

Tsunami – killer waves

Worksheet 1 Teacher's notes

1. What are natural disasters ? Can you name a few?

earthquake, hurricane, tornado, landslide, mudslide, flood, environmental disaster, avalanche...

2. What do you know about tsunamis? Have you seen any films that depicted that natural disaster? What would you like to know? In pairs write down three questions you would like to find the answers to.

students' own answers

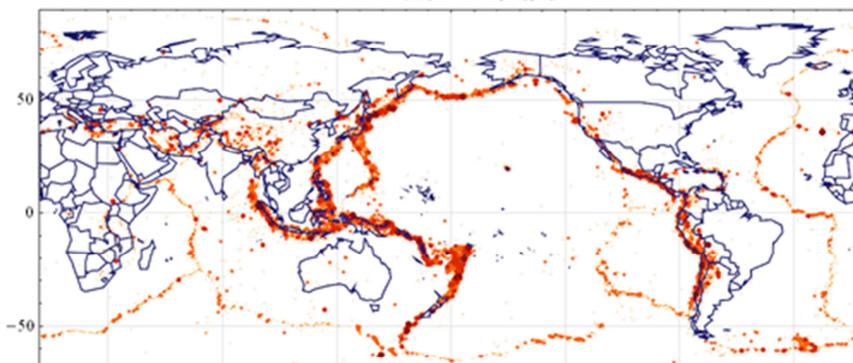


3. Find the answers to the following questions:

- What does the name tsunami mean ? *tsu- harbor, name- wave*
- What is tsunami? *A tsunami is a series of ocean waves that sends surges of water, sometimes reaching heights of over 100 feet (30.5 meters), onto land. These walls of water can cause widespread destruction when they crash ashore.*
- What causes tsunamis? *Tsunamis are caused by geological disturbances within the surrounding areas; they are usually caused by underwater volcanic eruptions, earthquakes and landslides*
- Where in the world 80% of tsunamis happen? *within an area in the Pacific Ocean this area is called the 'Ring of Fire'*
- What is the Ring of Fire? Mark it on the map of the world:

Earthquakes around the world

Between 1973 – 2011/03/13



Magnitude 5 6 7 8 9 10

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<http://blog.wolfram.com/category/geosciences/>

- What is a wave train ? *a series of waves with periods ranging from minutes to hours,*
 - What is the speed of tsunami waves? *500-600mph =800-970 kph*
 - How high are the waves? *100 feet= 30 meters*
 - Can we detect tsunamis? *Modern technology can detect when a tsunami is likely to happen. Seismographs are offshore computers that detect changes in wave heights; it can then send signals and trigger sirens to alert people on land.*
 - What should we do in case of tsunami? *The best defense against any tsunami is early warning that allows people to seek higher ground.*
4. Now go to <http://www.bbc.com/news/science-environment-12739417> and watch a short film how tsunamis are formed.

http://www.bbc.co.uk/science/earth/natural_disasters/tsunami

<http://www.windows2universe.org/earth/tsunami1.html>

<http://kidsgeo.com/geography-for-kids/0146B-tsunamis.php>

<https://www.dosomething.org/facts/11-facts-about-tsunamis>

<http://environment.nationalgeographic.com/environment/natural-disasters/tsunami-profile/>

5. Have you found answers to the three questions you wrote at the beginning of the lesson ? If not, do it now. Share your answers with the rest of the class.

students' own answers

6. At home read up about tsunami disasters, pay special attention to tsunamis that took place in Japan and Thailand.