

## *Fruitful Chemistry*

### **Cooking Up Chemical Reactions**

**Do any one of the following as:**

**A brief newspaper article - one page, at least 3 paragraphs**

**A short video, done as a newscast -(you may work in groups of up to 3)**

**or**

**A 3 section brochure of the item.**

1a. Have you ever wondered why bruised apples turn brown? It's actually the result of a common type of chemical reaction. Research the chemical reactions that happen when the skin of apples are exposed to air (oxygen) and how it can be prevented. Include the cause of why they change color, the damage/cost of it and what is done to prevent it.

1b. Do the same as the above, but with bananas. Include the chemical that bananas create that cases it, how it can be controlled in the kitchen and see if you can find any positive uses for it (think paper bags).

2a. Did you know that there's a way to cook fish without using heat? Research *ceviche*, Include countries that use this method of 'cooking' fish, how it 'cooks' the fish and at least one recipe.

2b. Find out about preserving meats. What causes them to spoil and how they can be made to last for a longer period of time. Include what causes meats to spoil, why it is important to keep them longer, and several methods available to preserve them.

### **Other Research Ideas**

3. Fireflies need no flashlights thanks to a chemical process called *bioluminescence*. Investigate the phenomenon of bioluminescence. Why do fireflies need it? Are there any other organisms that use it? How can a chemical reaction that gives off light occur without absorbing or producing heat?