Student Sheet Name_____

Title: Solutions Everywhere

Introduction: In this activity you will see how percent concentration is widely used to document the amount of different chemicals or substances found in medicines or foods. Here is some information on skin creams to treat acne.

Medicated products contain a chemical that dries up a pimple while acting as an exfoliant. The most common ingredients used for this purpose are are benzoyl peroxide and salycic acid. People with sensitive skin should choose a product that contains salycic acid over one containing benzoyl peroxide. The amount of drying chemical added to a product is measured in terms of percentage, with the stronger creams having a higher percentage (or concentration) of the active ingredient. Contrary to the "more is better" instinct, the highest concentration is not always the most effective, it all depends on your skin type and the sort of acne you are dealing with. Some acne will not respond well to OTC products and must be treated by a doctor or dermatologist (skin specialist).

Notice how important it is to have the correct chemical and the correct percentage of it for your skin.

Procedures:

1. Find 5 products at home with percentage concentration on their labels. They can be foods, medicines, cleaning products or anything with a label and percentages. Do not take all your examples from the same group.
2. Cut out the information about percentages and glue to this paper.
3. Next to the label, write the name of the substances you found interesting and comment on it. Was it what you expected? Why or why not?
4. Bring your work to school and plan on sharing with your class.
5. Answer the questions after you have shared results with your classmates.

Data:

Label from:

Name of interesting substance:

_____

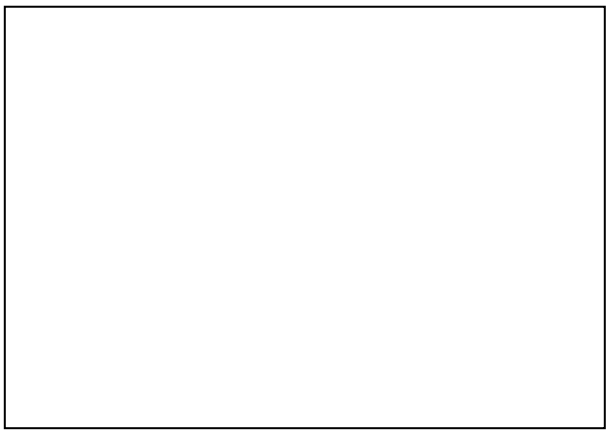
Why you thought it was interesting:

_____

_____

Label:

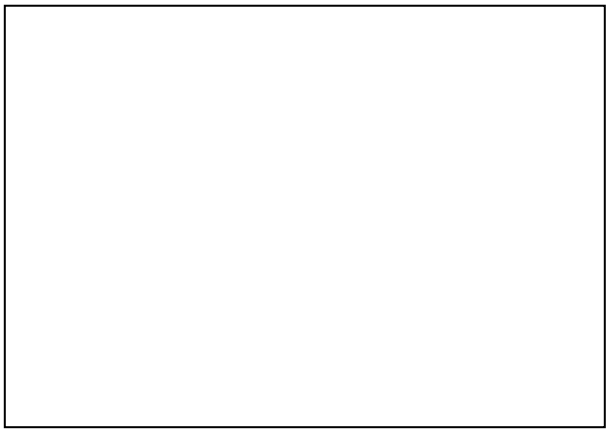
Label from:



Name of interesting substance:

Why you thought it was interesting:

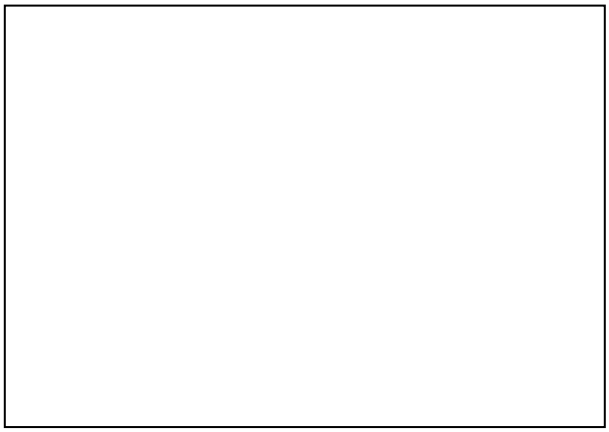
Label from:



Name of interesting substance:

Why you thought it was interesting:

Label from:



Name of interesting substance:

Why you thought it was interesting:

Label from:

Name of interesting substance:

Why you thought it was interesting:

Analysis:

1. Which substances contain high percentages of “inactive” or “inert” ingredients?

2. Why do you think the percentages of “inactive” ingredients in those substances were so high?

3. How do percentages of substances in foods help you make wise food choices?

4. Why is it often more important to look at the percent concentration than the total mass or volume of the substance?

Conclusion: