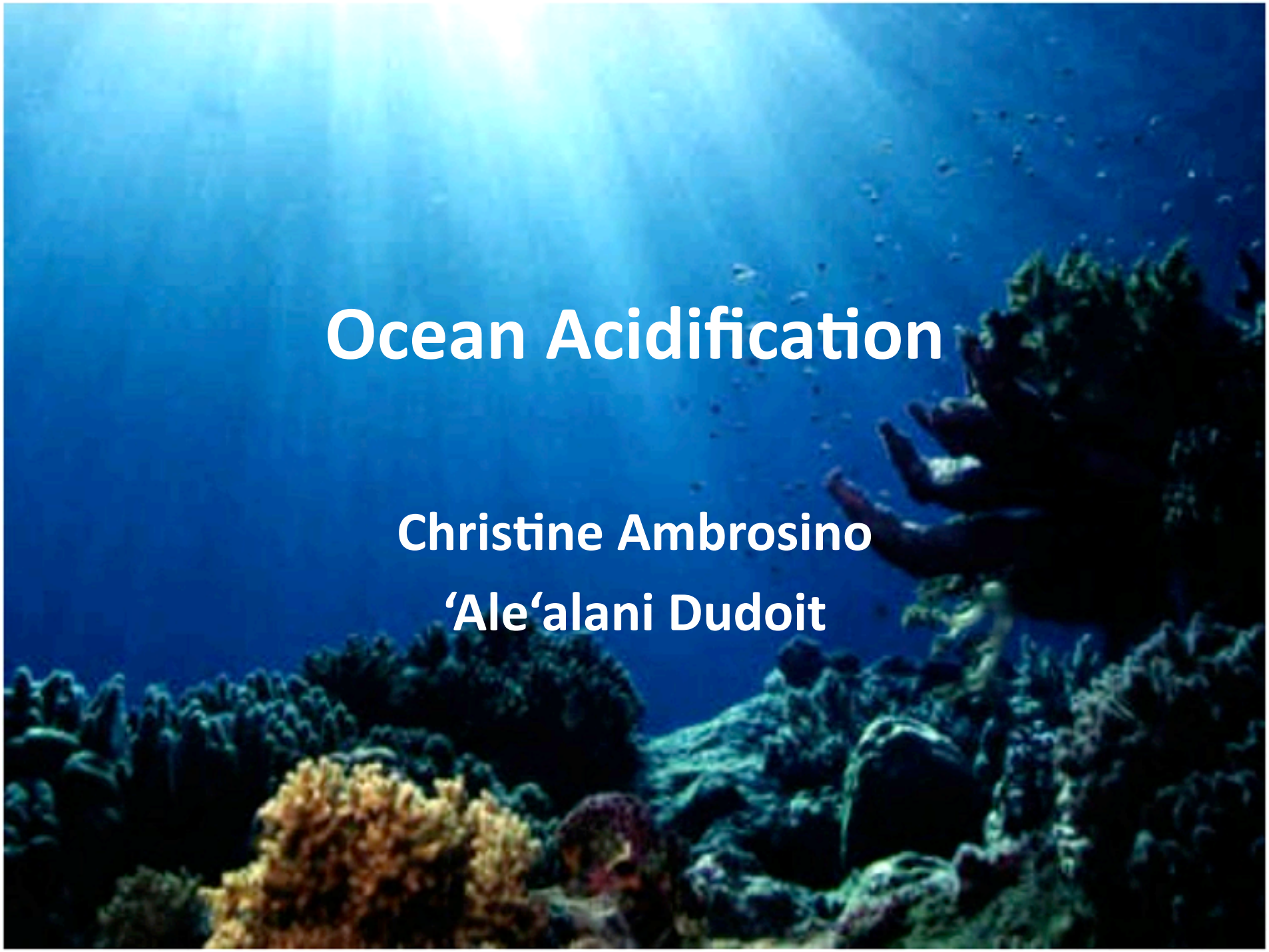
Ocean Acidification
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RULES

- No eating, drinking, gum chewing in the classroom.
- Lunch area is outside the sliding doors within view.
- Don’t wander around without checking with us.
- Wash your hands before you leave the lab.
- Wear shoes.
- Don’t pour sea water down the drain. Empty sea water into a bucket and dispose outside.
- Clean up before you leave the classroom.

What are coral skeletons made of?

A. Sodium bicarbonate
B. Calcium bicarbonate
C. Sodium carbonate
D. Sodium and calcium bicarbonate
E. Calcium carbonate

Which of these are global carbon sources?

A. The ocean
B. Fossils and dead organisms
C. Photosynthesis
D. Automobile and factory emissions
E. Corals

Why would the calcium (Ca^{2+}) concentration in the water increase/decrease after exposing coral skeletons to acidic seawater?

A. It increases due to the coral skeleton dissolving
B. It increases because you are adding calcium to the water
C. It decreases because acidic conditions cause corals to absorb more calcium
D. It remains stable
E. It decreases because it evaporates

What is happening to the atmospheric CO_2 concentration based on recordings from Mauna Loa Observatory?

- A. CO_2 concentration shows a GENERAL increasing trend
- B. CO_2 concentration has been stable
- C. CO_2 concentration increases and decreases annually
- D. Both A and C are correct
- E. Both A and B are correct

Why do scientists think ocean acidification will be bad for corals?

A. It raises the pH so corals cannot grow

B. It raises the pH and consumes carbonate making it difficult for corals to calcify

C. It lowers the pH and consumes carbonate making it difficult for corals to calcify

D. It raises the pH, causing changes in water temperature, which in turn, affects coral growth

E. It lowers the pH, causing changes in water temperature, which in turn, affects coral growth

Which of the following is an example of a GOOD hypothesis?

A. If seashells are exposed to acidic seawater, then global warming is true.
B. If carbon dioxide is added to ocean water with corals in it, then the calcium concentration in the water will increase.
C. If crustaceans are exposed to acidic seawater, then ocean acidification is not a threat.
D. If carbon dioxide is added to ocean water with seashells in it, then they are not made of calcium carbonate.
E. NONE OF THE ABOVE

What causes a solution to become more acidic?

A. An increase in dissolved minerals
B. An increase in hydrogen ions
C. An increase in temperature
D. An increase in pH
E. An increase in carbon

The ocean is becoming more acidic because it is absorbing more…?

A. Carbon
B. Calcium
C. Carbon dioxide
D. Carbonate
E. Oxygen