What's Jhe Matter: WebQuest



Answer these Essential Questions during your quest:

Site 1: Click on the link below, watch the video & answer the following questions. <u>http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm</u>

1. According to this video, what is matter?

2. PHYSICAL characteristics of a substance change as it goes from one state of matter to another. What three (3) defining characteristics explained in the video are DIFFERENT for each state?

1. 2. 3.

Site 2: Click on the following website and read the page. After reading the <u>States Of</u> <u>Matter</u> answer the questions. <u>http://chem4kids.com/files/matter_states.html</u>

3. A STATE of Matter can also be called a what?

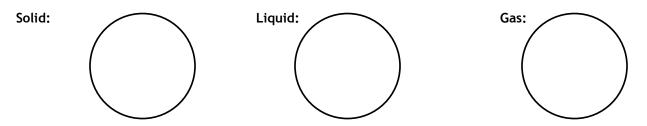
4. When the temperature of an object or system increases, what happens to the atoms and molecules of that substance?

5.**ABOUT THE PHYSICAL:** Draw the ENERGY PHASE CHANGE DIAGRAM/GRAPH of what happens to the energy in a substance when it changes from solid to liquid to gas.

Site 3: GOTO: <u>http://www.harcourtschool.com/activity/states_of_matter/</u> Click on a state of matter to view the ENERGY of the particles.

6. In Liquids, why are particles able to move past each other and change their shape?

7. Draw the microscopic particles inside each of the three states of matter:



8. In which state of matter do the particles move the fastest? What causes this?

9. In which state of matter is the temperature the COLDEST?

Site 4: GOTO:

http://www.bbc.co.uk/bitesize/ks2/science/materials/material_properties/play/ 10. Describe 3 Characteristics of the different materials used for building:

11. Are these PHYSICAL or CHEMICAL properties of the materials?

Site 5: GOTO this link and click PLAY: http://www.bbc.co.uk/schools/scienceclips/ages/10_11/rev_irrev_changes.shtml

12. Drag the different substances into the beaker to see which one dissolve and which do not. (Click the arrow to change the material) Name three materials that dissolve in this activity:

13. What 2 material(s) in this activity created a HETEROGENOUS MIXTURE?

14. What do we call SOLID MATERIALS that can DISSOLVE in a SOLUTION?

Click the REVERSING button. Drag the materials into the beaker to see which changes are permanent or irreversible.

15. What material(s) went through a CHEMICAL CHANGE?

16. What material(s) went through a PHYSICAL CHANGE?

GOTO this link and click PLAY:

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17. Is BURNING a PHYSICAL or CHEMICAL change? How do you know?

18. What does the speaker call the material that does the dissolving?

19. When you **FREEZE** the ice to SLIP UP Skull, what kind of CHANGE is occurring, PHYSICAL or CHEMICAL? How do you know?

20. Were ALL the IRREVERSIBLE CHANGES in this activity, PHYSICAL or CHEMICAL?

Site 7: Now that you have reviewed the three states of matter, SEE IF YOU REALLY KNOW THE PROPERTIES OF THE THREE STATES OF MATTER??? http://glencoe.mcgraw-hill.com/sites/0078617650/student_view0/chapter3/section1/self-check_quiz-eng_.html

Take the self quiz. Click Submit & Write your results here: Score: _____

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5.ABOUT THE PHYSICAL: Draw the ENERGY PHASE CHANGE DIAGRAM/GRAPH of what happens to the energy in a substance when it changes from solid to liquid to gas.

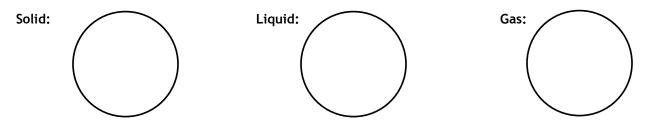
6. Watch the VIDEO at the bottom. Where exactly in our solar system is this water found?

7. Knowing its location, **DESCRIBE TWO PROPERITES** of the water that should be different than ours.

Site 3: GOTO: <u>http://www.harcourtschool.com/activity/states_of_matter/</u> Click on a state of matter to view the ENERGY of the particles.

8. Describe two properties that allow the particles of a liquid to move past each other and change their shape?

9. Draw the microscopic particles inside each of the three states of matter:



10. In which of these states of matter do the particles move the fastest? What causes this?

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