

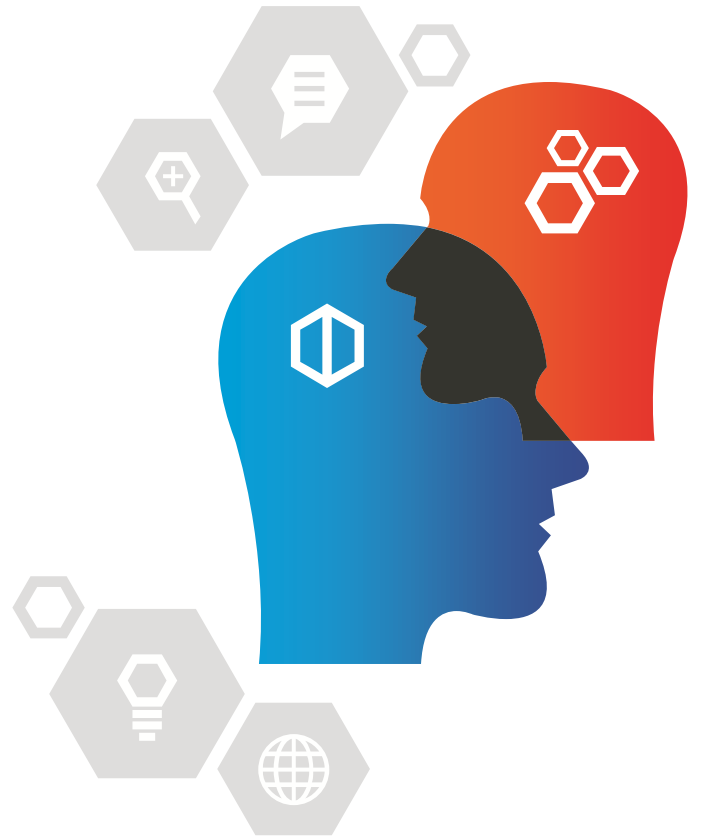


Oceanic ACIDIFICATION

WHAT YOU NEED

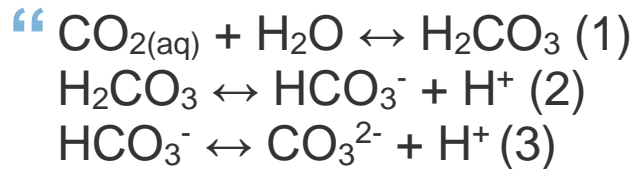
- 4 jars, 2 with lid
- Vinegar, water
- Salt (10 teaspoons)
- Shells or chalk pieces
- Tea light, matches/straw
- Litmus papers
- Small scale

Ocean acidification refers to a **reduction in the pH of the ocean** over an extended period of time, caused primarily by uptake of carbon dioxide (CO₂) from the atmosphere.



FIRST: SHELLS IN ACID

1. Take two clean jars; fill one with water and one with white vinegar.
2. Check pH of both liquids with litmus paper..
3. Find two similar pieces of seashell, or chalk.
4. Put one in each jar
5. Leave the shells/chalk for 12 hours and then compare



- * Have students weigh each shell/chalk piece and record the initial mass.
- * Prepare 2 jars and mark them as 1 and 2, pour the same amount of water and put the same amount of salt in each jar; stir water to dissolve salt
- * But a shell/chalk piece into each jar



Light a tea light and put it on water surface in jar No 2 (it should float); Put a jar lid on, the flame will soon go out. Alternatively, you can blow into the jar through straw. Leave shells in jars with lids on for at least 5 days Check pH with litmus paper After shells are dry, ask students to weigh shells and record mass and weigh the shells/chalk pieces

