

Title:	Animals of the Gulf of Mexico
Grade(s):	4
Subject(s):	Science
Author:	ICAC Team
Overview:	The teacher will ask students what they know about the oil spill in the Gulf of Mexico and how it affected animals along Alabama's coast. After reviewing the differences between vertebrates and invertebrate animals and the major classes of vertebrates, students will be asked to select a Gulf animal to research and write an illustrated essay using Microsoft Office.
Content Standards:	<p>SC (4) 6. Classify animals as vertebrates or invertebrates and as endotherms or ectotherms.</p> <p>TC (3-5) 1. Use input and output devices of technology systems.</p> <p>TC (3-5) 2. Use various technology applications, including word processing and multimedia software.</p> <p>TC (3-5) 5. Practice safe use of technology systems and applications.</p> <p>TC (3-5) 12. Create a product using digital tools.</p> <p>ELA (4) 12. Organize information on a specific topic obtained from grade-appropriate reference materials.</p>
Local/National Standards:	
Primary Learning Objectives:	<p>The student will:</p> <p>Describe the characteristics of an animal that lives in or near the Gulf of Mexico.</p> <p>Develop an understanding of Microsoft Word by inserting pictures and creating an essay about their chosen animal.</p>
Additional Learning Objectives:	The students will compose descriptive texts and practice writing mechanics.
Approximate Duration of Lesson:	60 min.
Materials and Equipment:	Books and magazines containing information and pictures of animals found around the Gulf of Mexico
Technology Resources Needed:	Computer with Microsoft Word, Digital Camera, Internet connection
Background/Preparation:	Knowledge of the characteristics of organisms such as whether a particular organism is an invertebrate or vertebrate, endotherm or ectotherm. Knowledge of Microsoft Word.
Procedures/Activities:	<p>Step 1 Ask students what they know about the oil spill in the Gulf of Mexico and how it affected animals along Alabama's coast.</p>

What kinds of animals live in the waters of the Gulf or along its shore?

Distinguish between **vertebrate** and **invertebrate** animals and **endotherms** and **ectotherms**.

- Vertebrates have backbones;
- Invertebrates do not have backbones
- Endotherms (warm-blooded) generate heat to maintain their body temperature;
- Ectotherms (cold-blooded) regulate their body temperature by exchanging heat with their surroundings.

Write the names of the major classes of vertebrate animals on the board and discuss characteristics of each class:

Fish with cartilage skeletons, Bony Fish, Amphibians, Reptiles, Birds, and Mammals.

Step 2

Have students choose an animal found in or near the Gulf and write a descriptive essay with pictures about that animal. The essay should include the following information:

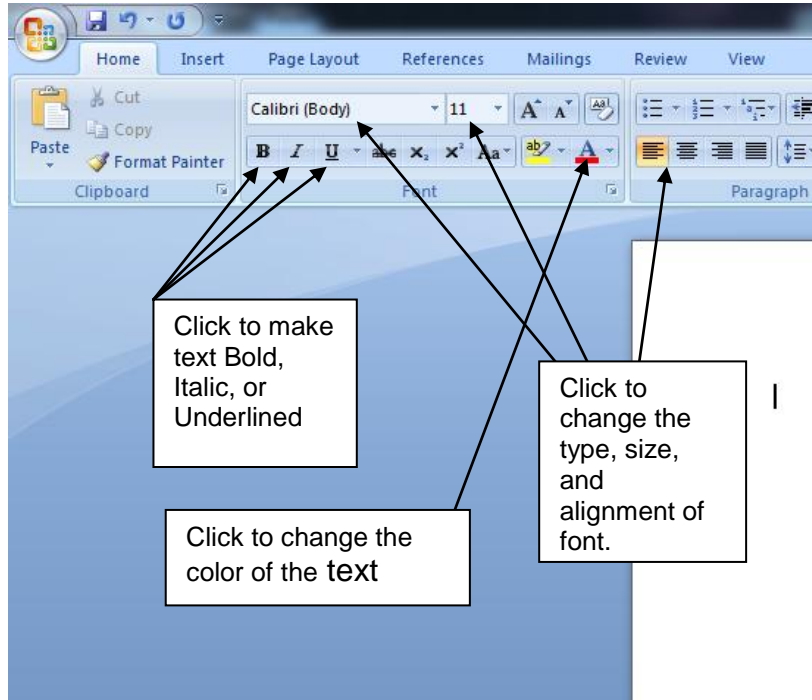
- invertebrate or vertebrate
- endotherm or ectotherm
- habitat
- diet
- how the animal might be affected by an oil spill

Step 3

A digital camera should be used to take pictures to be used in the essay. These can be pictures from the student's textbook, pictures taken on trips to the Gulf, pictures drawn by the student, or from other sources. If an internet connection is available the student can also use images from the Internet.

Step 4

Launch Microsoft Word:
The Word interface looks like this:



Step 5

Students should write an essay incorporating the information listed in Step 2.

Students should include pictures that they took of their animal. To insert an image, find where the pictures are located on your computer. If the digital camera is connected using a USB port, go to "My Computer" and the select the appropriate drive (for example, E: or F: drive). Right click with your mouse the picture you want to use, and select "Copy." Now, return to your Word document and point your cursor to where you would like your picture. Right click once again with your mouse and select "Paste."

Attachments:
Assessment
Strategies:
Extension:

Rubric

See Rubric

Students can share their stories with their classmates. This should include a question and answer session or discussion among the students.

Remediation:

Give students readings that are on their current reading level and that focus on organisms and their characteristics.

Assessment Rubric for Animals of the Gulf Story

Score:	1	2	3	4
Participation	No participation in the activity	Some participation, but didn't work well with the group	Participated throughout activity, contributed to successful outcome	Worked well with everyone in group, offered ideas, contributed to successful outcome.
Mechanics	5 or more punctuation or grammatical errors	3 to 4 punctuation or grammatical errors	1 or 2 punctuation or grammatical errors	No punctuation or grammatical errors
Content	Information is inaccurate and most required elements are missing.	Some information in the essay is inaccurate and/or required information is missing.	Essay contains accurate information on most of the required elements.	Essay includes accurate and complete information about the animal's classification, where it lives, what it eats, and how it might be affected by an oil spill.