

# WATER TREATMENT

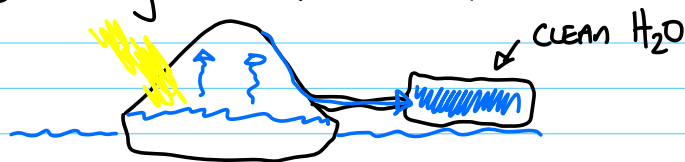
## \* DRINKING OCEAN WATER 101 \*

- 97% WORLD WATER = SALT WATER
- 3 WAYS to turn SALT water to FRESH water.
  1. Distillation
  2. Desalination by distillation
  3. REVERSE OSMOSIS

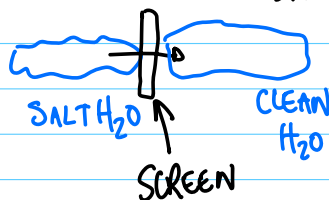
1 **Distillation** → the solution ( $\downarrow H_2O$ ) is BOILED MAKING THE  $H_2O$  EVAPORATE, LEAVING the dirt/BLEH ~~BEHIND~~ BEHIND

\* **Distill** \* Purify a liquid by VAPORIZING IT → CONDENSE IT THROUGH COOLING → COLLECTING the RESULTING LIQUID.

2 **DESALINATION by DISTILLATION** → Removing NaCl (SALT) from  $H_2O$  using HEAT from SUN.



3 **REVERSE OSMOSIS** → PUSHING SALT WATER THROUGH A SEMI PERMEABLE MEMBRANE (AKA A FILTER) OR DIRTY WATER



## OTHER WAYS TO CLEAN H<sub>2</sub>O



SO EASY

- Boil → Kills BACTERIA
- Chemical TREATMENT → CHLORINE
- Iodine - Kills BACTERIA BY disrupting STRUCTURE OF BACTERIA AND REPLACING NECESSARY CHEMICALS W/ IODIDE IONS

SAFE to DRINK 😊