

Name: \_\_\_\_\_  
Hour: \_\_\_\_\_ Date: \_\_\_\_\_

**Chemistry: Classifying Matter**

Classify each of the materials below. In the center column, state whether the material is a **pure substance** or a **mixture**. If the material is a pure substance, further classify it as either an **element** or **compound** in the right column. Similarly, if the material is a mixture, further classify it as **homogeneous** or **heterogeneous** in the right column. Write the entire word in each space to earn full credit.

<i>Material</i>	<i>Pure Substance or Mixture</i>	<i>Element, Compound, Homogeneous, Heterogeneous</i>
concrete		
sugar + pure water ( $C_{12}H_{22}O_{11} + H_2O$ )		
iron filings (Fe)		
limestone ( $CaCO_3$ )		
orange juice (w/pulp)		
Pacific Ocean		
air inside a balloon		
aluminum (Al)		
magnesium (Mg)		
acetylene ( $C_2H_2$ )		
tap water in a glass		
soil		
pure water ( $H_2O$ )		
chromium (Cr)		
Chex mix		
salt + pure water ( $NaCl + H_2O$ )		
benzene ( $C_6H_6$ )		
muddy water		
brass (Cu mixed with Zn)		
baking soda ( $NaHCO_3$ )		