



Waves - What causes waves?

Fact

- Most ocean waves are caused by the wind blowing across the surface of the water. Stronger winds cause larger waves.
- Waves of water don't actually move towards the beach and out again, they only move up and down.
- The energy from the wind makes bits of water move and those bits of water pass the energy on to the next bits which pass it on to then next bits of water and so on, all the way to the shore.
- When a wave breaks along the coastline this is due to the water getting shallow and the bottom of the wave gets slowed down but the top of the wave doesn't and it basically just topples over itself.

Do you know

- Wind also makes waves on lakes.
- You can actually surf the waves of the Great Lakes in America and Canada – the waves are slower and much smaller than at a coastal beach, but you can do it!
- Tsunamis (tidal waves) are different from surface waves. These are usually caused by underwater earthquakes, volcanic eruptions or landslides.

Experiments you can do

Try making your own waves.

What you need;

A large rectangular pan (like a roasting dish)

A sheet thick cardboard

Water

What you do:

Half fill the pan with water and fan air across the surface of the water with the cardboard. Watch what happens. Are waves made? Fan the air gently then do it strongly. What difference does it make to the waves?

Other Investigations

Next time you're in a swimming pool find something small to float in the water, like a toy boat or a clean piece of wood. Make some waves with your body and see if you can make the floating thing move across the pool. Does it float over to the side or does it stay in the same place and bob up and down.

Jokes

What did one wave say to the other? Nothing they just waved
From Analesha Little