

Identify a picture of a Vashon till, Esperance sand, Lawton clay, pre-Vashon (Olympia formation) rocks.

Be able to identify the location of these deposits from one another... for instance, on a topographic/geologic map.

Describe the origin of the Puget lowland.

Identify on a map, areas within the Puget Sound least/most prone to wave attack.

Describe in general the type of waves typically encountered in Puget Sound and how (and why) they differ from most other coasts (e.g., the outer coast of Washington State).

Describe in general the type of tides typically encountered in Puget Sound and how they differ from the East coast and northern Europe.

Be able to explain the variability of wave conditions throughout the year.

Be able to explain the variability of tidal conditions throughout the fortnightly cycle and the year.

Describe the difference between waves in the nearshore of Puget Sound and the outer coast of Washington.

Given a tidal curve, be able to identify MLLW, MHHW, MSL, spring tides, neap tides.

Know the age (within a factor of 10) of the following entities:

North American Cordillera  
Cascade Mountains  
Olympic Mountains  
Puget Lobe of Cordilleran Ice Sheet  
Lake Russell  
Vashon Till  
Esperance Sand  
Lawton Clay  
West Point low-tide terrace  
Olympia formation

Define/describe the following:

Fetch  
Wave breaking  
Wave period  
Vashon till

Esperance sand  
Lawton clay  
Subduction  
Semi-diurnal tides  
Diurnal tides  
Mixed semidiurnal  
Ordinary high-water mark  
Ordinary low-water mark  
Spring tides  
Neap tides  
MLLW  
MHHW  
flood tide  
ebb tide