Density of Ocean Water - NOTES

Thermohaline circulation

* Saltwater vs. Freshwater
* Seawater has a \_\_\_\_\_\_\_\_\_\_ density than freshwater
  + It contains many dissolved substances which add \_\_\_\_\_\_\_\_\_\_\_\_\_
* Ex: you float better in the ocean than in a lake

Salinity

* Salinity is the amount of \_\_\_\_\_\_\_\_\_ dissolved in water
* Measured in grams per 1000ml
* Salinities near shores vary due to the addition of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thermohaline circulation

* Currents caused by differences in \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_
* Colder, saltier water sinks, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ less dense warm water
* Cold water travels towards the \_\_\_\_\_\_\_\_\_\_; warm water travels towards the \_\_\_\_\_\_
* Ex:
  + Antarctica – water freezes, leaving salt behind
    - Creates \_\_\_\_\_\_\_\_\_\_\_\_ dense water
    - Dense water sinks
    - Travels to the equator
    - Displaces warm water which \_\_\_\_\_\_\_\_\_\_and travels to the \_\_\_\_\_\_\_\_\_\_\_

Global Conveyor Belt

How does this affect climate?

* The GCB brings warm air north to high latitudes ( US, Canada, Europe)
* Provides them with a temperate climate
* Even a small \_\_\_\_\_\_\_ in surface \_\_\_\_\_\_\_ (addition of freshwater) prevents water from sinking
  + This addition could throw off the GCB

