

FORM 4 GEOGRAPHY NOTE 6

STRAND 2: PHYSICAL ENVIRONMENT

A. RELIEF

OCEAN

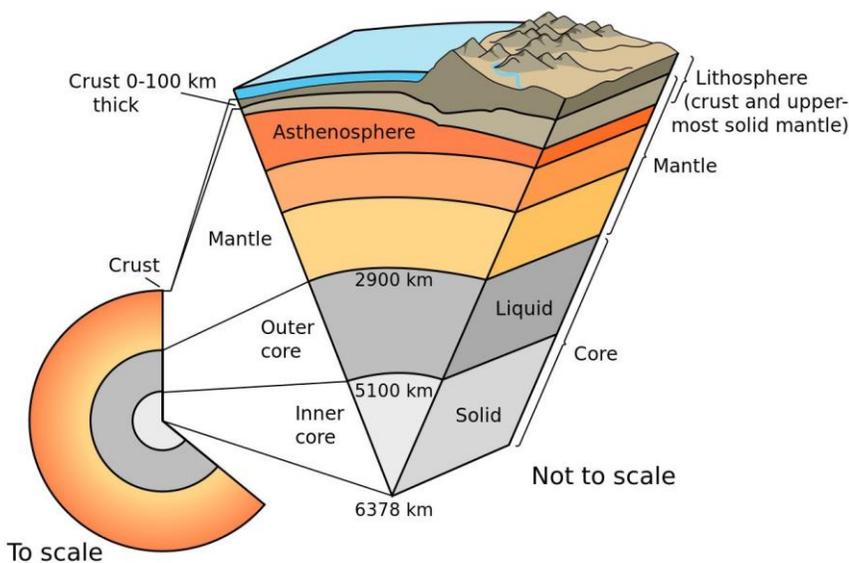
The ocean is:

- A very large expanse of sea.
- A large area of water.
- A body of salt water covering much of the Earth.

How the world was formed.

1. Bible
 - In the beginning the world was created by God.
 - In the book of Genesis.
2. Scientists
 - World was created from the sun.
 - A huge ball of fire spun off from the sun and cooled and became Earth.
 - Rain filled basins and made the oceans, rivers and bodies of water on Earth.

- **Lithosphere** is the outer part of the earth, including the crust and the upper mantle.
- **Asthenosphere**
 - is part of earth's mantle.
 - is about 100 km to 350 km under the surface.
 - is the lower part of the upper mantle, and behaves as a hot viscous liquid.

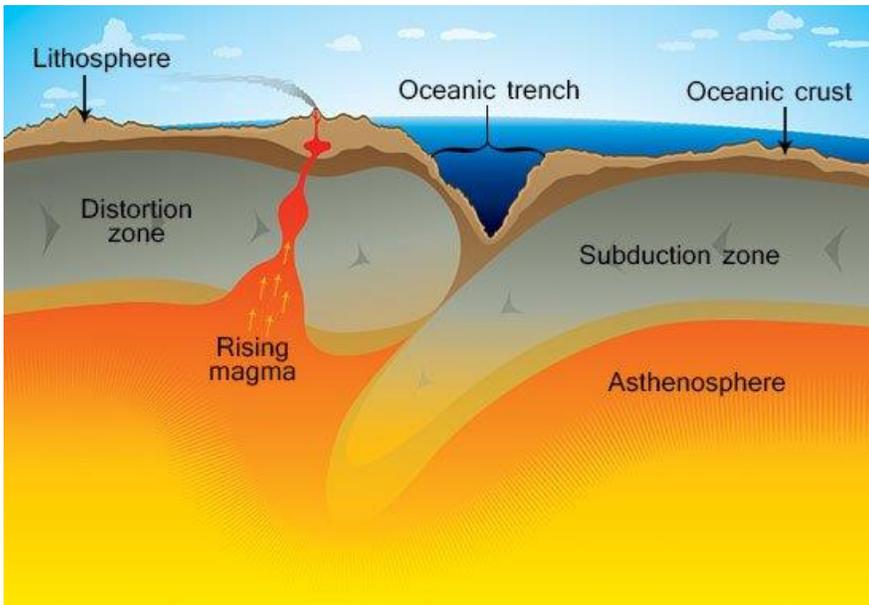


Remember last year on the topic based on the layers of the earth.

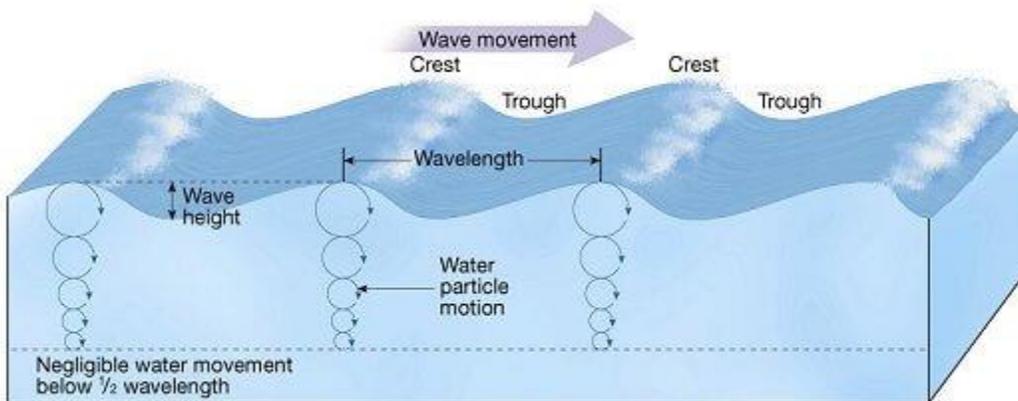
1. Crust
2. Mantle
3. Core

Lithosphere and Asthenosphere is part of it as well.

Ocean trenches are natural tectonic plate boundaries between two crustal plates.

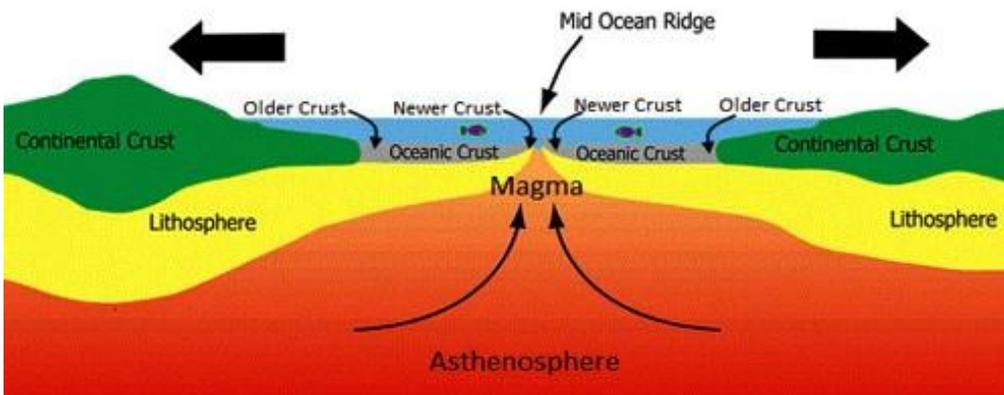


Oceanic trough, an elongate depression in the seafloor that is characteristically shallower, shorter, narrower, and topographically gentler than oceanic trenches.



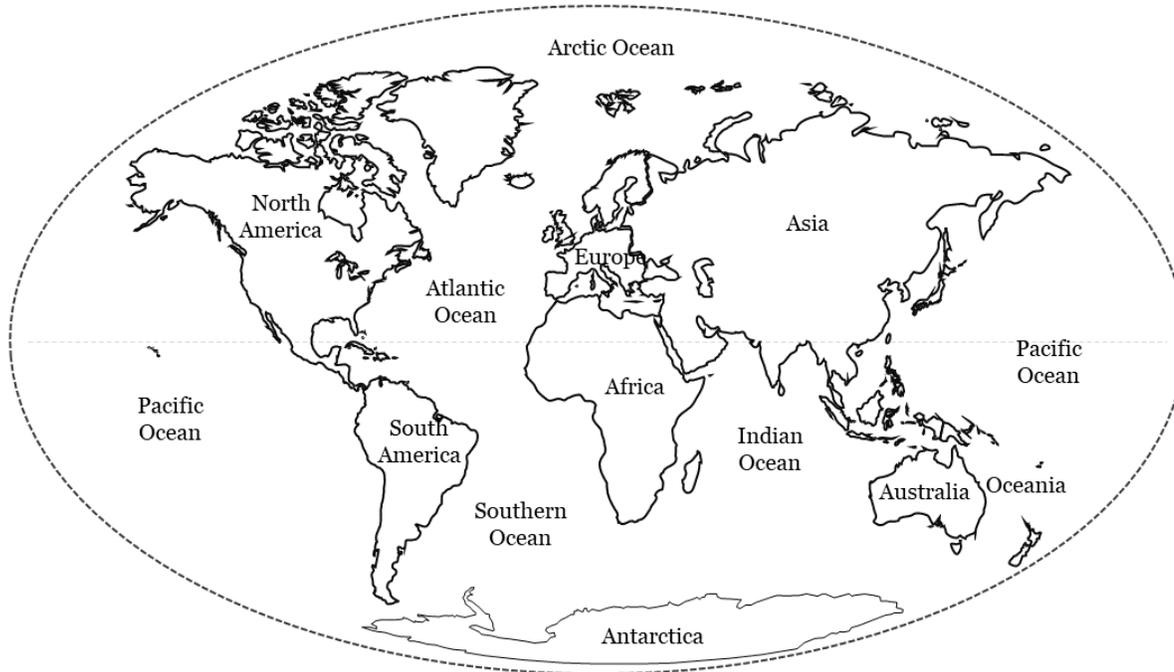
Oceanic ridge is an underwater mountain range, usually formed by plate tectonics.

Sea Floor Spreading



The images provide a better understanding of the definition of each term.

5 OCEANS OF THE WORLD



1. Pacific Ocean.
2. Atlantic Ocean.
3. Indian Ocean.
4. Southern Ocean.
5. Arctic Ocean.

The Pacific Ocean

- The largest and deepest in the world.
- It covers more than 30% of the earth's surface

The Pacific Ocean floor

- It is composed of nine oceanic tectonic plates
- The ocean floor is actually very flat, even in areas with seamounts or deep trenches.

3 main trenches in the Pacific Ocean

1. Mariana Trench
2. Tonga Trench
3. Philippine Trench

Ocean temperature

- Varies from place to place.
- Varies from season to season.

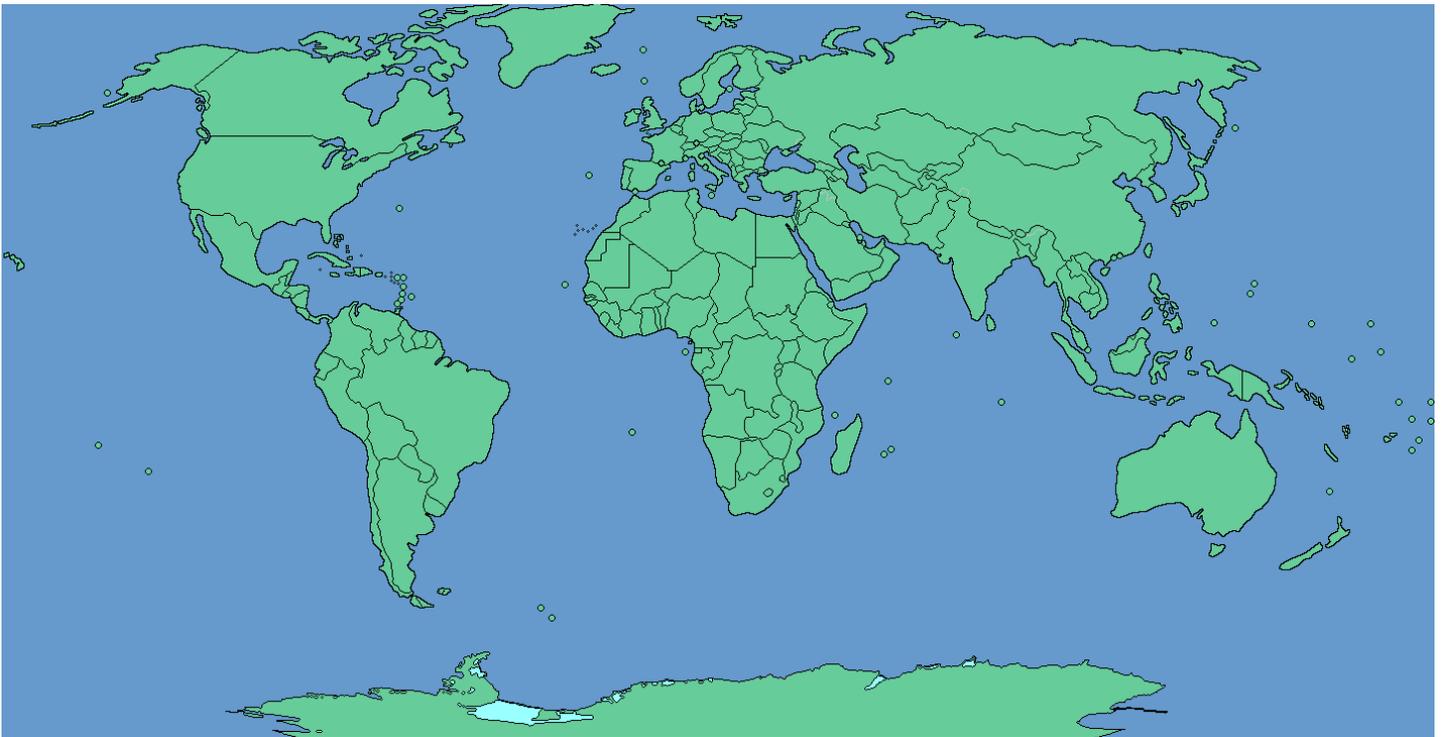
- Tropical oceans receive a lot of direct overhead sunlight for much of the year, so the water is warm.
- The Polar Regions receive sunlight but never directly overhead, so water in these places tends to be cold.

ACTIVITY 1: Answer the following questions below using the notes provided.

1. Explain how the world was created from the scientist's point of view.
2. Describe in your own words the size, depth and ocean floor of the Pacific Ocean.
3. State a difference between lithosphere and asthenosphere.

ACTIVITY 2: Use the map below to complete the questions that follow.

1.



- a. Identify the 5 main oceans of the world onto the map.
 - b. Name the 3 main trenches in the Pacific Ocean.
2. Compare the temperature of the ocean in the tropics and the poles.