

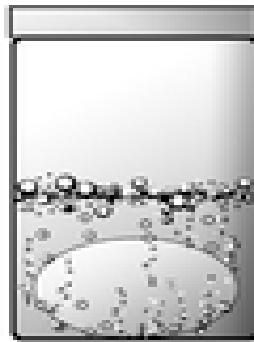
Science/Acids and Bases

Name: _____ Date: _____

Acids and Bases

All substances are either **acid**, **base** or **neutral**. A neutral substance is neither acid nor base. Acid and base are opposites. When they are mixed together, they **neutralize** or destroy each other. Many of the chemical reactions you see from mixing two substances together are caused because one substance is an acid and the other is a base. The strength of the chemical reaction depends upon the strength of the acid and base.

Have you ever seen what happens when baking soda is added to vinegar? Baking soda is a base and vinegar is an acid. When these two substances meet, a chemical reaction takes place. The acid and base neutralize each other, forming a carbon dioxide gas (CO_2) from the carbon in the baking soda. Sea shells and egg shells are both made of a base called calcium carbonate, or limestone, and will act similarly to baking soda when placed in vinegar.



An eggshell (base) placed in vinegar (acid) creates a carbon dioxide gas that forms bubbles.