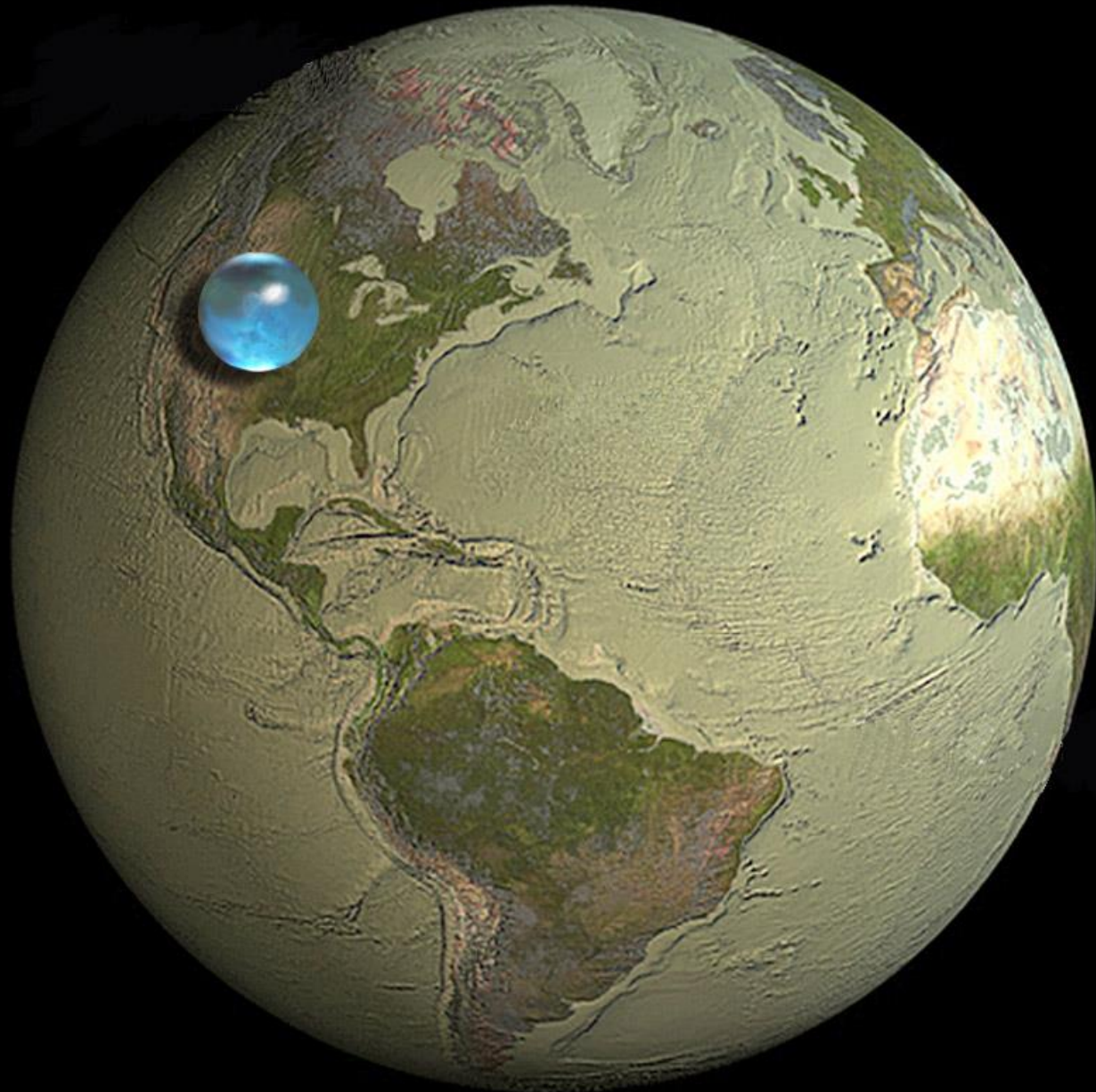




Image credit: Jack Cook, Woods Hole Oceanographic Institute



Meg Chadsey; wsg.washington.edu/about-wsg/staff/meg-chadsey/

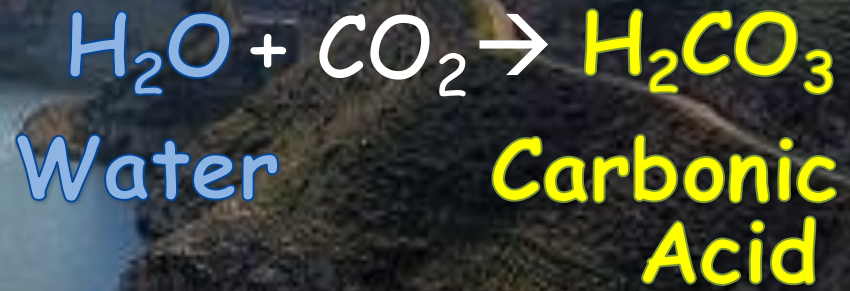
What is Ocean Acidification?

Climate Change

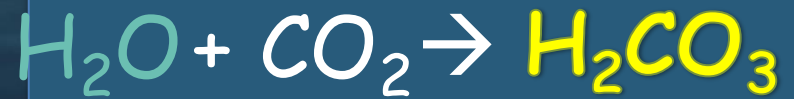
CO₂
(Carbon Dioxide)

The ocean absorbs ~25% of carbon dioxide we emit into the atmosphere.

Ocean Acidification



The pH Scale



Seawater Carbonic Acid

* Average global surface ocean pH

Demonstrations

1) *A Tale of Two Acids: lemon juice vs. CO₂*

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2) *Hold Your Breath: experience how a small decrease in pH can have a big impact*

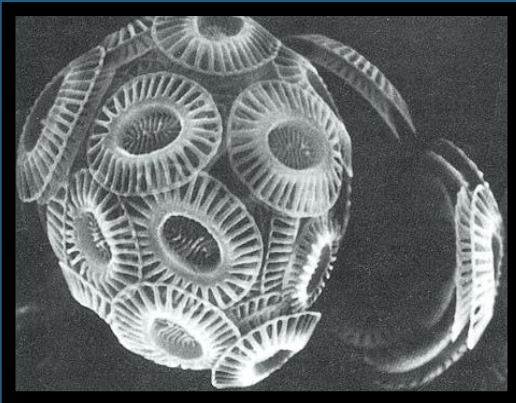
Demonstrations

1) *A Tale of Two Acids*: lemon juice vs. CO_2

2) *Hold Your Breath*: experience how a small decrease in pH can have a big impact

3) *Shells on Acid*: why calcifiers (organisms with calcium carbonate shells) are especially vulnerable to acidification

Ocean Acidification means less calcium carbonate for building shells



Demonstrations

1) *A Tale of Two Acids*: lemon juice vs. CO_2

2) *Hold Your Breath*: experience how a small decrease in pH can have a big impact

3) *Shells on Acid*: why calcifiers (organisms with calcium carbonate shells) are especially vulnerable to acidification

4) *Crossing Thresholds*: what root beer can teach us about acidification

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wsg.washington.edu/our-northwest/ocean-acidification/



Photo: Matt Chadsey