

Science 8
Friday Oct 20th.

Distribution of Water

97% of Earth's water is ocean water (salt water)

3% is fresh water, but most fresh water is frozen in ice.

0.5% is how much the planet has readily available to drink.

* Canada owns 40%
of the world's fresh
water.

→ fresh water → No salt.

Surface waves → Waves are large ripples, produced by steady motion of wind energy. Surface waves are waves found in the first layer of the ocean. They are produced by wind.

Deep Ocean Waves → Deep ocean waves are produced further down in the ocean. Temperature, salinity and ocean currents generate these waves.

Coastline

Where land meets sea.

Coastline/Erosion

Energy of waves shape coastlines. During winter, violent waves erode rock and sand.

Gentle summer waves add sand and rock to develop beaches. Sea water contains salt and chemicals that can erode certain rock types.

Some things that can affect the degree of erosion are:

1. Shape of the shoreline
2. wave energy
3. slope of the shoreline
4. Type of rock.

Summer waves are known as constructive waves (helps build up the shoreline). Winter waves are known as destructive waves (tear down, erodes the shoreline)

Erosion → is the washing away or wearing away of soil/land. Erosion can be caused by

wind humans
waves
rain
salt
chemicals

Salinity measures the amount of salts in a liquid. The salinity of our oceans stays at a steady rate → stays the same, therefore, salts enter and leave the ocean.

Salt enters the ocean by:

1. Rivers flow over rocks and pick up salt and take to the ocean.
2. volcanic action

Salt leaves the ocean by:

① Salt spray caused by waves

②

organisms living in the water needs salt for their bones and shells.

-> When they die, they sink to the ocean floor taking the salt with them.

Points to know

- Cold water is more dense (heavier) than warm water. Cold water sinks.
- The saltier the water the more dense it is
- upwelling: cold salty water pushes down

upwelling.

Water gets pushed up

