

My Aquatic Animal Plan

Introduction:

Have students divide into groups of 4. Introduce the topics of respiration and a general digestion reaction. Have students research aquatic animals' respiration and digestion.

Modifications: For students with special scaffolding needs, supply the links for sources to research. Videos are a good source of information as well as Google's Text to Speak extension reads articles to students who struggle with reading skills. (need headphones) Also assessments can be modified to meet needs of any IEPs. For physical handicaps, videos or live stream can be made to allow students to be a part of the data collection if accommodations are not available for specific needs.

Oxygen needs of aquatic animals: <http://w3.marietta.edu/~biol/aquatic/sextant/respire.htm>

How do aquatic animals breathe: <https://www.livescience.com/64260-breathing-underwater-aquaman.html>

Temperature and dissolved Oxygen: <https://www.fondriest.com/environmental-measurements/parameters/water-quality/dissolved-oxygen/>

Flow rate and dissolved oxygen:

https://www.usgs.gov/special-topic/water-science-school/science/dissolved-oxygen-and-water?qt-science_center_objects=0#qt-science_center_objects

Aquatic Life in Tennessee Field Trip:

TVA resources

TDEC guest speakers and field trip to the stream near the boat ramp

U.S. Army Corps Of Engineers

Kayak/Canoe water safety:

TTU exercise science instructor

Probe use:

<https://www.vernier.com/product/o2-gas-sensor/>

<https://www.vernier.com/product/flow-rate-sensor/>

Research time: This will be time to research, collaborate, make the presentation slide show, and write the research paper. It is also the best time for students to misuse time. Make a schedule of daily expected activities to help students to stay focused on the goal. This project should be given at least 3-4 days of class time.

Assessment:

Research paper: Rubric

Presentation: Rubric