**Oceanography SOL Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Oceans**

Understandings:

The ocean is a dynamic system in which many chemical and physical changes are taking place. The oceans are an important source of food and mineral resources as well as a venue for recreation and transportation. However, the oceans’ resources are finite and should be utilized with care.

Knowledge and Skills:

1. Most waves on the ocean are generated by the wind\_. A few are caused by a shock to

the seafloor due to a volcanic eruption or an earthquake. These are \_tsunamis\_.

2. There are large current systems in the oceans that carry warm water towards the poles\_

and cold water towards the \_equator\_\_.

3. \_Upwelling\_ bring cold, nutrient-rich water from the deep ocean to the surface and are

areas of rich biological activity.

4. The \_tides\_ are the daily periodic rise and fall of water level caused by the gravitational

pull of the moon and the sun on Earth.

5. Sea level falls when \_glacial\_ ice caps grow and rise when they melt.

6. Algae\_ in the oceans are an important source of atmospheric oxygen.

7. The ocean is the single largest reservoir of \_heat\_ at Earth’s surface. The stored heat in the ocean drives much of Earth's \_weather\_ and causes climates near the ocean to be \_\_milder\_ than the climate in the interior of the continent.

8. Convection\_ is the major mechanism of energy transfer in the oceans, as well as in the Earth’s interior.

9. The topography of the seafloor is at least as variable as that on the continents. Features of the seafloor that are related to plate tectonics processes include \_mid-ocean ridges\_ and \_trenches\_.

10. Other major topographic features of the seafloor include the continental \_shelf\_, continental \_\_slope\_\_, \_abyssal\_ plains, and seamounts.

11. The impact of human activities, such as waste disposal, construction, and agriculture, affect the water quality within watershed systems and ultimately the oceans. \_Pollution\_ and over-fishing can harm or deplete valuable resources.

12. Estuaries\_, like the Chesapeake Bay, are areas where fresh and salt water mix, producing variations in salinity and high biological activity.

13. Chemical pollution and \_sedimentation\_\_ are great threats to the chemical and biological well-being of estuaries and oceans.

WORD BANK

convection milder equator tsunamis tides

trenches wind mid-ocean ridges poles upwellings

abyssal shelf glacial slope pollution

estuaries algae sedimentation heat weather