Water Quality B/C

NCSO Coaches Clinic 2020

Overview

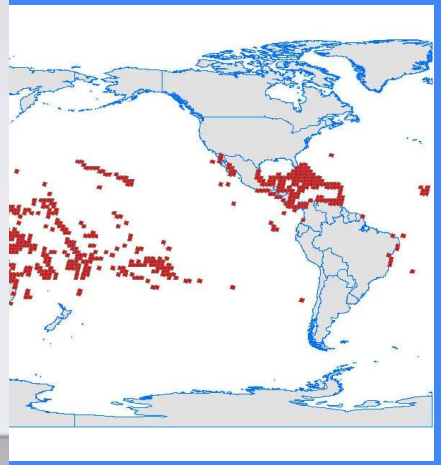
- Marine and Estuary Ecosystems
- One page of notes, low-tech calculator, Salinometer
- Goggles needed!

Three Sections

- Marine and Estuary Ecology
- Macroflora/fauna Identification
- Water Monitoring and Analysis
  - Salinometer

Equal scoring for each part!

What’s New?



Example Questions!

Questions - Marine and Estuary Ecology

- *Acropora* is a genus of stony coral especially susceptible to coral bleaching, a process in which
  - a) coral form a $CaCO_3$ skeleton
  - b) basic conditions cause a color change
  - c) **algae are ejected from polyps**
  - d) direct sunlight causes a loss of pigment

Questions - Marine and Estuary Ecology

- Growth of algae symbionts within coral reefs is highly dependent on which elemental nutrient?
  - a) **Nitrogen**
  - b) Carbon
  - c) Sulfur
  - d) Phosphorous

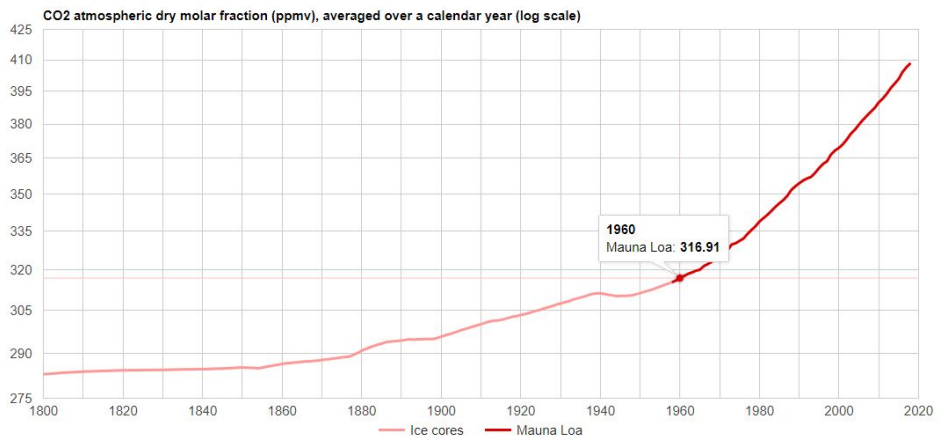
Questions - Identification

- Identify the organism in the image to the right.

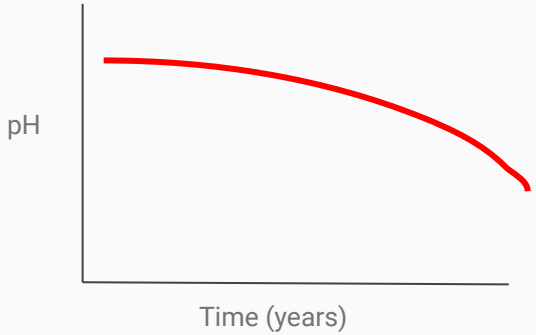
  Long-spined black sea urchin

- Which of the following is likely to occur if this species is absent from the coral reef?
  - a) Nitrogen accumulation
  - b) Coral bleaching
  - c) Gamete release
  - **d) Algae overgrowth**

Questions - Water Monitoring and Analysis



- On the axes provided below, sketch the shape of the graph you would expect given the CO2 information provided



Strategy


Thank You!
Questions?