# W.A.L.L WITHIN TSUNAMIS



#### By- Jasmin, Zaina, Eloh, and Jy'Aire



# EARTH'S SYSTEMS???



## HYDROSPHERE!







#### HYDROSPHERE (WATER) -

- HydroSphere is the water component of the earth. It covers 70% of the earth and is home to many creatures. This sphere contains bodies/beds of water such as the Ocean, Lakes, Ponds, Rivers, and Seas. Many things fall within in this like precipitation, rainfall, and evaporation. The hydrosphere both have kinetic and potential energy. That being the energy stored in the earth's ocean floor (potential) and (Kinetic) such as waves, heated bubbles in nucleation sites, underwater volcanoes. The energy also consist of sound vibration, electromagnetic , e.t.c.







### ATMOSPHERE

#### ATMOSPHERE(AIR) -

The atmosphere is a source of gases, Many gases are in the air (mixture of gases). Most of what Earth depends on is the Atmosphere. All living things need most of the gases the atmosphere provides, without the atmosphere, the earth would be "just a lifeless rock". Energy transfers from the atmosphere and earth's surface through conduction, convection, and radiation. Atmosphere and ocean interact intensively, a moisture source and a heat source for the atmosphere(also storage). There are four layers troposphere, stratosphere, mesosphere, and thermosphere. The troposphere is the one that associates with weather, 10 miles above earth's surface, contains gases that are carbon dioxide, methane, etc. Made up many parameters which is air temperature, atmospheric pressure, humidity, wind, precipitation and solar radiation they are measured to define weather patterns and the atmospheric conditions locally. The waves generated by the earthquake, tsunamis ends up making ripples which affect not only the lithosphere but the ionosphere a level of the atmosphere.



### LITHOSPHERE







#### LITHOSPHERE (LAND) :)

The geosphere is almost any region of matter that makes up earth and the atmosphere. The geosphere is basically what allows every other sphere to exist because without the geosphere it would become almost impossible for the other spheres to exist. Natural disasters are affected by the geosphere because the geosphere is all land. When it comes to tsunamis and the geosphere there are many ways that damage dealt can be prevented, one of these ways is that when sea levels rise because of tsunamis there are places with high ground that people can retreat to in order of safety. Since geology is basically everything that's earth's matter, there are procedures in place that require people to get to high ground. To prevent damage against buildings there could be some sort of reinforcements put onto the buildings.







### BIOSPHERE



### BIOSPHERE (LIFE) -

The biosphere is the part of earth that contains life. It is the sphere that exist in all other spheres. There is life in the hydrosphere, geosphere and atmosphere. One energy that cycles through this system is solar energy. Plants take it in and through photosynthesis they create food. This food is matter and all the other organism dependent on plants will then eat this food and get the energy from the food. Then organisms that eat animals will get their energy from the organism that ate the plant. Another form of matter that cycles through the system is water. All organisms need it to survive.





#### TSUNAMI?

A tsunami is a giant wave that is caused by an earthquake or a volcanic eruption. As the wave travels inland it builds up and can move as fast as a jet.



#### TSUNAMIS AND EARTH SYSTEMS?

Tsunamis are both affected and affect earth systems. The geosphere can cause tsunamis with the shifting of tectonic plates. These are earthquakes and the energy released causes big waves. Tsunamis also cause damage to the geosphere and the biosphere because of the destruction done by the waves.





#### SAFETY AND TSUNAMIS

Now that you know about Tsunami's and how they work it's time to tell you how to prepare for one, or atleast rid yourself of receiving any life threatening injuries. We already know that the Tsunami forms a big body of water creating a massive wave about 100 feet tall (common height). In order to avoid the massive waves crashing down. Got to a building in which is thoroughly supported and passes the height of the tsunami. Wait it out till the waves die down and pull everything back into the ocean.

Buildings are commonly used in tsunamis but mountains and hills usually work as well.





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