

# [Water waves essay](https://assignbuster.com/water-waves-essay/)

Water waves have been around for years; learning about water waves can help you understand the outside world. Water waves can be used in many ways, but they can also be harmful, too. When were they discovered? Water waves have been around since the creation of the earth, but Isaac Newton came up with a theory; after studying waves in about 1687. What is the biggest wave? In 1958 the biggest tsunami wave was recorded. How much harm can water waves really do? In 1958 the tsunami wave uprooted one million trees. How can we protect our selfs from water waves?

Two basic ways to keep water waves from harming us are: wear life jackets when you are in a place waves get high and don’t be out on boats when the weather is supposed to be bad. What type of wavs are water waves? Transverse and longitudinal are the types of waves that can be seen in water waves. There is a lot more information about water waves in the paragraph below and the paragraphs will go into more detailed answers to the questions above. Introduction of Waves: Properties Water waves have been recorded to be as high as 1, 720 feet or as low as a small ripple.

In 1958, on the night of July 9, the biggest tsunami wave was recorded. The shore line of the Lituya Bay there was a wave that was recorded to be 1720 feet above sea level. That was the biggest wave recorded in history, so far. When you throw a stone into a body of water it makes water waves known as a ripple. A ripple is the smallest water wave. Water waves have a great range of wave lengths. Introduction of Waves: Types of Waves “ A Transverse wave is a mechanical wave that causes particles in matter to move at right angles to the direction the wave travels.”

A water wave is a transverse wave, but a water wave is also a longitudinal wave, too. “ A longitudinal wave is the particle displacement and is parallel to the direction of wave propagation. ” (2 paragraph www. acs. psu. edu/drissell/demos/waves/wavemotion. html) Water waves are one of the examples that show both transverse and longitudinal waves. As the waves go through water it travels in clockwise circles. The radius of the path decreases; when the depth of the water increases. Introduction of Waves: Discovered/History

In the eighteenth and the first part of the nineteenth century, after Isaac Newton, French mathmaticians Laplace Lagrange, Parson, and Cauchy made improved linear theories about water waves. At the same time, Gerstner had a theory on nolinear waves and brothers Weber did fine experiments. During 1837-147 Earnshaw, Airy, Kelland, Green, and Bussell made contributions to get ready for Stokes and others subsequent works. This is how to theory of water wave came to be. Water waves have been around here since the second day of creation according to Genesis 1: 6-8 from the Holy Bible.

In the eighteenth century Newton began to build a theory. Uses for Water Waves: Everyday uses Surfing is one of the ways water waves are used every day. Surfing is a beach sport that requires a lot of energy and many water waves. The largest wave sighted was 100 feet tall. On January 28, 2013 Garret McNamara surfed the largest waves in Nazard. We used water waves in surfing, but when you throw a rock into a pond you create a small water wave. When you go out on boats you create and use waves. Water waves are used and created every day. Scientific uses for water waves are transforming water waves in into electricity.

How does this work? In some generators the wave will turn a turbine and it will transform the wave into electricity. There are many types of water wave’s generators. Some stay on the shore line, while others can go into the ocean and work. With waves we could change the way we power our houses and other buildings that have electricity. Scientists use water to make electric energy. Scientists think this could be a new source of energy. Concerns with this wave: Dangers There are many dangers in waves. Tsunamis are one of the world’s biggest disasters every year. The tsunami wave in 1687 that hit Lituya Bay destroyed millions of trees.

Just those water waves uproot millions of trees. Other than tsunami; people have been killed by being out in the ocean with the waves. The waves get over their heads and they can’t swim past them and then they drown. When boats go out in the oceans or lakes, they can be wrecked in an instant by a wave. Does that mean you can never swim, boat, or surf again? No. You have to take precautions and use safety rules to make sure you are safe on the water. Concerns with this wave: Safety Issues Taking safety precautions when it comes to waves can be a matter of life or death.

People drown from waves being too high. There are a few safety rules that can help you stay safe especially if you live near an ocean. During 2005-2009, there were about four thousand drowning deaths. When you are at the beach and waves are a little higher than normal, wear a life jacket. If the waves are higher than normal, it’s probably best to stay out of the water. If you choose to be in the water, you’ll need to be very cautious. When you are boating make sure you have seen the weather forecast to make sure you don’t ship wreck. If you live by an ocean, keep a close eye on the weather.

When they have people leaving the city, that will be your clue to get out of there. People die or get trapped after or during a tsunami. Watching the weather and using common sense can be your best way of keeping safe with water waves. Interesting Facts: Frozen Waves Bailey interviewed her Uncle Kurt McBryde. He works on boats and after he is done he test runs them. He uses the waves to test the boat for stability and performance. He also surfs. Not in the ocean, but behind a boat. Surfing uses water waves too. These are the questions she asked and the answers she got : When you test a boat out on the water how do you use the waves?

When the waves rock and hit the side of the boat i have to make sure that the boat is properly weighted so that the water will not come into the boat when the large waves arrive. How does the boat make water waves? The hul displaces the water and makes all shapes and sizes of waves. When you surf behind the boat does it matter the size of the wave? Yes, it does. When you are surfing the bigger the wave is the easier it is to ride and keep up with. Does the wave effect your performance when you surf? Yes. She enjoyed talking to her uncle and learned a lot. Conclusion

In conclusion, water waves have been around for years; now understand, water waves can help you understand other waves. Water waves may have some dangers, but they can be helpful, too. Now you can answer when were they created. In Genesis 1: 6-8 it states when they were created so they have been around almost all of time. Where do water waves exist? Anywhere there is water and a source of energy that can make a wave. Who started this theory? Isaac Newton began a basic knowledge in a theory we use today. The last key point is you know what a water wave is a body of water forming a mechanical wave.