Compounds/Elements/Mixtures
Mini-Lab

Element	Compound	Mixture
• Composed of one kind of atom • Found on the periodic table • Cannot be separated into any simpler form by chemical or physical means	• Composed of 2 or more kinds of atoms chemically bonded in a specific ratio	• Composed of 2 or more elements or compounds mixed together physically • Not chemically combined • Each part keeps its own chemical identity • Can be heterogeneous (different throughout) or homogeneous (same throughout)

Station Number	Identity of Substance	Observations	Claim of Classification (Element, Compound, Mixture)	Evidence
1				
2				
3				
4				
5				
6				
7				

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.

Material	***Pure Substance or Mixture →***	***→ Element, Compound, Homogeneous, Heterogeneous***
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		
potassium (K)		
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 ($NaHCO_3$)		