

## TSUNAMIS

Is a tsunami a terrible natural disaster?

### ORIGIN OF NAME

The word tsunami is a Japanese word, 'tsu' and 'nami', but it is called 'harbour wave' in English. They are called 'harbour waves', because they are only visible when they are near the coast in shallow water. You pronounce tsunami 'soo-nah-mee'.

Tsu

The image shows the Japanese characters for tsunami, '津波' (tsunami), written in a blue, stylized font. The character '津' (tsu) is on top and '波' (nami) is on the bottom.

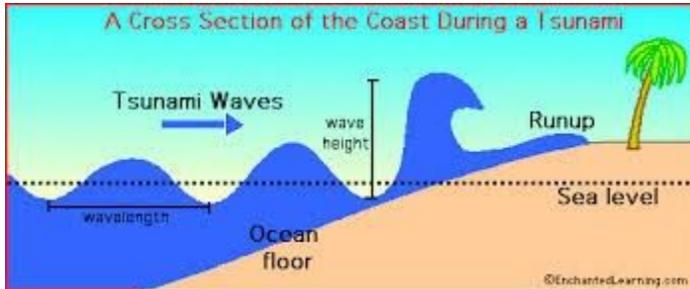
nami

### TSUNAMI VS TIDAL WAVE

Tsunamis are different to tidal waves. A tidal wave is controlled by wind energy, the sun and the moon. The waves can only reach a limited size and speed. Tsunamis however, produce much larger waves and are controlled by underwater volcanoes, landslides and most commonly, earthquakes.

### HOW IS A TSUNAMI FORMED?

When there is an earthquake on the ocean floor, a huge amount of energy tries to travel to the ocean surface. This causes the sea level to rise, gravity then pulls it back to earth. This produces a lot of energy which spreads out to the sides. A tsunami is formed when it reaches shallow water because when the waters are shallow, it makes it grow higher. Did you know a tsunami can move up to 500 MPH which is faster than an aeroplane?



## **DESTRUCTIVE POWER**

It is difficult to know when a tsunami is coming because they are barely noticeable. The defences can't stand up to them, as a result, immediate devastation occurs. When a tsunami hits land, all the people who survive think it's over. However, an hour later a more powerful one comes - this is called a 'wave train'. If a tsunami comes, lives will be lost if you don't evacuate quickly and buildings will be destroyed.

## **SCIENCE**

You should not worry though, because scientists have lots of monitors underwater so people can be safely evacuated with early communication. They also try to make communication systems quicker.