

# GULFING UP TROUBLES AND HOW WE CAN HELP!

## Teacher Overview

**Grade Level:** 3rd

**Length of Time:** 30 minutes in class plus the field trip

### Essential Questions:

- How does the Mississippi River connect the Midwest to the Gulf of Mexico?
- What can we do in our community to help with prevention of marine life habitat destruction?
- What steps can humans take to help marine life survive?

### Standards:

- Next Generation Science Standards
  - **3-LS4-3.** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
  - **3-LS4-4.** Make a claim about the merit of a solution to problem caused when the environment changes and the types of plants and animals that live there may change.

### Materials:

- Gulf of Mexico observation worksheet. (see document below directions)
- K-W-L Chart (Tracks what a student knows (K), wants to know (W), and has learned (L) about a topic. Can be used before, during, and after research.)
- Pencil/Pen
- Clipboard

### Introduction:

Ask students to imagine you are the new kid in school. What would you do in order to make new friends and be successful in school? (Answers may vary, but might talk about wearing certain clothes, or joining a club, or being kind to others.) Explain that these are all survival methods, and all living animals develop methods to survive in the habitat they live in day to day.

### Activity:

- Explain to students that they will be observing marine animal ambassadors in their habitats to discover what they do to survive. They will see what defense mechanisms are used and how some things are possibly out of their control.



- Have students take the National Mississippi River Museum & Aquarium (NMRMA) Pre-Survey. On a blank piece of paper (individuals) or on the board (as a group) have students respond to the following questions:
  - What are three survival mechanisms marine life animals may have?
  - What are some challenges marine life may face?
- Create a K-W-L chart to assess prior knowledge.
  - K (What they know) W (What they want to know) L (What the students learned after their experiences and research)
- Prior to the trip the teacher may want to distribute the observation worksheet. (see document below lesson directions)
  - Explain to the students there will be marine life and murals that explain the story of the Gulf of Mexico. (Below image shows area students will be in)



- The day of the trip you may want to model the observation process. What do students notice about the wildlife? What is in their habitat? What does the signage say about the various species or exhibit?
- Allow students, with adult chaperones, to move around the exhibit, observing and making notes, drawings, or diagrams.
- When you return to the classroom, ask students to share their findings.
  - Add these to the “Learn” column of the K-W-L chart.
- Ask students what marine life uses as possible survival mechanisms.
- Come up with possible solutions to some of the troubles in the Gulf of Mexico.
  - Ask the students if they have ideas to help marine life.
  - Is there anything we can start doing today?



- Take the NMRMA Post Survey. On a blank piece of paper (individuals) or on the board (as a group) have students respond to the following questions:
  - What are three survival mechanisms marine life animals may have?
  - What are some challenges marine life may face?
  - What actions can humans take to help?

**Extension:**

Using the internet, research and create a public service announcement (PSA) poster or video. Focus on a particular species or struggle. Examples: Climate change, ocean acidification, plastics etc.

Lesson Plan Development funded by the Resource Enhancement and Protection Conservation Education Program (REAP CEP)



NATIONAL MISSISSIPPI RIVER MUSEUM & AQUARIUM

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Conservation Scientists observe marine life while focusing on habitat, survival and challenges the animal faces. While you are visiting the National Mississippi River Museum & Aquarium, pretend you are Conservation Scientist for the day and choose an animal to observe. Make notes in the boxes below.

<b><u>EXHIBIT NAME</u></b>	<b><u>NAME OF ORGANISM</u></b>
<b><u>DESCRIPTION OF DEFENSE/SURVIVAL</u></b>	<b><u>POSSIBLE PREDATORS</u></b>
<b><u>THE CHALLENGES OR RISKS</u></b>	<b><u>FUN FACTS</u></b>

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