Monitoring Water Quality Infographic

Now that you have identified the various chemical and biological issues impacting the site, you must demonstrate your understanding to a local environmental governmental body in a visually supportive and concise way. In your group of 3, you and your team must create an infographic that:

- 1) identifies and provides evidence for which chemical parameters are causing the widespread fish death at your assigned environmental site
- 2) identifies and describes the relationship between human activities and the environmental parameters causing the fish death
- 3) identifies and provides relevant solutions to addressing these issues backed up by scientific research (you may consult your textbook or websites like <u>National Geographic</u>, <u>NASA Climate Change</u>, and <u>ScienceDaily</u>).
- 4) provides a comprehensive breakdown of each group member's contributions in developing and finalizing the infographic (this can be attached separately to the infographic).

Here are some examples of infographics:

- <u>https://thenehemiahfund.org/2015/07/06/understanding-food-insecurity/</u>
- <u>https://elearninginfographics.com/wp-content/uploads/Digital-Learning-Realities-2017-Infographic.png</u>
- <u>https://marinedebris.noaa.gov/multimedia/infographics#prettyPhoto[field_image_image]/</u> 3/

Remember, infographics are graphic visual representations of information, not essays. Try to use text in a concise and effective manner to explain your graphic choices, rather than to explain everything with words. Your infographic may be digital or physical. Here are some websites you may consider using to make your infographic:

- <u>https://piktochart.com/</u>
- <u>https://www.canva.com/</u>
- <u>https://infogram.com/</u>
- <u>https://www.visme.co/make-infographics/</u>

Include any references used either separately attached or at the bottom of the infographic.

Your group's infographic is due on Tuesday, April 24.

Criteria	4 - Excellent	3 - Good	2 - Basic	1 - Not Meeting
Content				
Shows understanding by explaining and/or demonstrating the water quality measures related to the environmental issue for the given case study (STEM 1).	Shows a deep understanding of the given case study by evaluating, justifying, and defending the results of water quality measures and provides new insights into their environmental impact accurately and precisely, rarely making errors or omissions.	Shows proficient understanding of the given case study by analyzing and applying the results of water quality measures to their environmental impact in new ways, rarely making errors or omissions.	Shows adequate understanding of the given case study by explaining the results of water quality measures with partial accuracy, and/or making some errors or omissions.	Shows minimal to no understanding of the given case study by providing little to no assessment of the results of water quality measures with poor accuracy, and/or making numerous errors or omissions.
Formulating a conclusion: Analyzes, interprets and evaluates processes and results by making scientific conclusions about the human activities and the environmental issues for the given case study <i>(STEM 2).</i>	Makes a compelling conclusion on all the information collected and analyzed, related to human activities and the environmental issues for the given case study.	Makes a valid conclusion based on most of the information collected and analyzed, related to human activities and the environmental issues for the given case study.	Makes an invalid conclusion based on the information collected and analyzed, related to human activities and the environmental issues for the given case study.	Fails to make a conclusion or makes a conclusion that is not based on any of the information collected, related to human activities and the environmental issues for the given case study
Identify, analyze and appreciate appropriate and inappropriate solutions related to	The solutions presented for the given case study develop a	The solutions presented for the given case study develop a convincing	The solutions presented for the given case study develop a simplistic	The solutions presented for the given case study develop a vague position of

the environmental issue for the given case study (STEM 4).	perceptive position of environmental solutions supported by significant evidence (references).	position of environmental solutions supported by relevant evidence (references).	position of environmental solutions supported by reasonable evidence (references).	environmental solutions supported by weak evidence (references).
Organization				
Performs and records: collecting and organizing information <i>(STEM</i> <i>3)</i> .	Locates, evaluates and selects completely relevant information in an organized manner.	Accurately presents information in an organized manner.	Locates information but does not always evaluate its relevance. Makes an attempt to present information in an organized manner.	Does not locate information or includes completely irrelevant information. Information is not presented in an organized manner.
Visuals/Scientific Writing				
Using a variety of Information Communication Technologies and other media and tools to collect, present, and share information (STEM 3).	Infographic multimedia, color choice, and design are highly relevant and aesthetically pleasing.	Infographic multimedia, color choice, and design are mostly relevant and is mostly aesthetically pleasing.	Infographic multimedia, color choice, and design are somewhat relevant and is somewhat aesthetically pleasing.	Infographic multimedia, color choice, and design are unrelated and is not aesthetically pleasing.
Records and explains reasoning and procedures clearly and completely, including appropriate terminology (STEM 3).	Provides a compelling explanation using precise scientific vocabulary with few to no grammatical errors.	Provides a meaningful explanation using effective scientific vocabulary with some grammatical errors.	Provides a plausible explanation using simplistic vocabulary with multiple grammatical errors.	Provides vague explanation using incorrect scientific vocabulary with numerous grammatical errors.
Collaboration				

Teamwork collaborate, share work with others. Evaluate individual and group processes (STEM 3).	Students provide significant evidence to demonstrate they have collaborated in an exemplary manner with each member taking responsibility for and completing their share of the workload.	Students provide satisfactory evidence to demonstrate they have collaborated in an effective manner with most members taking responsibility for and completing their share of the workload.	Students provide some evidence to demonstrate they have collaborated in an adequate fashion with a few members taking responsibility for and fulfilling part of their share of the workload.	Students provide little to no evidence to demonstrate they have collaborated successfully with only one member taking responsibility for the entire workload.
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