Environmental Stewardship

Lesson 10: Summative Assessment

Grade Level: 9-12
Time Required: 2 - 50 minute class periods. (1 Day of work time & 1 Day of Presentations)

Summary/Objective
Students will create a "One-Pager" to demonstrate their understanding of this curriculum module. This assessment allows students to show what they have learned while giving them the flexibility and creativity to create a product they can be proud of.

Engineering Connections: Environmental & Civil Engineering

Standards
HS-PS1-2 Matter and its Interactions
Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.
HS-PS1-5 Matter and its Interactions
Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.
HS-LS2-3 Ecosystems: Interactions, Energy, and Dynamics
Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions.
HS-LS2-7 Ecosystems: Interactions, Energy, and Dynamics
Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
HS-ESS3-4 Earth and Human Activity
Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.
HS-ETS1-1 Engineering Design
Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
HS-ETS1-3 Engineering Design
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.

Assessment

One-Pager Scorecard & Directions

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Name:_____
Period:_____

One - Pager Score Card

Directions: Choose one of the following main areas for your one-pager. (Landfills, Leachate, Water Quality/Treatment, Water Pollution, Chemistry of Water)

Engineering Connection ● What fields of engineering might be associated with this topic? ● What types of problems would they be solving?	
Personal Relevance ● Why does this topic matter to you?	
Vocabulary ● 3-6 key vocab terms are incorporated/defined	
Diagram ● Neatly constructed ● Correctly labeled	
Takeaways ● Describe 5 things you have learned.	
Creativity - ● Poster is nicely put together ● Several colors used.	
Total Score	