Name _____ Date _____ Period _____ Page _____

pH and Color Change - Notes Sheet

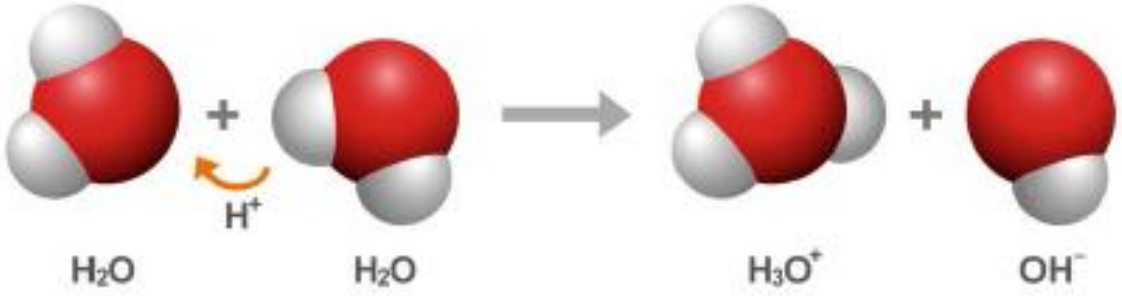
Key Concepts:

- Whether a solution is acidic or basic can be measured on the _____.
- When universal indicator is added to a solution, the color change can indicate the _____ of the solution.
- _____ cause universal indicator solution to change from _____ toward _____.
- _____ cause universal indicator to change from _____ toward _____.
- Water molecules (H_2O) can interact with one another to form _____ ions and _____ ions.
- At a pH of _____, there are _____ of ions and _____ ions in water, and this is called a _____ solution.
- _____ solutions have a pH _____ 7 on the pH scale.
- _____ solutions have a pH _____ 7 on the pH scale.

pH and Color Change……Processing

EXPLAIN IT WITH ATOMS & MOLECULES

The chemical formula for water is H_2O. Sometimes two water molecules can bump into each other and form the ions H_3O^+ and OH^-.



What is happening in the chemical equation above?

Why is one ion positive and the other ion negative?

The pH scale is a measure of the concentration of H_3O^+ ions in a solution. Use the words *increases*, *decreases*, or *stays the same* to describe how the concentration of H_3O^+ ions changes as different substances are added to water.

How does the concentration of H_3O^+ ions change as each substance is added to water?	
Type of substance	Concentration of H_3O^+ ions
Acid	
Base	
Neutral	