
Water Chemistry Testing

As you have likely figured out by now, water chemistry testing is critical to the overall health of your aquarium ecosystem. There is a delicate balance that must be maintained and monitored regularly to make sure your fish stay healthy.

Assignment #3

With your team, decide which water chemistry parameters are critical to health of your fish. How often should these tests be performed? How will you keep track of the data? How will you communicate your data with others? What are the "critical values" for each test - the values above or below which your fish can become sick or even die? There are some resources to help you get started at:

<http://www.cstecalumet.org/Aquatic%20Adventures%20Academy/waterchemistry.html>

Communicating Research Findings

Prepare a presentation to share your findings with the rest of the group. Be sure to include proposed solutions to the questions posed above. You should also include support for each response.

Curriculum Connections

Can you think of other examples where the testing and monitoring of water is important? How about examples that do not involve water? What makes the testing so important in these situations?



Aquatic Adventures Academy Project Rubric

Teacher Name: _____

Student Name: _____

CATEGORY	4	3	2	1
Plan for Organizing Information	Students have developed a clear plan for organizing the information as it is gathered and in the final research product. All students can independently explain the planned organization of the research findings.	Students have developed a clear plan for organizing the information in the final research product. All students can independently explain this plan.	Students have developed a clear plan for organizing the information as it is gathered. All students can independently explain most of this plan.	Students have no clear plan for organizing the information AND/OR students in the group cannot explain their organizational plan.
Response to Questions	Students present well-developed responses to all of the posed questions.	Students present well-developed responses to most of the posed questions.	Students present well-developed responses to some of the posed questions.	Students present well-developed responses to few to none of the posed questions.
Delegation of Responsibility	Each student in the group can clearly explain what information is needed by the group, what information s/he is responsible for locating, and when the information is needed.	Each student in the group can clearly explain what information s/he is responsible for locating.	Each student in the group can, with minimal prompting from peers, clearly explain what information s/he is responsible for locating.	One or more students in the group cannot clearly explain what information they are responsible for locating.
Quality of Sources	Researchers independently locate at least 2 reliable, interesting information sources for EACH of their ideas or questions.	Researchers independently locate at least 2 reliable information sources for EACH of their ideas or questions.	Researchers, with some adult help, locate at least 2 reliable information sources for EACH of their ideas or questions.	Researchers, with extensive adult help, locate at least 2 reliable information sources for EACH of their ideas or questions.
Group Timeline	Group independently develops a reasonable, complete timeline describing when different parts of the work (e.g., planning, research, first draft, final draft) will be done. All students in group can independently describe the high points of the timeline.	Group independently develops a timeline describing when most parts of the work will be done. All students in group can independently describe the high points of the timeline.	Group independently develops a timeline describing when most parts of the work will be done. Most students can independently describe the high points of the timeline.	Group needs adult help to develop a timeline AND/OR several students in the group cannot independently describe the high points of the timeline.