

Name: _____ Period: _____

Title: Earth Systems Ocean Fair

Due Date: _____

Background Information:

The oceans are the largest reservoir of water on Earth. It contains a vast array of plants and animals, in fact more than are on the land. Algae, a marine plant, carries out a major percentage of photosynthesis on the planet, making them vital to the carbon/oxygen nutrient cycle. As well as having diverse biotic organisms, oceans have many abiotic factors that influence ecosystems in the ocean and around the planet. Some of these factors include the temperature of the water, the depth of the water, tides, and salinity.

Purpose: By creating a visual display you should gain a greater understanding of a marine organism and a marine ecosystem. You will also better understand the influence abiotic factors, like temperature, salinity, depth, and tides, can have on biotic marine organisms.

Materials: You will be providing the needed materials to put your project together. You may use a pre-made tri-fold board or fold a piece of poster board into threes. These are available at craft stores, office supply stores, Walmart, and some grocery stores. You will also need to provide visual aids, color photos and anything else that will make your project stand out.

Procedures:

1. Choose any single biotic organism in the ocean to research and create a tri-fold project presentation about. A sample list is provided below, however the possibilities are almost limitless. Try to choose something you don't know very much about. The ocean is full of strange and unique creatures!

Electric Eel	Any Jelly Fish	Any Shark	Any Whale
Dolphins	Coral	Phytoplankton	Kelp
Anglerfish	Viperfish	Blowfish or pufferfish	Any Sea turtles
Any Rays	Zooplankton	Tube worms	Sea Slugs
Any Octopus	Any Squid	Sea Snakes	Any Shrimp
Clown Fish	Zebra Fish	Coelacanth	Any Sea horses
Sea urchins	Baracuda	Algae	

2. You will be researching all about this organism for 2 days in class. You can use the library or the internet.

3. You must find out the following information and present it on your tri-fold board:

- The ecosystem, and the food web your organism is a part of. You should describe the ecosystem and have a picture of it. You must also draw and label a food web that includes your organism.
- The influence of the following abiotic factors on your organism and ecosystem should be described: salinity, water depth, tides, ocean temperature.

- You should research three interesting facts about your organism. Your classmates and teacher should learn something new and interesting. If you don't think it is something cool keep looking.
- In addition to the information listed above, color pictures, diagrams, activities, props, audio and visual aids, food are necessary to make your project unique and interesting. (You do not have to have all of those things but the more the better!)
 - All writing on your board must be typed. You may not copy any text off the internet. Points will be deducted if it looks or sounds as if you have copied another's work.
 - You will need a typed bibliography including 3 sources of information. This must be visible on your project board.
 - Please be creative. The more exciting and interesting your project is, the better your grade will be.
 - You will need to give a 2-3 minute oral presentation covering the information you learned. You should be able to talk easily about your project without reading your board, it should be obvious you are the expert on this organism.
 - Your project must be in class on the due date. **If you will be absent on the Due Date, your project must be turned in prior to that date.**
 - Please read through all the requirements, on the reverse side of this page, and be sure you have included everything.

Grading Requirements:

Name:		
Requirement	Points Possible	Points Received
Physical Appearance of your Project: how interesting, exciting, unique, appealing is your project, use of interesting visual aids (music, video, food, props etc), all wording typed, overall neatness, everything in color	50	
Food Web: Complete, neatly drawn, energy flow shown, organisms labeled, color	20	
Abiotic Factors: Description of the influence of abiotic factors including: salinity, water depth, tides, ocean temperature	25	
Three Interesting Tidbits: Did your classmates and teacher learn something new and interesting, were your facts "wow" facts?	30	
Oral Presentation: Could you talk easily about your project without reading your board, it should be obvious you are the expert on this organism	30	
Bibliography: Correct format, at least 3 different sources, typed, clearly visible on project board	15	
Total	170	