

Name:

Hour:

### Lab: Identifying Elements, Compounds, and Mixtures

**Directions:** Read through the review chart below and answer the pre-lab questions. Then, rotate through the stations, identifying each substance as an element, compound, or mixture. If it is a mixture, be sure to include whether it is **homogeneous** or **heterogeneous**. Be sure to include 3 observations of the substance, and a meaningful REASON for your classification!

Element	Compound	Mixture
<ul style="list-style-type: none"><li>Made of ONE kind of atom (found on the periodic table)</li><li>Cannot be separated into any simpler form chemically or physically</li></ul>	<ul style="list-style-type: none"><li>Made of 2 or more kinds of atoms chemically combined in a certain ratio (e.g water molecule is 2 hydrogens and one oxygen atom)</li></ul>	<ul style="list-style-type: none"><li>2 or more elements or compounds mixed together physically.</li><li>Not chemically combined!</li><li>Each part keeps its own chemical identity</li><li>Can be <b>heterogeneous</b> (different throughout) or <b>homogeneous</b>. (the same throughout)</li></ul>

### Pre-Lab Questions

1. What is the difference between an atom and a compound?
2. How is a heterogeneous mixture different from a homogeneous mixture?
3. How is the way a mixture is combined DIFFERENT from how a compound is combined?
4. What is easier to separate, a mixture or a compound? Why?
5. Which can be found on the periodic table: elements, compounds or mixtures?