Unit 2 Properties of Matter – Assessment

Project Information:

You will add to the playlist by creating a short video of a digital project. You can use a song, stop-motion video, movie skit, poem, digital poster, or Ted-Talk or cool science lab demonstration (...pretty much a free-choice) to answer the question:

How can you exploit the properties of plastic and pollution to clean up the huge patches of plastic floating in our oceans?

Assignment Criteria:

1. Video file correctly named: ***Last Name, First Name, Our Oceans 2022*** filed in shared Science Folder (5 pt)
2. Evidence of Project Preparation - *Notes and brainstorm on **Prep Page*** shared in Science Folder (5 pts)
3. Video is longer than *2 minutes* and less than *3 minutes* in length. *(5 pts)*
4. Video includes a brief *definition* and *description* of matter as well as the ***properties of matter***. (10 pts)
5. Video includes a brief description of ***density*** and how density allows us to predict floating or sinking. (10 pts)
6. Video includes a ***solution*** to a global problem in the question with evidence of how the proposed solution is solving a problem or dealing with a difficult situation. (30 pts)
7. High quality projects include images, photos or drawings, models, video clips, music or audio. Examples of matter, its properties, of your proposed solution to support your solution are included. (10 pts)
8. **Peer Review** Editing during Collaboration-Conference (5 pts)

Completeness of Assignment Criteria	Subject Knowledge	Quality of Project and Collaboration	Total
_____ / 15 points	_____ / 50 Points	_____ / 15 points	_____ / 80 points

Unit 2 Properties of Matter – Assessment

Learning Targets:

List and describe characteristics of solids, liquids, and gasses.

Conduct a lab investigation involving changes in state of matter (given direction & procedures).

Read and interpret a heating curve graph.

Explain the relationship between atoms, particles, thermal energy and state of matter by Creating/Describing a simulation of the three states of matter.

Define, describe, and calculate the density of a substance; D=m/v

Create a model to show increasing density on the molecular level.

Explain the relative position of substances, based on density, in water = 1.0g/ml.

Convert numerical quantities using metric conversion.

Collect accurate data during a lab investigation.

Unit Vocabulary to Include/Keep in Mind:

Solid Liquid Gas Plasma Phase Change Boiling Point Melting Point Sublimation Deposition Density Irregular shaped object Regular shaped object Independent variable Dependent variable Mass Volume

	1.0	0.9 - 0.5	0.5 - 0
Completeness of Assignment Criteria (x15)	Project meets assignment criteria completely. Project is named correctly, shared, between 2 and 3 minutes long, submitted on time and shows evidence of preparation. (15pts)	Project meets the majority of assignment criteria.	Project does not meet enough assignment criteria to be considered complete.
Subject Knowledge (x50) ****NOTE: Not all vocabulary terms need to be included for full credit****	Project clearly and correctly describes matter and density. The solution proposed is grounded in science with evidence and is supported with compelling evidence. (50 pts)	Project is mostly correct and clear in its explanation of matter and density and the solution is presented with some evidence. May be missing one or more concepts and/or minor errors.	Project contains numerous factual errors and/or is missing concepts necessary for a complete explanation of the properties of matter or density. Major features to the solution are missing.
Quality of Project (x15)	Project quality meets expectations. Examples present. Graphics or models are used appropriately, easy to see and enhance explanation. Collaboration during conference.	Project quality is approaching expectations; models or graphics are approaching expectations; One element may be missing.	Project quality is poor- difficult to see text, graphics or models. Graphics or models are poorly created. Many missing elements. No collaboration conference.