**If Your Cat Took Chemistry, Would She Eat This Stuff?**

The following are the listed ingredients for Puss'n'Boots ***Pounce*** (Shrimp Flavor) Treats for Cats:

Flour, liver, dried whole egg, glycerin, pregelatinized wheat flour, shrimp by-products, wheat gluten, torula dried yeast, ***calcium sulfate***, cheese meal, phosphoric acid, animal fat (preserved with butylated hydroxyanisole, otherwise known as BHA), ***potassium chloride***, ***salt***, potassium sorbate ( a preservative), wheat middlings, color, choline chloride, ***calcium carbonate, ferrous sulfate***, vitamin E supplement, ***zinc oxide***, BHA ( again!), ***cupric oxide***, ***cobalt carbonate, manganous oxide***, vitamin A supplemennnn b n,t***, potassium*** ***iodide***, D-calcium pantothenate, vitamin B-12 supplement, vitamin D-3 supplement, water sufficient for processing.

 The purpose of this activity is to practice writing formulas for simple inorganic compounds whose names are found on labels of products in the supermarket, drugstore or at home.

1. On the back of this sheet is a list of ions, many of which you should already be familiar with. You are to read product labels to find compounds formed from the ions that you already know or that are on the list. For each compound, the following information will be required:

Example:

a. Name of compound as it appears on the label potassium iodide

b. Chemical Formula KI

c. Name of the product in which it is found. Puss’n’Boots Pounce Treats for Cats

 2. List 18 different ionic compounds. Any product can have multiple compounds in it.

3. A compound may only be used once, even if it appears in a separate product. (If the exact same compound is listed more than once, you don’t get the point for it *either* time.)

4. Names must be of ionic compounds, not elements and not covalent compounds. For example, if you find sulfur (element) or carbon dioxide (covalent compound) in a product, do not use either as one of your 16 compounds.

5. The list must be numbered and alphabetized by compound name for full credit. (2 pts)

If you’re unsure as to whether or not an ingredient is an ionic compound, DO NOT USE IT. If you do not know the chemical formula with 100% accuracy for any ionic compound, DO NOT USE IT. Points will NOT be awarded for using the Internet to find formulas. YOU need to create the formula, so find names that YOU are familiar with from class, worksheets, or the textbook.

Adapted from http://www.labarchive.net/labdb/get.tcl?experiment\_id=72

C2H3O2- Acetate

CO32- Carbonate

HCO3- Hydrogen carbonate (bicarbonate)

OH- Hydroxide

NO3- Nitrate

NO2- Nitrite

CrO42- Chromate

Cr2O72- Dichromate

PO43- Phosphate

HPO42- Hydrogen phosphate

NH4+ Ammonium

ClO- Hypochlorite

ClO2- Chlorite

ClO3- Chlorate

ClO4- Perchlorate

MnO4- Permanganate

SO42- Sulfate

SO32- Sulfite

HSO3- Hydrogen sulfite (bisulfite)

HSO4- Hydrogen sulfate (bisulfate)

O22- Peroxide

CN- Cyanide

FO- Hypofluorite

FO2- Fluorite

FO3- Fluorate

FO4- Perfluorate

BrO- Hypobromite

BrO2- Bromite

BrO3- Bromate

BrO4- Perbromate

IO- Hypoiodite

IO2- Iodite

IO3- Iodate

IO4- Periodate