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| 1. Define the following:    1. Element –    2. Molecule –    3. Compound – | | * 1. Mixture –   2. Homogeneous mixture –   3. Heterogeneous mixture – | |
| 1. What did the playdough balls represent in this activity? What did the toothpicks represent? | 1. The element section did not have any toothpicks. Why? | | 1. What is the difference between a molecule and a compound? |
| 1. If you were looking at the particles, a drawing, or model of a compound, what are some things you would notice? | 1. If you were looking at the particles, a drawing, or a model of a molecule, what is one thing you could you see that you would not see in a compound? | | 1. In the mixture section, why didn’t you connect the water and the salt with a toothpick? |
| 1. Look at the particles of the following substances. Determine if it is an element, compound, or mixture.   Pure Gold (Au) Carbonic Acid Sugar (C6H12O6) Ammonia (NH3) Kool Aid  water[1]water[1]water[1]http://www.chemistry-reference.com/images/structural/carbonic%20acid.pngsugar[1]220px-Ammonium-3D-balls[1]water[1]         \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ http://upload.wikimedia.org/wikipedia/commons/5/5a/D-glucose-chain-3D-balls.pngwater[1]water[1]http://upload.wikimedia.org/wikipedia/commons/5/5a/D-glucose-chain-3D-balls.pnghttp://upload.wikimedia.org/wikipedia/commons/5/5a/D-glucose-chain-3D-balls.png    Mystery Substance Nitrogen H2O2 Air Silver (Ag)  C:\Users\roehml\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\V6LRM1PL\220px-Methane-3D-balls[1].pngatom2[1][1]http://upload.wikimedia.org/wikipedia/commons/7/7a/Sphere-with-blender.pngC:\Users\roehml\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\7JUOCVZ6\N2[1].jpghttp://upload.wikimedia.org/wikipedia/commons/7/7a/Sphere-with-blender.pnghttp://upload.wikimedia.org/wikipedia/commons/7/7a/Sphere-with-blender.pngC:\Users\roehml\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\7JUOCVZ6\Carbon_Dioxide[1].png125px-Hydrogen-peroxide-3D-balls[1]http://education.jlab.org/qa/atom_model_03.gifhttp://upload.wikimedia.org/wikipedia/commons/c/cf/Ammonium-nitrate-xtal-3D-balls-A.png  http://upload.wikimedia.org/wikipedia/commons/7/7a/Sphere-with-blender.png  C:\Users\roehml\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\0V3JGUBA\190450_350px-Water_molecule.svg_68[1].jpg  \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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| 1. Identify if each statement is referring to an atom, element, molecule, compound, or mixture. | |
| * 1. The smallest unit of an element that has the same properties as the element.   2. A pure substance made of two or more atoms of the same element that are bonded together | 1. More than one substance that can be separated by physical means. 2. A pure substance that is made of all the same type of atom. |
| 1. More than one substance chemically bonded together, can be separated only by chemical means. | |
| 1. Match the diagrams to the description that best matches.    1. Element    2. Compound    3. Mixture of Elements    4. Mixture of Compounds    5. Mixture of Elements and  Compounds   1. \_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_  4. \_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_\_\_\_\_\_ | |
| 1. Draw particle diagrams (like you see in Q10) for each of the things described.   *Homogenous mixture made up Heterogeneous mixture Homogenous mixture   of an gaseous element and a made up of two different made up of two different  gaseous compound. liquid compounds solid elements* | |
| 1. Complete the classification  of matter  flow chart:   *Uniform*  *Not uniform*  **Heterogeneous**  *All one type of atom  NOT bonded together*  **Element**  *One or more types of   elements bonded together*  *More than one type of  element bonded together*  *Separated by  physical means*  *Separated by  chemical means*  **Pure substance**  **MATTER** | |

*Put glue here in this margin to make a “flippy”*☺