Deep beneath the surface of the ocean is a wild and exciting world of mountains, plains, and valleys that are bigger, wider, and deeper than any found on land. Because weathering and erosion do not occur beneath the surface of the water, the underwater world changes very slowly.

The ocean floor is like a wide, shallow tub or basin. The rim of the basin is called the **continental shelf**. The shelf slopes gradually to a huge plain in the ocean known as the oceanic crust. New crust is made when magma rises from **mid-ocean ridges** and cools and hardens. The new crust is then pushed away by even newer magma. **Ocean trenches** are formed when the moving oceanic crust hits the continental crust and is pushed below the continental crust.

Ocean canyons are created when sediment from rivers washes into the ocean and rests on the continental shelf. Once the sediment builds too high or if an earthquake occurs, the sediment and water form an underwater landslide and carve out canyons on the ocean floor, just as rivers carve out canyons on land.

Far offshore, **islands** (land completely surrounded by water) can be created by underwater volcanoes, sometimes called **seamounts**, which push up above the surface of the ocean. Closer to shore, islands are created by chunks of land that break off from the continent or by parts of the mainland being cut off by rising sea levels. Coral islands, called **atolls**, are the remains of reefs around underwater volcanoes that have sunk over many years or over which the sea level has risen.

A **reef** is a chain of rock or coral near or on the surface of the water. The biggest reef in the world is the Great Barrier Reef off the coast of Australia. Since coral is alive, the reef grows about six inches per year, and the Great Barrier Reef is big enough to be seen from outer space.

Underwater volcanoes are made from magma that pushes up through weak spots in the oceanic crust. Hot magma meets cold water and cools to form rock that builds up over time to form volcanoes. A volcano that is poking out of the ocean is called an island.

Answer the Following

1. Why is the landscape deep below the ocean water's surface more dramatic than the landscape on land? _____
2. Name two ways islands are formed. _____
3. Name two ways the ocean floor changes. _____
4. What is a continental shelf? _____
5. How do ocean trenches form? _____