

Fill in the table by categorizing each substance as a pure substance or a mixture then determine if it is a compound, element, homogeneous mixture, or heterogeneous mixture.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Material</b>	<b>Pure Substance or Mixture</b>	<b>Element, Compound, Homogeneous, Heterogeneous</b>
concrete		
sugar + pure water (C <sub>12</sub> H <sub>22</sub> O <sub>11</sub> + H <sub>2</sub> O)		
iron filings (Fe)		
limestone (CaCO <sub>3</sub> )		
orange juice (w/pulp)		
Pacific Ocean		
air inside a balloon		
aluminum (Al)		
magnesium (Mg)		
acetylene (C <sub>2</sub> H <sub>2</sub> )		
tap water in a glass		
soil		
pure water (H <sub>2</sub> O)		
chromium (Cr)		
Chex mix		
salt + pure water (NaCl + H <sub>2</sub> O)		
benzene (C <sub>6</sub> H <sub>6</sub> )		
muddy water		
brass (Cu mixed with Zn)		
baking soda (NaHCO <sub>3</sub> )		

Identify the following as physical or chemical changes

- You cut your hair. \_\_\_\_\_
- Making a peanut, pretzel and cereal mixture.  
\_\_\_\_\_
- Baking soda reacts with vinegar and forms a gas.  
\_\_\_\_\_
- A piece of metal is bent in half. \_\_\_\_\_
- An aspirin is crushed into fine powder. \_\_\_\_\_
- Copper turns green when exposed to the environment. \_\_\_\_\_
- Two clear liquids are mixed and a yellow color forms. \_\_\_\_\_
- Baking cookies. \_\_\_\_\_
- Diamonds are used to scratch glass. \_\_\_\_\_
- A tree burns to form ashes. \_\_\_\_\_
- A piece of paper is crumpled up. \_\_\_\_\_
- Water freezes to form ice. \_\_\_\_\_
- A candle burning. \_\_\_\_\_
- A candle melting. \_\_\_\_\_

Complete the following metric conversions

- 2576 mg = \_\_\_\_\_ g
- 5.68 Gigabytes = \_\_\_\_\_ Megabytes
- 16.67 cm = \_\_\_\_\_ mm
- 104.8 km = \_\_\_\_\_ m
- 19.8 g = \_\_\_\_\_ kg
- 2567.98 Tm = \_\_\_\_\_ Dm
- 44.78 cm = \_\_\_\_\_ m
- 0.5675 mL = \_\_\_\_\_ L
- 65.67 g = \_\_\_\_\_ mg
- 5.668 kg = \_\_\_\_\_ g
- 857.50 cm = \_\_\_\_\_ m
- 586.379 cm = \_\_\_\_\_ mm
- 8.687 mm = \_\_\_\_\_ cm
- 567.6 m = \_\_\_\_\_ cm
- 1278.978 mg = \_\_\_\_\_ g