

Density WebQuest

WebQuest Description:

Grade Level:

Curriculum:

Keywords:

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WebQuest URL: <http://zunal.com/webquest.php?w=339699>

Introduction

Why is it that ice floats in water, but a brick sinks down to the very bottom? Why is it that oil always sits on top of water? It's all about DENSITY! Throughout this web-quest we will go on a journey by using a simulation to discover what causes certain objects to sink and others to float. Objective: ESWBAT identify and explain the relationship between mass, volume, and density. Do Now: Answer the following question based on your prior knowledge and the images above you viewed. Which is heaviest 1 kilogram of gold or 1 kilogram of feathers? Explain your response.

Tasks

Today you will be investigating a digital lab with your lab partners. Each group is made of three to four scholars. Your first task is to assign one of these roles to one group member. Each group member should have at least one role (one member may have more than one)

- Laptop A manager - this scholar will be using Laptop A, no other scholar can touch or use this laptop.
- Laptop B Manager - this scholar will be using Laptop B, no other scholar can touch or use this laptop. (This scholar should know how to type quickly because they will be doing the majority of typing)
- Time Manager - this scholar will be keeping track of the time left. They will be given a stop watch to keep track of time.
- Group Manager - this scholar will make sure the group is following all the instructions on the Web Quest website and ensuring scholars remain on task.

Next, in your groups: Proceed to the Process tab and complete Steps 1, 2, and 3. Each step will contain a website link you must visit and a word document link. Each website has its own word document. You are required to complete the questions or input the data into each word document. (Answers on word document will be graded based on ACCURACY, not EFFORT) Once you have completed each step, make sure to check the rubric. Rubric will describe how points will be awarded for each section. You may check off each section to make sure you have completed each component properly.

Process

Step 1: Visit the following

website: (<http://easyscienceforkids.com/density/>) On Laptop A Make sure to press the previous link or copy and paste it to the search bar on your web browser. Once you visit the website, on Laptop B make sure to open the word document titled Step 1 WORD DOCUMENT. You will be answering the questions on the word document. Word Document for Step 1 is found in the list of links at the bottom of this page. Please make sure you are using the word document titles STEP

1!

Step 2: Visit the following

website: (http://www.goodsitesforkids.org/images/density_liquids.jpg) On Laptop A Make sure to press the previous link or copy and paste it to the search bar on your web browser. Once you visit the website, on Laptop B make sure to open the word document titled Step 2 WORD DOCUMENT. You will be answering the questions on the word document. Word Document for Step 2 is found in the list of links at the bottom of this page. Please make sure you are using the word document titles STEP

2!

Step 3: Visit the following

website: (<https://phet.colorado.edu/en/simulation/legacy/density>) On Laptop A Make sure to press the previous link or copy and paste it to the search bar on your web browser. Once you visit the website, on Laptop B make sure to open the word document titled Step 3 WORD DOCUMENT. Follow the clear directions on the word document on how to navigate the website. Make sure to follow each step closely and LOOK AT THE PHOTOS to guide you. Word Document for Step 3 is found in the list of links at the bottom of this page. Please make sure you are using the word document titles STEP

3!

What will Ms. Lopez be doing? As you are completing each step, I will be walking around to check in with each group. These check ins will be for about two minutes per group. This is your opportunity to ask any clarifying questions. You may raise your hand if you have any lingering questions, DO NOT call out my name. I will be working with each group,

