

Agents of Change on Pharmaceuticals in Waterways Presentation

Name: _____

Pick at least five of the eight standards to cover in your research presentation on Interdependent Relationships in Ecosystems (Life science) and Engineering Design.

| NGSS Standard | (4) Excellent | (3) Good | (2) Almost | (1) Not Yet |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HS-LS2-1 | Used effective mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. | Used some mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems but not at different scales. | Used poor mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems but not at different scales. | Used no mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. |
| HS-LS2-2 | Used effective mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems at different scales. | Used some mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems but not at different scales. | Used poor mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems but not at different scales. | Used no mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems but not at different scales. |
| HS-LS2-6 | Effectively evaluated claims, evidence, and reasoning that the complex interactions in an ecosystem maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. | Evaluated some claims, evidence, and reasoning that the complex interactions in an ecosystem maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. | Evaluated few claims, evidence, and reasoning that the complex interactions in an ecosystem maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. | Did not evaluate claims, evidence, and reasoning that the complex interactions in an ecosystem maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. |
| HS-LS2-7 | Effectively designed, evaluated, and refined a solution for reducing the impacts of human activities on the environment and biodiversity. | Designed, evaluated, and refined a moderately plausible solution for reducing the impacts of human activities on the environment and biodiversity. | Designed, evaluated, and refined an unrealistic solution for reducing the impacts of human activities on the environment and biodiversity. | Did not address a design, evaluation, or refine a solution for reducing the impacts of human activities on the environment and biodiversity. |
| HS-LS2-8 | Effectively evaluated the evidence for the role of group behavior on individual and species' chances to survive and reproduce. | Somewhat evaluated the evidence for the role of group behavior on individual and species' chances to survive and reproduce. | Insufficiently valued the evidence for the role of group behavior on individual and species' chances to survive and reproduce. | Did not evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce. |
| HS-LS4-6 | Effectively created or revised a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity. | Created or revised a moderately plausible simulation to test a solution to mitigate adverse impacts of human activity on biodiversity. | Created or revised an unrealistic simulation to test a solution to mitigate adverse impacts of human activity on biodiversity. | Did not create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity. |
| HS-ETS1-2 | Effectively designed a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. | Designed a moderately plausible solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. | Designed an unrealistic solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. | Did not design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. |
| HS-ETS1-3 | Effectively evaluated a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts. | Evaluated a moderately plausible solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts. | Evaluated an unrealistic solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts. | Did not evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts. |