** The Element Project**

Due Date \_\_\_\_\_\_ A Day

\_\_\_\_\_\_ B Day

**Requirements:**

1. Planning Sheet (50%)
2. Poster (25%)
3. Commercial (25%)
4. **Element Project Planning Sheet**: You will use a variety of sources to research one of the Elements on the Periodic Table. Your task is to find as much information as you can from books, magazines, journals, encyclopedias, science catalogs, Internet and mobile apps. You will need to summarize all of the required information on a regular-sized poster board and produce a TV Commercial, News Report, or Home Shopping Network segment (infomercial) to introduce and present your element. The planning sheet will be completed to help you ensure that all required information is included on your poster or in your commercial and help you avoid plagiarizing content from your resources. At least two of your resources must come from books or periodicals, and a minimum of five sources sited in MLA format in a bibliography on the back of your poster.
5. **Poster**: Detailed information about your project will be presented on a regular-sized poster board. A tri-fold display board is allowed, but not required. Carefully plan the layout of your poster to utilize space and color in an effective, creative, and appealing way. Clearly label each section and make sure any hand-written information is neat and legible. Proofread for spelling, grammar, and factual accuracy. Pictures related to your topic must be captioned and sited in your bibliography. Images on the Internet do NOT belong to you; so give credit to your source.
6. **Video Segment**: You will present information about the uses, cost, interesting facts, and real-world applications of your element in a commercial, news report, or infomercial. You will be required to record your segment on video and bring it with you to class on the due date above or perform it “Live” in front of the class. You are allowed to work with other students on this task, but the element of each student in the group must be included in the segment and everyone involved must have a copy of the video to present to the class. The school has Flip-cams and editing software available for you to use, but it must remain on school grounds and in the presence of a teacher. Again, songs and images from the Internet do NOT belong to you, so give credit to your sources and do not use copyrighted material. If you choose to post your videos to YouTube, which is a convenient way to store them, please make sure the settings are marked PRIVATE so you do not put yourself or your classmates at risk.

**Element Project Planning Sheet Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Element\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| Symbol | Atomic Number | Atomic Mass |
| # of Protons | # of Neutrons | # of Electrons |
| Melting Point | Boiling Point | Density |
| Normal Phase | Cost | Safety Concerns |
| Origin of Name | Discovered by | Time and Place of Discovery |
| Common Isotopes | Calculation of Average Atomic Mass | |
| Family/Group Name | Reactivity | Classification  Metal Nonmetal Metalloid |

**Interesting Facts**

1.

2.

3.

4.

5.

**Applications and Uses**

1.

2.

3.

**Location of Electrons**

|  |  |
| --- | --- |
| Long-hand electron configuration | Short-hand electron configuration |
| Bohr Diagram (rings) | Aufbau Diagram (arrows) |

**Annotated Bibliography**

SOURCE #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NOTES FROM THE SOURCE I FOUND:

SOURCE #2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NOTES FROM THE SOURCE I FOUND:

SOURCE #3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NOTES FROM THE SOURCE I FOUND:

SOURCE #4: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NOTES FROM THE SOURCE I FOUND:

SOURCE #5: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NOTES FROM THE SOURCE I FOUND:

**Attach more pages if necessary**

**Grading the Element Project:**

**1. Planning Sheet**

**Basic Information (50 points possible)**

* Name
* Symbol
* Atomic #
* Atomic Mass
* Protons
* Neutrons
* Electrons
* Melting Point
* Boiling Point
* Density
* Phase
* Cost
* Safety
* Family
* Classification
* Name Origin
* Discovery
* Bibliography
* Interesting Information 
* Uses 

**Locating Electrons**

* Long-hand configuration

Bohr Diagram

* Nucleus
* Core Electrons
* Valence Electrons
* Short-hand Configuration

Aufbau Diagram

* Proper Order of Energy Levels
* Proper Alignment of Orbitals
* Proper Spin-Pairing

**2. Poster (25 points possible)**

* Visually appealing, good use of color/space
* Neat, legible writing, appropriate font size
* Includes only relevant information
* Includes accurate information
* Images and information sited appropriately
* Text is original (not printed from websites)
* MEETS CRITERIA OF PROJECT

**3. Video Segment (25 points possible)**

Presents Basic Information

* Name
* Atomic #
* Atomic Mass
* Symbol
* Cost

Details that Enhance Presentation

* Uses and Applications
* Slogan, Music, and/or Images Relevant and Appropriate
* Creative and Attention-Grabbing
* More than just reciting from the poster