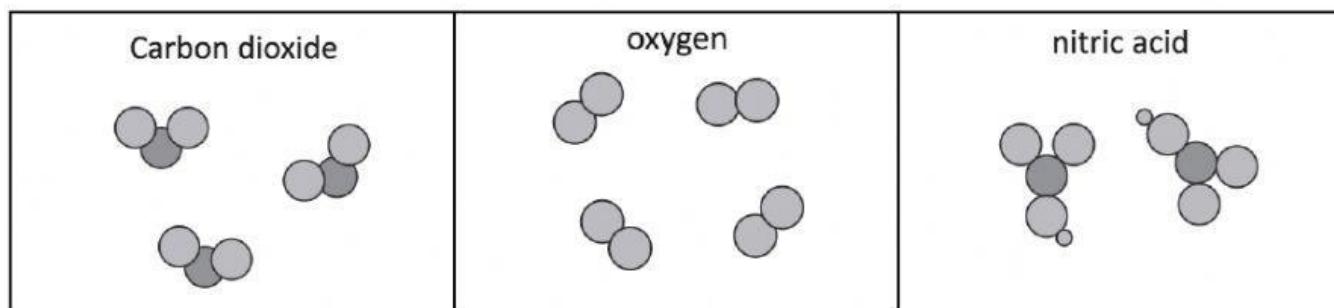


Name: \_\_\_\_\_ Block: \_\_\_\_\_ Date: \_\_\_\_\_

## Elements, Compounds, and Mixtures

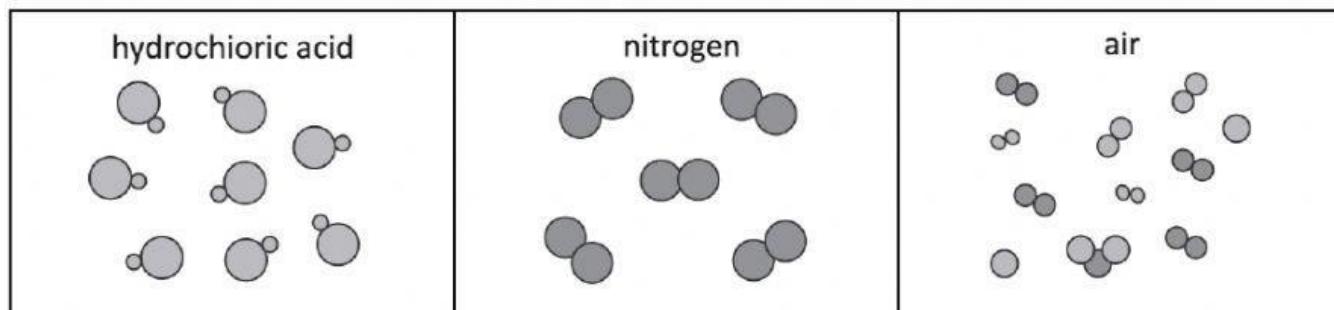
**Identify each diagram as either an element, compound, or mixture.**



1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_



4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

**State whether each substance below is an element, compound, or mixture.**

Substance	Chemical Formula	Element, Compound, Mixture
Oxygen	O <sub>2</sub>	
Sulfuric Acid	H <sub>2</sub> SO <sub>4</sub>	
Salt Water	NaCl + H <sub>2</sub> O	
Magnesium Oxide	MgO	
Gun Powder	S + K <sub>n</sub> O <sub>3</sub> + C	
Nitrogen	N <sub>2</sub>	

**Complete the following sentences using the word bank.**

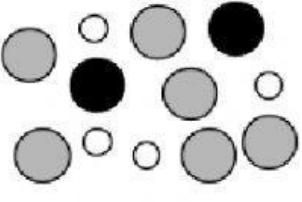
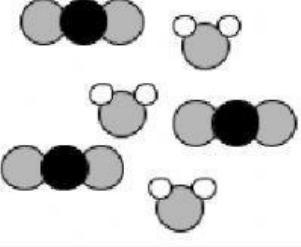
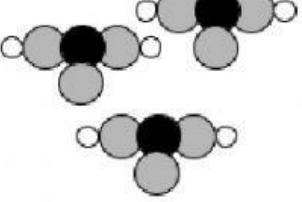
two or more	two or more	only one	not chemically joined	chemically joined
-------------	-------------	----------	-----------------------	-------------------

1. An *element* is made up of \_\_\_\_\_ type of atom.
2. A *compound* is made up of \_\_\_\_\_ different atoms, \_\_\_\_\_ together.
3. A *mixture* is made up of \_\_\_\_\_ different atoms, \_\_\_\_\_ together.

**State whether each statement is true or false.**

1. \_\_\_\_\_ Elements can only exist as atoms.
2. \_\_\_\_\_ Compounds can only exist as molecules.
3. \_\_\_\_\_ Mixtures can include atoms and molecules.
4. \_\_\_\_\_ Compounds can be broken down into new substances physically.
5. \_\_\_\_\_ Elements cannot be broken down into new substances.
6. \_\_\_\_\_ Mixtures can be separated into their component substances by chemical reactions.

**Students were asked to draw a diagram of soda water, a mixture of carbon dioxide and water. Below are the answers from three students.**

		
Phillip	Caroline	Roderick

**For each student, state whether or not their answer was correct. If their answer was incorrect, what was their error?**

Phillip: \_\_\_\_\_

Caroline: \_\_\_\_\_

Roderick: \_\_\_\_\_