



Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_.

## Organic Chemistry

### Role of Chemicals in our Lives

This activity will help to show you that chemicals play a vital role in our daily lives.

Each lab group will have the same amount of time to identify the product whose list of ingredients appears below. In order to discourage guessing you will be required to indicate the clues that led to your conclusion. You are allowed the use of any reference materials including chemistry books, chemical and trade-name dictionaries, etc.

The winning group is the one that identifies the most products in the least amount of time.

### **Products**

- 1) Water, high fructose corn syrup, citric acid, malic acid, calcium carbonate, dextrin, sugar, pectin, gum acacia, glycerol, ester of wood rosin, red #40, blue #1, ethyl matol, sodium benzoate, erythorbic acid, ascorbic acid, 2% juice
- 2) Water, sucrose syrup, glucose-fructose syrup, citric, salt, sodium citrate, monopotassium phosphate, ester gum
- 3) Water, canola oil, maltodextrin, salt vegetable monoglycerides, potassium sorbate, calcium disodium EDTA, citric acid, preservatives, artificial flavor, beta carotene, vitamin A, vitamin D
- 4) Water, aluminum potassium sodium silicate, titanium dioxide, acrylic polymer kaolin, zinc oxide

5) Water, glycerin, alcohol, tetrasodium pyrophosphate, benzoic acid, FD & C blue #1, FD & C yellow #5, flavor, poloxamer 407, sodium benzoate, sodium lauryl sulfate, sodium saccharin, xanthan gum

6) Water, glycerin, stearic acid, aloe vera gel, isoparaffin, glycol stearate, mineral oil, triethanolamine, lanolin, cetyl acetate, fragrance, glyceryl stearate, cetyl alcohol, dimethicone, aluminum silicate, methylparaben, yellow #5, blue #1, disodium EDTA, polyethylene glycol, magnesium

7) Water, sodium lauryl sulfate, sodium lauryl sulfate, cocamide mea, angelica extract, fragrance, citric acid, propylene glycol, orange #4, red #33, violet #2

8) Sodium fluoride, water, glycerin, sorbitol, hydrated silica, tetra sodium pyrophosphate, sodium lauryl sulfate, cellulose gum, flavor sodium saccharin, sodium hydroxide, blue #1, yellow #10

9) Acetone, water, glycerin, gelatin, fragrance, denatium benzoate, yellow #11

10) Water, stearic acid, triethanolamine, isobutane, lauryl-23, fragrance, propane, sodium lauryl sulfate

11) SD alcohol 40, water propane, vinyl acetate, crotonic acid, vinyl neodecanoate copolymer, isobutane, amino methyl propanol, fragrance, ammonium hydroxide, ammonium benzoate

12) Aluminum zirconium tetra chlorohydrate glycol, SD alcohol 408, dimethicone, propylene glycol, cyclomethicone, fragrance