## **Types of Matter and Mixtures - Check your understanding!**

**<u>True or False?</u>** Answer these questions as a group. Check your answers when done. Don't peek at the answers ahead of time! ©

1	Oxygen (O2) is a mixture	16	Bonds are formed when the electrons in the outer shell are
2	Air is a molecule.		shared or transferred.
3	An element is made out of only one kind of atom.	17	Atoms are the building blocks of elements, molecules, compounds and mixtures.
4	The atoms in a pure element are not bonded together.	18	Sodium Chloride, or table salt, is a compound.
5	The atoms in a molecule are not bonded together.	19	Air is a mixture of many different gas molecules.
6	When looking at drawings of a molecule, the "spheres" often represent molecules, & lines or	20	Pizza is a heterogeneous mixture.
	sticks represent the bonds connecting them.	21	Salt water is a heterogeneous mixture.
7	A molecule could be made of the same atoms or different atoms that are bonded together.	<b>22</b>	A solution is when one substance dissolves in another.
8.	Ozone (O3) is made of three	23	In Kool Aid, water is the solute.
<b>o</b>	oxygen atoms and is a compound.	<b>24</b>	In Kool Aid, the sugar is the solute.
9	Water, salt and carbon dioxide are all molecules.	25	Another word for air is oxygen.
10	Water, salt, and carbon dioxide are all compounds.	<b>26</b>	Often when you look at the drawing of a compound, you will notice that there are different colored "spheres" bonded
11	NaCl is made out of four different kinds of atoms.	<b>27</b>	together Tap water has many things
12	$_{\rm H_2O_2}$ is made up of 2 hydrogen atoms and 2 oxygen atoms.	27	dissolved in water. This means that tap water is a homogeneous mixture.
13	Ammonia (NH3) is a compound.	28	Solutions are homogeneous
14	A water molecule is in the shape of a triangle.		mixtures.
15	A carbon dioxide molecule has a single bond.	<b>29</b>	Pure water (H <sub>2</sub> O) is a compound and a molecule.