

Science Experiment Bowl Over

YOU WILL NEED:

Tsunami is a Japanese term for great ocean waves. They are waves caused by earthquakes, submarine landslides, or volcanic eruptions which will bowl you over. They are not anything to do with the tide.

- deep baking pan
- water
- 2 blocks of wood

In this activity, you can create conditions that will produce your own tsunami wave, then you'll understand much better how they are formed and the changes these giant waves produce. This is a great experiment for a hot summer day because it's likely you will get very wet! So either wear your old clothes, or be very careful.

WHAT TO DO

Fill the pan with water, then place the blocks of wood in the bottom of the pan so they are completely below the surface of the water. The object of this experiment is to rapidly compress, or squeeze, the water between the blocks. So, take hold of the blocks and quickly bring them together. Do it again, and again. Continue the squeezing action until the blocks can no longer compress the water.

WHAT HAPPENS

The movement of the two blocks coming together rapidly under the water forces swells of water to the surface, where they form waves that splash over the sides of the pan.

WHY

The action of the blocks and the water in this experiment is similar to the conditions in the ocean depths that produce tsunami waves. Great earthquakes and volcanic forces on the ocean floor cause large amounts of ocean water to be compressed, or squeezed together, and pushed to the surface. There, great walls of water are formed and threaten nearby coastal cities. These great waves sometimes reach heights of 15 to 30 metres. Because they form so suddenly and can be without warning they can be extremely dangerous and often kill many people.