Ocean & Seas Guided Notes Part 2

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A \_\_\_\_\_\_\_\_\_ in water is a rhythmic movement that carries energy through the water.   
Waves are caused by high winds blowing on top of the water.

Throughout a day, the water level at the ocean’s edge changes. This rise and fall in sea level is called a \_\_\_\_\_\_\_\_\_.   
A tide is a giant \_\_\_\_\_\_\_ that can be thousands of kilometers long but only 1 m to 2 m high in the open ocean.   
Tides are created by the gravitational attraction of \_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_and of Earth and the Sun.  
\_\_\_\_\_\_\_\_\_\_ is the upward movement of cold water from the ocean depths.  
Upwelling brings up tiny ocean organisms, minerals, and other nutrients from the deeper layers of the water; without upwelling the surface of the ocean would be nutrient \_\_\_\_\_\_\_\_\_.  
  
\_\_\_\_\_\_\_\_\_\_\_\_\_ is an abnormal climate event that occurs every 2-7 years in the Pacific Ocean, causing changes in the winds, currents, and weather patterns.  
El Nino interrupts up the pattern of upwelling.  
Without nutrients provided by upwelling, fish and other organisms cannot find food.  
Fish and other organisms die and weather patterns are disturbed.

The ocean floor has higher mountains, deeper canyons, and larger flatter plains.   
Earthquakes occur more often.  
The rocks are very different.  
The crust is thinner.

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the gradually sloping end of a continent that extends under the ocean.  
The ocean covering the continental shelf can be as deep as 350 m.  
Large mineral, oil and natural gas deposits are found here.  
At the edge of the continental shelf, the ocean floor plunges steeply 4 to 5 kilometers.  
The continental slope extends from the outer edge of the continental shelf down to the ocean floor.

Large, flat areas on the ocean floor are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
The abyssal plains are larger in the Atlantic and Indian than in the Pacific due to the deposition of sediments by large rivers.  
The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ has large cracks that trap sediments and result in smaller abyssal plains.  
Abyssal plains are close to the continent and are made of mud, sand and silt.  
Farther out on the abyssal plains, some of them contain the remains of tiny organisms that form ooze.  
Where ocean life is not abundant, the floor of the ocean is covered with red clay.  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are underwater volcanic mountains that rise more than 100 meters above the ocean floor. Most have been found in the Pacific Ocean.  
Some seamounts reach above the surface of the water to form islands, like the Azores in the Atlantic and the Hawaiian islands in the Pacific.  
Guyots are flat-topped seamounts.

\_\_\_\_\_\_\_\_\_\_\_\_\_ are the deepest parts of the ocean found along the edge of the ocean floor.  
The Mariana Trench in the Pacific Ocean contains the deepest spot (1100 meters) on Earth known as Challenger Deep.

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the area in an ocean basin where new ocean floor is formed.  
The mid-ocean ridges form an almost continuous mountain belt that extends from the Arctic Ocean down through the middle of the Atlantic Ocean around Africa into the Indian Ocean and across the Pacific Ocean.  
In the Atlantic it is called the mid-Atlantic Ridge and in the Pacific, the Pacific-Antarctica Ridge.  
  
The plant and animal life in the ocean is affected by several factors.  
One factor is the amount of sunlight that penetrates the ocean.  
Another factor is the temperature of the ocean water.  
Water pressure is also a factor.

Plants and animals in the ocean are classified into three major groups based on their habits and the depth of the water in which they live.  
The three major groups are plankton, nekton and benthos.

\_\_\_\_\_\_\_\_\_\_\_\_\_ float at or near the surface where sunlight can penetrate.  
Most of the plankton are very small, such as algae.  
These organisms drift with the currents or tides.  
Plankton are the main food for many larger organisms. They account for most of the organisms in the ocean.

Jelly Whales, seals, dolphins, squid octopuses, barracuda and other fish are all \_\_\_\_\_\_\_\_\_\_\_\_.  
Nekton are free-swimming organisms that feed on other nekton as well as on plankton.  
Many have adaptations enabling them to function at depths that have great pressure and no light.  
fish, which float on the ocean surface, is one example of plankton.  
This beautifully colored fish is classified as nekton.

Organisms that live on the ocean floor are \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
Crabs, and lobster are just a few examples of benthos.  
The deep bottom environments are sparsely populated with benthos.  
Some benthos are plants that live on the ocean floor in shallow waters where sun can penetrate.

A \_\_\_\_\_\_\_\_\_\_ is an example of benthos.