

Element Project

For this project, you will be assigned an element to research and create an ornament for. The ornament will be made of 20 circles folded into triangles on which you will place information about the element. It is highly recommended that you put the information and pictures on the triangles before assembling the ornament. When printing pictures and diagrams, keep the size of the triangle in mind and resize.

Your element must be neat, colorful, and contain the following information. Each piece of information is to be clearly labeled. The uses and interesting facts must be written in your own words (no copying) using complete sentences and correct spelling and grammar. A list of all books and web pages used must be written on a separate piece of paper. A minimum of three sources is required, one of which must be a book. The handout that I gave you is from the book:

A Guide to the Elements
Publ: Oxford University Press, New York
Author: Albert Stwertka
1998

The following web page contains a list of good periodic table web sites:

<http://sciencespot.net>

Go to "Kid Zone" and choose "Chemistry/ Periodic Table Sites".

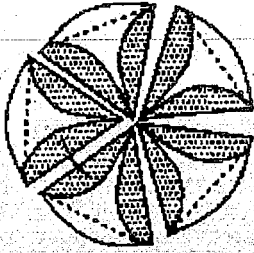
Required Information

- | | |
|---------------------------|---|
| 1 Student Name | 11 Atomic Diagram |
| 2 Element Name and Symbol | 12 Classification (Metal, Nonmetal, Metalloid) |
| 3 Atomic Number | 13 Phase at 25°C |
| 4 Atomic Mass | 14 Melting and Boiling Points (°C) |
| 5 Period and Group | 15 Interesting Fact About the Element 1 |
| 6 Use 1 | 16 Interesting Fact 2 |
| 7 Use 2 | 17 Interesting Fact 3 |
| 8 Use 3 | 18 Picture or Design 1 |
| 9 Density | 19 Picture or Design 2 |
| 10 Oxidation State | 20 Characteristics such as color, odor, hardness, radioactivity, etc. |

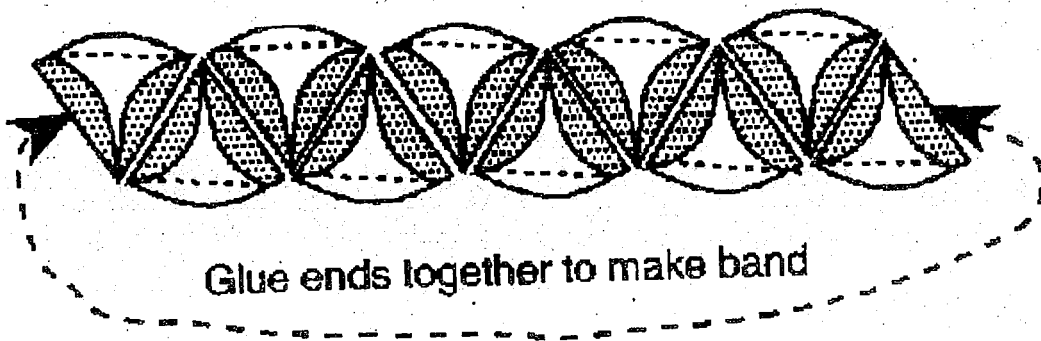
Assembling the Ornament

1. Cut out 20 circles.
2. Fold the circles along the fold lines.
3. Glue 5 circles together along 2 sides for the top of the ball.
4. Glue another 5 circles together along 2 sides for the bottom.
5. Glue 10 circles together along 2 sides to make a band to go in between top and bottom.
6. Glue top and bottom to center band.

Glue circles together: Glue 5 circles together to make tops and bottoms:



Glue 10 circles together like this:



Glue ends together to make band

Glue band to top and bottom

Name _____

Element Project Requirements: This is what you need to research and complete for the ornament

- 1) Student Name
- 2) Element name and symbol
- 3) Atomic Number
- 4) Atomic Mass
- 5) Period and Group
- 6) Use 1
- 7) Use 2
- 8) Use 3
- 9) Density
- 10) Oxidation state
- 11) Atomic Diagram
- 12) Classification (metal/nonmetal/metalloid)
- 13) Phase at 25°C
- 14) Melting and Boiling point (°C)
- 15) Interesting Fact about the element #1
- 16) Interesting Fact about the element #2
- 17) Interesting Fact about the element #3
- 18) Picture or design #1
- 19) Picture or design #1
- 20) Characteristics such as color, odor, hardness, radioactivity, etc.

Element Ornament Grading Sheet

Required Information

(3 points each)

Element Name _____
Symbol _____
Atomic Number _____
Atomic Mass _____
Period and Group _____
Density _____
Classification _____
Oxidation State(s) _____
Melting and Boiling Points _____
Phase at 25°C _____
Characteristics _____

Uses (5 points each) _____

Interesting Facts (5 points each) _____

Pictures or Designs (5 points each) _____

Atomic Diagram (4 points) _____

Miscellaneous

Neatness (5 points) _____

Correct Spelling and Grammar (5 points) _____

Creativity (6 points) _____

References (7 points) _____

Total Grade _____