

**Assignment 10: Coastal process**

1. Fill in the table below, regarding the geography of the ocean floor:

Area	Average depth (m)	Average slope (°)	Atmospheric influence?
Continental shelf			
Continental slope			
Abyssal plain			

2. a. List **three differences** between the surface ocean water circulation system and the deep ocean water circulation system.

b. Where are the **principal** geographic areas that are the connection between the two?

3. What's the difference between an **active margin** and a **passive margin**? What would you see on land or along the ocean floor on each that would identify it as one or the other? Give an example of each.

4. a. What's the difference **in origin** between an ocean **current**, **waves** and **tides**?

b. Which is the most likely to cause damage to human structures along a coast?

5. a. What factors determine if a coastline is going to **erode** or **aggrade** (grow)?

b. Classify the **Washington coastline** as "erosional" or "aggradational". Give the website or report citation from which you drew this information (please include the year of the site or report).

c. What **mitigation techniques** are used to resist coastal erosion? Are any of them long-term solutions?