

# Writing Your Name using Chemical Symbols

## Objective

In this activity, you will use your creativity to spell your name (first or middle name and your last name) using chemical symbols of elements on the periodic table. For example, you can spell Yvonne using the symbols for yttrium (Y), vanadium (V), oxygen (O), nitrogen (N), and neon (Ne).

## Materials

- Ruler
- Pencil
- Colored pencils or markers
- 8.5 x 11 sheets of copier paper
- IUPAC Periodic Table of the Elements
- Computer

## Procedure

Accordion Book must include:

- The chemical element symbols used to spell your name (first or middle name and last name).
  - If your name has the letter J, use J and the information for Iodine (J was the former symbol for Iodine).
  - If you are only using the first letter of a two-lettered symbol, still include the second letter, but fade the letter so it does not appear that it is used in the spelling (see example at the end of the activity).
- Box drawings of the symbols as they appear in the IUPAC periodic table of the elements (including atomic number, atomic mass, symbol, and element's name).
- The following information for at least **four** of the elements you use (typed and printed on the copier paper and clipped to your accordion book).
  - Physical description of the element: metal, nonmetal, or metalloid; solid, liquid, or gas at room temperature, or synthetic.
  - Group number and period number where the element is located in the periodic table.
  - Description of the atomic structure of the atoms of the elements:
    - Number of protons and neutrons in the nucleus, and the number of electrons found in the electron cloud.
  - At least two chemical and physical properties of the element.
  - The description of at least two common uses of the element.
  - When was the element discovered and who discovered it.
- Each element's box should be at least 5.4 cm wide and 6 cm tall
- The accordion book should be organized neatly and created in color.

## Useful websites

<http://www.lenntech.com/periodic/periodic-chart.htm>

<http://www.webelements.com>  
<http://chemicalelements.com/>  
<http://www.rsc.org/periodic-table/>  
<http://iupac.org/what-we-do/periodic-table-of-elements/>

### Example

For example, if your name is *Yvonne Wilson*, you could write it using the elements Y, V, O, N, Ne, W, I, Li (notice that the i from the Li symbol is shaded grey since it is not part of the spelling), S, O, and N. Notice that the sizes and shapes of the boxes are different from the instructions given above, in order to fit the space available below

39 <b>Y</b> yttrium 88.91	23 <b>V</b> vanadium 50.94	8 <b>O</b> oxygen 15.99	7 <b>N</b> nitrogen 14.01	10 <b>Ne</b> neon 20.18
------------------------------------	-------------------------------------	----------------------------------	------------------------------------	----------------------------------

74 <b>W</b> Tungsten 183.8	53 <b>I</b> Iodine 126.9	3 <b>Li</b> lithium 6.938	16 <b>S</b> sulfur 32.05	8 <b>O</b> oxygen 15.99	7 <b>N</b> nitrogen 14.01
-------------------------------------	-----------------------------------	------------------------------------	-----------------------------------	----------------------------------	------------------------------------

### Rubric- For the 4 elements you choose

- Element Name
- Atomic Number
- Atomic Symbol
- Atomic Mass
- Number of protons, number of neutrons, and number of electrons
- Physical descriptions: metal, non-metal, metalloid, density, physical state at room temperature
- Uses (at least 2 common uses)
- Group, period
- At least two chemical or physical properties of the element
- Neatness, spelling, color, creativity
- List of sources of information (books, websites, magazines, etc. (cited properly using easybib.com)
- Year discovered and discoverer (4 points)