

Assignment Due by Th June 2nd

Read this page and the last page before you go to the aquarium.

This exercise is optional extra credit... worth up to 15 points added to one exam score. You may do this assignment individually, or in collaboration in groups of 2 or 3. The credit you receive is the same whether you do it by yourself or with others. It is set up this way to be flexible re your preference and style of learning.

Receipts are required for each person...no credit will be given for anyone who doesn't have a receipt, so write your name on the receipt and staple them all to this front page. Don't lose them!!!

Receipts REQUIRED to get credit for assignment. Staple receipt(s) here →

This self-guided field trip is designed to introduce you to the great diversity of marine creatures and a few of the adaptations that help them survive in the oceans. Questions may involve specimens from more than one exhibit. Some questions will require that you make observations of the organisms in the exhibits and draw conclusions. In some cases, the information you need is posted at the exhibit, but this is not always the case. There are also numerous naturalists on hand to answer questions.

This assignment should take you approximately **3-4 hours**. You are expected to provide **DESCRIPTIVE AND COMPLETE ANSWERS** to the questions posed, so be sure to give yourself sufficient time.

Seattle Aquarium

The Seattle Aquarium is located on the waterfront, Pier 59: 1483 Alaskan Way

For driving directions to the aquarium, go to their web site:
www.seattleaquarium.org/visit/location/

Cost: Adults \$11.50

Hours: 9:30am to 5pm*
*Last entry at 5pm; exhibits close one hour later.

The headings in this handout correspond to specific exhibits [see map to the right →] and will serve as a guide for your tour of the aquarium.

Enjoy your trip!!!



I. Life on the Edge -- Wild Outer Coast & Inland Sea _3 pts_

Observe the species in the two active pools & use the booklets on display to answer the following:

1. Touch the **sea anemone's** tentacles. It seems to stick to your finger. What is really going on and what function does it serve in the wild?
2. Why are **green anemones** green?
3. What part of the **Giant Barnacle** is used to capture food?
4. How do **Blue Mussels** hold on to the rocks?
5. **Purple Sea Urchins** often live where the waves are large. What protects purple sea urchins from pounding waves?
6. Provide detailed observations of any **2 significantly different species** (of your choice) from the tide pools in this exhibit. For example, you could choose sand dollar & shrimp, or chiton & snake prickleback. Your observations should include how each animal moves, how it feeds and what it eats, where it occurs in the tide pool and why. Describe any other special behaviors or adaptations and the purpose of such adaptations. Drawings are encouraged as part of your description.

(1)

(2)

II. Life on the Edge -- Below the Surface

1. Name three defensive mechanisms of an octopus.
 - (1)
 - (2)
 - (3)
2. What purposes would changing color serve the octopus?

III. Pacific Coral Reef **_2 pts_**

1. **Reef Builders:** Describe how the coral reef is built?
2. What are the major primary producers on a coral reef? _____
3. **Day and Night on the Reef:**
 - a. **Define** the following terms and give an **example** of a fish in this exhibit for each trait.
Diurnal:

Nocturnal:

b. What do you think would be the advantage of being nocturnal, in a high-diversity ecosystem like the coral reef?
4. Observe the body form, swimming style, and any other notable behavior of these 4 fish:
• gray reef shark • cardinal fish • parrot fish • clown fish
Now **choose two** of these fish and compare and contrast what you observe; describe how the things you observed would help in their lifestyle & survival?
 - (1)

(2)