

A Lesson on Ocean Acidification

Created by Queen Quet, Chieftess of the Gullah/Geechee Nation
for the Ocean Action Information Exchange ©2020

Objective

To learn what ocean acidification is and how it is an aspect of climate change

Questions

- 1) What are the names of the oceans of the world?
- 2) What is acidification?
- 3) What is carbon dioxide?
- 4) What is pH?
- 5) Read the steps in the EarthEcho Water testing kit and obtain water samples. (www.monitorwater.org)
- 6) Observe and journal about what additional creatures you encounter when obtaining water samples. This can be a written, artistic, and/or photographic journal.
- 7) Compare World Water Monitoring Day and World Oceans Day
- 8) Participate in the EarthEcho Water Challenge and write about what you learned by participating in the challenge.
- 9) Create an image or collage of what a healthy ocean would look like and then make one of what would happen if ocean acidification took over the ocean.



There is actually only one ocean that is divided into regional areas that have the names that were listed in Question #1.
Click on the image to hear Bill Nye the Science Guy explain more about the ocean:



www.youtube.com/watch?v=kRdxBJtNbgU&ab_channel=GraskicRoki

Educational Resources for the Educator

- Ocean Conservancy Ocean Acidification Site: <https://oceanconservancy.org/ocean-acidification/>
- EarthEcho Action Guides and Lesson Plans
- <https://www.monitorwater.org/tools/action-guides-lesson-plans>
- Captain Planet Foundation Instructional Resources <https://captainplanetfoundation.org/programs/cpf-resources/educator-resources/workshop-resources/>
- National Oceanic and Atmospheric Administration (NOAA) Ocean Acidification Lesson Plans
- <https://www.nnvl.noaa.gov/StoryMaps/DITC/OA/OceanAcidificationTeachersGuide2016.pdf>
- Climate Change and Ocean Health <https://www.scseagrant.org/climate-change-and-ocean-health/>
- Ocean Acidification Mock Conference Lesson <https://www.calacademy.org/educators/lesson-plans/ocean-acidification-mock-conference>
- South Carolina Marine Educators Association <https://www.scmarineed.org/>

Examples of How to Keep a Field Journal



As you take your journey to the ocean, you will want to keep a journal of what you see and experience.

- How to Keep a Nature Field Journal
Journal Examples
Journal Examples 2

Field Journal Video: <https://www.bing.com/videos/search?>

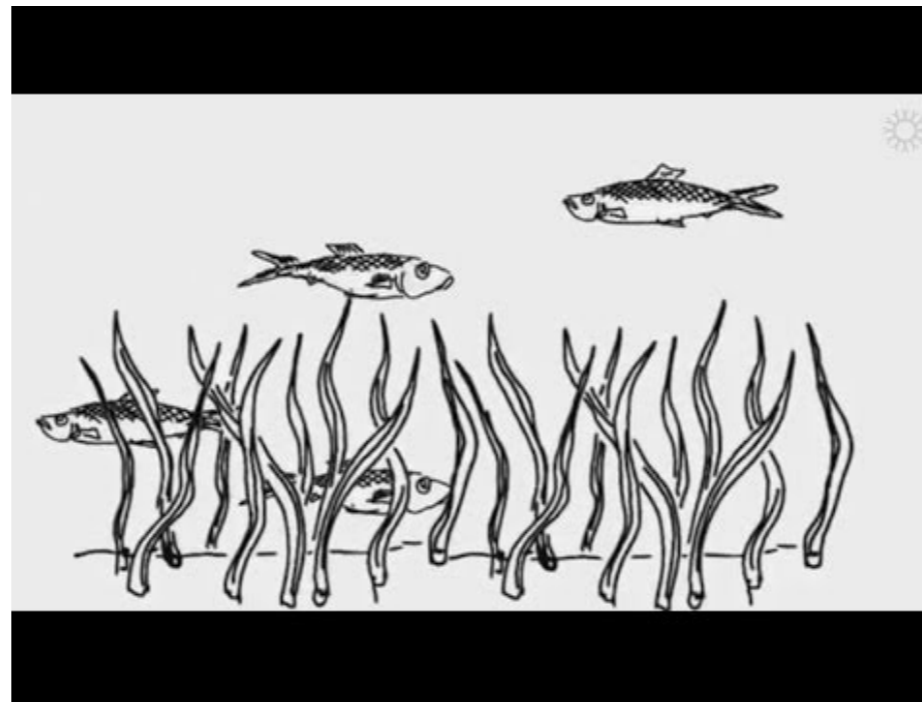
[Videos on What Ocean Acidification Is](#)



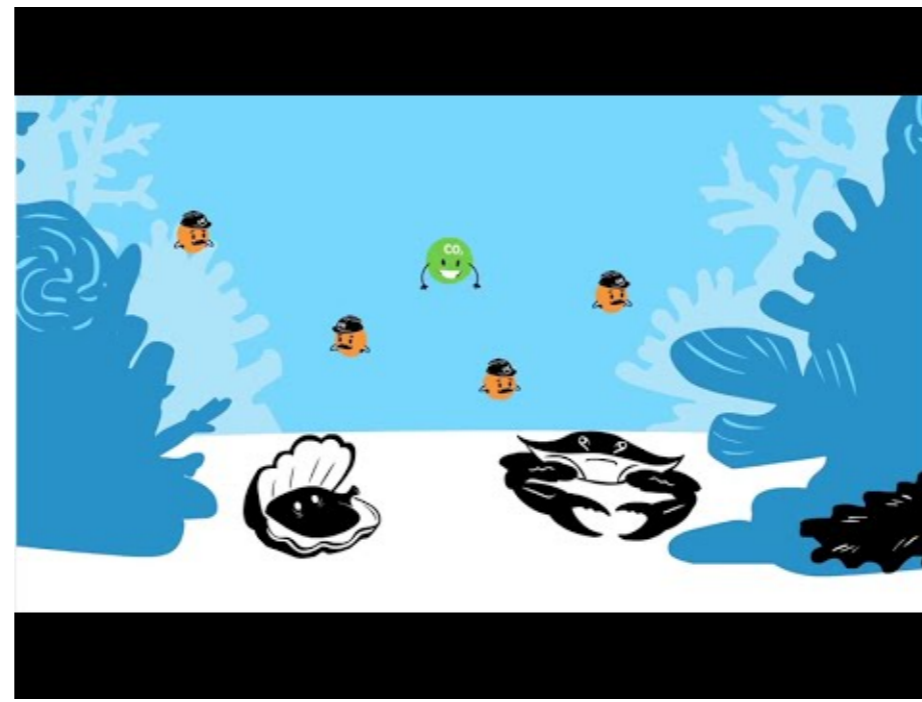
https://www.youtube.com/watch?v=qAkhuETyn5U&feature=emb_logo&ab_channel=Grist



https://www.youtube.com/watch?v=ogZkV-Yj7Hc&feature=emb_logo&ab_channel=Pew



https://www.youtube.com/watch?v=GL7qJYKzcsk&feature=emb_logo&ab_channel=CaliforniaAcademyofSciences



https://www.youtube.com/watch?v=6SMWGV-DBnk&feature=emb_logo&ab_channel=AllianceforClimateEducation



https://www.youtube.com/watch?v=PwophjeptF8&feature=emb_logo&ab_channel=XPRIZE