| **Physical and Chemical Changes** | |
| --- | --- |
|  | |
| **Complete the activities in this order.** | **As you do the activities, answer these questions.**  Type your answers in a different color. |
| **Watch and Listen** |  |
| <https://www.youtube.com/watch?v=x49BtB5dOwg> | 1. What is a physical change?   A physical change is a change to a sample of matter in which some properties of the material change, but the identity of the matter does not.   1. What is an example of a physical change?   Examples of physical change include, cutting paper, melting butter, dissolving salt in water, and breaking glass.   1. How can water be an example of a physical change?   One example of a physical change is the evaporation of water. When water evaporates, it changes from a liquid state to a gas state. But, it is still water.   1. What are three indicators of a chemical change?   Bubbles of gas appear. Gas-producing reactions run to completion when the gas can leave the reaction mixture. A color change occurs. A change in melting point or boiling point occurs.   1. Can a chemical change be undone?   Chemical changes generally result in newer substances and hence cannot be undone. Consider, for example, the burning of logs. We cannot change the ashes from these burnt logs back into the wood.   1. What is a chemical change?   Chemistry. a usually irreversible chemical reaction involving the rearrangement of the atoms of one or more substances and a change in their chemical properties or composition, resulting in the formation of at least one new substance   1. What is one example of a chemical change?     Rusting of iron in presence of moisture and oxygen.   1. What are 4 facts about chemical changes?   In a chemical reaction, new substances are created from reacting substances.  Chemical reactions can produce heat and light. For example, burning of wood.Many rockets use the reaction of oxygen and hydrogen for their propulsion and Heating sugar to form caramel.   1. What are 4 facts about physical changes?   All physical changes are reversible and their mass does not change. Some examples are changes of shape, changes of states, and passing electricity through a copper wire. Physical changes could be: melting, freezing, boiling/evaporating, condensing, deposition and sublimation. |
| **Read** |  |
| Click the image to access the link    I  <http://www.chem4kids.com/files/matter_chemphys.html> | 1. What are physical changes usually about? 2. What interacts to cause chemical changes? 3. Is crushing a can a physical or chemical change? Why? 4. Is burning a sugar cube a physical or chemical change? Why? 5. How is iron rusting a chemical change? |
| **Watch** |  |
|  | 1. What are five indicators of a chemical change? 2. How does fizzing (producing a gas) occur? 3. What are two examples of a chemical change producing an odor? 4. What is an example of a chemical reaction causing a color change? 5. What is an example of a chemical change when the temperature increases? 6. What is an example of a chemical change when the temperature decreases? 7. What is a precipitate? |
| **Identify As A Physical or Chemical Change** | |
| **QUESTION ANSWER and WHY** | |
| Glass Breaking |  |
| Snowman Melting |  |
| Cake Baking |  |
| Volcano Exploding |  |
| Food Digesting |  |
| A haircut |  |
| **Finish Early?** | |
| Use the link to the right to review physical and chemical changes. | <https://quizlet.com/433224942/match> |