

Atomic Structure Project

**Your Task:** Write a children's book appropriate for a third or fourth grade child on the topic of the element of your choice. The format of your book should include:

▶ **Cover:** the book's cover should have the name of your atom, your name and class.

● **Table of Contents:** one or two pages long and listing the interesting stuff you've put in your book.

▶ **Basic Information:** atomic number, atomic mass, symbol, a simplified drawing of the atomic nucleus (color code the particles). Your description of the element should include a short history of the element, what it looks like in its pure form, its physical state at room temperature (solid, liquid or gas), how common the element is in nature, where it is found, how you make pure samples of the element, common uses for the element. (6 or more pages)

● **Compounds the Atom Can Make:** include two compounds giving their names, formula and what they are used for. (1 page each compound)

■ **Glossary:** your glossary should include at least ten (10) words included in your book with appropriate definitions and pronunciation key. Color code the words of the glossary where they appear in the book. This is where descriptions of words like proton, nucleus, etc. will take place. Don't waste space on the book pages with wordy explanations of terms you can fit here. (2-4 pages)

▶ **Sources:** websites, books, etc. used to prepare this project.

Go to <http://www.ufrsd.net/staffwww/stefanl/Webquest/Atoms/index.htm#task> for more information about the project including how to start, resources, and a grading rubric.

Grading Rubric*(1.5 points for each)*

| Got it? | Topic in your Book   |
|---------|--|
|         | The name of your atom on the cover of your book. Your name on the cover of your book. The name of your class and period on the cover of your book.                             |
|         | Table of contents. Atomic number of your element somewhere in the book. Atomic mass of your element somewhere in the book.   |
|         | The symbol for your element somewhere in the book. A color coded diagram of your element's nucleus showing the particles in the nucleus.                                       |
|         | The number of protons in the nucleus of your element. The number of neutrons in the nucleus of your element. The electron cloud surrounding the nucleus of your element.       |
|         | A short history of your element. Who found it, when was it discovered, etc. The appearance of your element in its pure form at room temperate. Is it shiny? Yellow? Dull? ect. |
|         | The physical state of your element at room temperature. Is it a solid, liquid, or gas? How common is your element in nature? How do your make a pure sample of your element?   |
|         | What are the common uses of your element? What are some health effects of your element? What are some environmental effects of your element?                                   |
|         | What are the name, formula and uses for one compound containing your element? What is the name, formula and uses for another compound containing your element?                 |
|         | Glossary of a minimum of ten words in your book.   |
|         | Bibliography of sources used. Colorful. Made to size.  |