsh? ______________________
   ______________________

2. What animal makes a daily migration up and down these marsh plants? ______
   ______________________ Where would you find it at high tide? ____________
   ______________________ Why? ______________________

3. What are two functions that barrier islands perform? ______________________
   ______________________
   ______________________

4. As you look east across Mobile Bay, what large man-made structure do you see?
   ______________________ What type of natural resource is this structure extracting deep beneath the bay's surface? ______________________

5. What is marine debris? ______________________
   How does eating plastic kill an animal? ______________________
Invertebrate Trail

In the space below, make a rubbing of your favorite invertebrate from the Invertebrate Trail.