WATER
Molecules

God designed water from the very beginning. Scriptures allude to its presence in heaven, "WHO laid the beams of His chambers in the waters…" Ps 104:3 (see additional lesson verses)

AMAZING WATER:
Water serves as a standard for measuring volume, weight, density, and specific gravity. Approximately 70% of earth, of our muscles and organs, and of our diet is or should be water. Water is a relatively strong polar molecule making it the universal solvent – able to dissolve more substances than any other liquid.

Molecule:
A molecule is a group of two or more atoms bonded together that acts as the smallest basic unit of a chemical substance. These two or more atoms can be identical or different elements.

Polarity:
Water molecules attach 2 Hydrogen atoms to 1 Oxygen atom with the hydrogen at a 104.5° angle. The hydrogen end has a positive charge, and the oxygen end has a negative charge.

VOCABULARY:

Universal Solvent	Standard	Water Ice	Molecule	Polarity	States of Matter

1. _____ A substance that expands when it freezes (only a few substances do)
2. _____ A substance that dissolves more chemicals than any other substance.
3. _____ The smallest unit of a pure substance or compound.
4. _____ Something used as a reference for measuring, comparing, and other.
5. _____ Water is found in all 3 _____ at earth's temperatures.
6. _____ One reason water can dissolve other molecules.

CHOOSE FROM THE FOLLOWING ABOUT 1 mol of H_2O:

10 mL	18 mL	Blue	Red	True/False



1. How much water (volume) is equal to a mole of H_2O?
2. What color is the ball representing ½ mole of H_2O?
3. A mole of water is the same volume as a mole of glass? T / F