Activity 3: Properties and Change Practice

(Topic 2—Properties of Matter)

Place a check in the appropriate column:

|  |  |  |
| --- | --- | --- |
| **Change** | **Physical Change** | **Chemical Change** |
| Salt dissolves in water |  |  |
| HCl reacts with Mg |  |  |
| A piece of copper is cut in half |  |  |
| A sugar cube is ground up |  |  |
| Water is heated and changed to steam |  |  |
| Iron rusts |  |  |
| Ethyl alcohol evaporates |  |  |
| Ice melts |  |  |
| Milk sours |  |  |
| Sugar dissolves in water |  |  |
| Na and K react violently with water |  |  |
| Pancakes cook on a griddle |  |  |
| Grass grows on a lawn |  |  |
| A tire is inflated with air |  |  |
| Food is digested in the stomach |  |  |
| Water is absorbed by a paper towel |  |  |
| Ethyl alcohol boils |  |  |
| Paper burns |  |  |
| Water freezes |  |  |
| Fireworks explode |  |  |
| Alka-seltzer gives off carbon dioxide |  |  |
| Clouds form in the sky |  |  |

Instructions: Write “T” if the material is heterogeneous or “M” if it is homogeneous.

1. Wood 6. Dirt
2. Black coffee 7. Pepperoni pizza
3. Water 8. air
4. Lucky charms 9. milk
5. Salt 10. Gold ring

Instructions: Classify each of the following as an element (E), a compound (C), or a mixture (M)

1. Gold 6. air
2. Water 7. Carbon dioxide
3. Seawater 8. silver
4. Sugar 9.ice
5. Chocolate sundae 10. A Big Mac®

Instructions: Classify each of the following properties of matter as physical (P) or chemical (C).

1. Color 6. Reacts violently with chlorine
2. Density 7. Good conductor of heat
3. Burns easily 8. Dissolves readily in water
4. Not affected by acids 9. Melts at 145 °C
5. Boils at 450 °C 10. Malleable

Instructions: Classify each of the following changes in matter as physical (P) or chemical (C).

1. Grinding chalk into powder 6. Burning gasoline
2. Dissolving salt in water 7. Hammering gold into foil
3. Dissolving zinc in acid 8. Melting ice
4. Tearing a piece of paper 9. Digesting food
5. Stretching copper into wire 10. Making hydrogen from water