Step 1: Read the article and complete # 1-4. Use full sentences where necessary.

<https://foodcrumbles.com/chemical-formulas-food/>

1. Ascorbic Acid is chemically C6H8O6  Explain what the letters and numbers mean.

|  |
| --- |
| Type here |

1. How is a chemical formula similar to an ingredients list?

|  |
| --- |
| Type here |

1. What is a disadvantage of using chemical formulas for recipes?

|  |
| --- |
| Type here |

1. Why do some chemical formulas have numbers after the element and some do not?

|  |
| --- |
| Type here |

Step 2: Convert the recipe from chemical formulas to ingredients. Use the article listed above as well as the NCBI Pub Chem Compound search tool ([click here](https://www.ncbi.nlm.nih.gov/pccompound/?term)). Be sure to put both the chemical name and the standard ingredient name as we know it in the kitchen.

|  |  |
| --- | --- |
| C12H22O11 | Type here |
| NaCl | Type here |
| [C12H19Cl3O8](https://pubchem.ncbi.nlm.nih.gov/search/#query=C12H19Cl3O8) | Type here |
| [C8H8O3](https://pubchem.ncbi.nlm.nih.gov/search/#query=C8H8O3) | Type here |
| [C6H8O6](https://pubchem.ncbi.nlm.nih.gov/search/#query=C6H8O6) | Type here |

Extra Credit!

|  |  |  |  |
| --- | --- | --- | --- |
| NaHCO3 + KC4H5O6  | Type here + | Type here | = Type here |

Step 3: Use the NCBI Pub Chem Compound search tool ([click here](https://www.ncbi.nlm.nih.gov/pccompound/?term)) to find the chemical formulas for the selected ingredients on the label shown below and put them in the chart provided.

|  |  |  |
| --- | --- | --- |
| C:\Users\ktaylor\Downloads\IMG_5044.jpg | Ingredient | Chemical Formula |
| Palm Oil |  |
| Dicalcium Phosphate |  |
| Corn Starch |  |
| Xanthan Gum |  |
| Corn Syrup |  |
| Folic acid |  |
| Niacin |  |
| Iron |  |