Due: Friday, November 18, 2011

**100 POINTS**

## Brochure Facts

Each fact is worth one point; therefore the maximum value you can achieve is 33 points for the facts that you are required to have in your element brochure.

## Brochure Design (32 POINTS)

1. A tri-fold brochure ( $\mathbf{6}$ points)
2. Colorful, neat, legible, attractive brochure ( $\mathbf{1 0}$ points)
3. The atomic orbital model of the element (third picture in your brochure) (2 points)
4. Two pictures of your element (4 points)
5. Paragraph on back of brochure about the periodic table ( 5 points)
6. A list of source used under the paragraph on the back page ( 5 points)

## You may use a computer program or complete the brochure by hand. It is also acceptable to type out your information and paste it on the brochure.

## Atom Model (25 POINTS)

The required model is 3-Dimensional and shows the correct information for your element. Your model needs to include a nucleus, correct number of protons, neutrons, and electrons, energy levels, and a key to show what each material/color represents in your model. Your model must be sturdy and organized!

## BE CREATIVE WITH YOUR MATERIALS!

Point Summary
Brochure Facts $\rightarrow 33$ points
Brochure Design $\rightarrow 32$ points
Atom Model $\rightarrow 35$ points
TOTAL POINTS $\boldsymbol{\rightarrow} \mathbf{1 0 0}$ POINTS

| ELEMENT FACTS (that need to be included in your brochure) YOU STILL NEED TO FIND 8 MORE FACTS ON YOUR OWN: |  |
| :---: | :---: |
| Name of the element |  |
| Symbol of the element |  |
| Atomic Number |  |
| Number of protons |  |
| Number of electrons |  |
| Number of neutrons |  |
| Electron arrangement/configuration in the atom |  |
| Group number and name |  |
| Period Number |  |
| Other elements in the group |  |
| Who discovered the element and when |  |
| Density of the element |  |
| Heat of fusion and heat of vaporization |  |
| Color of the element |  |
| State of matter of the element at room temperature |  |
| Is the element a metal, non-mental or metalloid |  |
| Isotopes of the element |  |
| Oxidation number of the element |  |
| Purchase price of the element (any form) |  |
| Uses of the element (minimum of 4) | 1. |
|  | 2. |
|  | 3. |
|  | 4. |
| Interesting Fact about the element ( 2 minimum) | $\begin{aligned} & \hline 1 . \\ & 2 . \end{aligned}$ |
| PERIODIC TABLE FACTS (includ | in the Periodic Table paragraph on the back of your brochure) |
| What were some of the first elements discovered? |  |
| Around what time were they discovered? |  |
| When was the first periodic table made? |  |
| Who created the modern periodic table? |  |
| Why were there blank spaces in the table? |  |

## Element and Periodic Table. WebQuest Rubric L3

Name: $\qquad$ Period: $\qquad$

|  | Criteria | Points/Comments |
| :---: | :---: | :---: |
| Tri-fold Brochure | Is the brochure folded in to three, neat sections? | /6 |
| Brochure Design | Is the brochure colorful, neatly made, attractive, etc.? Is the information presented neatly and organized? | $\ldots$ |
| Picture of the atomic orbital model of the element | Do you have a picture that shows your element's protons, neutrons, and electrons? | 12 |
| Two pictures of your element | Pictures are included in brochure. | 14 |
| Periodic Table Paragraph | On the back page, do you have a paragraph (atleast 5 sentences) about the history of the periodic table? | 15 |
| Bibliography | Did you list all the sources you used on the back page of your brochure? | 15 |
| Brochure Facts | Did you include all 33 elements facts? | 133 |
|  |  | Total $/ 65$ |
| Atomic Model Design 3-D | Presented on a sturdy material? Neatly made? Falling apart? Organized? | /15 |
|  | Correct number of protons, neutron, and electrons? | /15 |
| Key | Did you include a key explaining the materials used? | 15 |
| Video E.C. (up to 15 pts) |  |  |
|  |  | Total 135 |

