

Name: _____

Today's Date: _____

Elements Project (worth 150 points)

Introduction

You are one of many important elements found on the periodic table: carbon, oxygen, nitrogen, hydrogen, iron, phosphorus, potassium, sodium, calcium, sulfur, chlorine, gold, silver, or copper. As one of the most important elements on Earth, you are an employee of the World Element Corporation. Due to recent cost increases, the World Element Corporation has been forced to lay off some of its workers. Because you are terrified of losing your job, you have decided to design a presentation for the Executive Board of the World Element Corporation (i.e. your teacher), defending your position in the company. You must be convincing and clearly explain the importance of your role. Good luck - the "World" depends on you!

The Task

For this task, you must come up with a persuasive presentation (in the form of a letter and foldable presentation board) to give the **Executive Board of the World Element Corporation**, that explains why you should keep your job. The project must include:

Major Assignments	Due Date	Points
<ul style="list-style-type: none">• Answers to the Key Questions and Bibliography<ul style="list-style-type: none">○ You must use at least one book, one encyclopedia, and one Internet resource from the list Mrs. Kuebler and Mrs. Goad give you; in addition to filling out the bibliography.		30 pts
<ul style="list-style-type: none">• A five paragraph persuasive letter that defends your position as to why you should keep your job.• Use your answers from the key questions to guide you through writing your letter. You will also be making a planning sheet to help guide you through the writing process.<ul style="list-style-type: none">○ Your teacher will show you a sample letter to help you.	Typed Rough Draft: Final Typed Copy:	20 pts 60 pts
<ul style="list-style-type: none">• Foldable Presentation Board (<i>on 11x17" paper provided by your teacher</i>) that highlights key things about you as an element that may "sell" you to the company's Executive Board.<ul style="list-style-type: none">○ This should be neat, colorful, and filled with all the required components. (See page 13 for details.)		40 pts

※ I have read and made note of all the assignments and due dates for the Element Project. I have also looked at the calendar on the next page to see the checkpoints for other assignments throughout the project.

Student Signature

Parent Signature

Name: _____

Calendar of Class Work and Homework for Elements Project:

Monday	Tuesday	Wednesday	Thursday	Friday
11/28 Introduce Project HW: Parent Signature	11/29 Library: Research HW: Key Questions due Friday	11/30 Library/Computer Lab: Research HW: Key Questions due Friday	12/1 Library/Computer Lab: Research HW: Planning Sheet	12/2 Library/Computer Lab: Collecting pictures HW: Planning Sheet
12/5 Work on handwritten letter in class HW: Handwritten Letter due Wednesday	12/6 Work on handwritten letter in class HW: Handwritten Letter due Wednesday	12/7 Computer Lab: Type Rough Draft HW: Typed Rough Draft due Friday	12/8 Computer Lab: Type Rough Draft HW: Typed Rough Draft due Friday	12/9 Work on Foldable in class No Homework
12/12 Work on Foldable in class HW: Foldable due Friday	12/13 Work on Foldable in class HW: Foldable due Friday	12/14 Computer Lab: Type Final Draft HW: Final Draft (and Foldable) due Friday	12/15 Computer Lab: Finalize Project HW: Final Draft (and Foldable) due Friday	12/16 PROJECT DUE TODAY! No Homework

Summary of Assignments and Due Dates:

Assignment	Due Date
• Parent Signature on Project	11/29
• Key Questions and Bibliography	12/2
• Planning Sheet	12/5
• Handwritten Letter	12/7
• Typed Rough Draft	12/9
• Typed Final Draft	12/16
• Foldable	12/16

Name: _____

Calendar of Class Work and Homework for Elements Project:

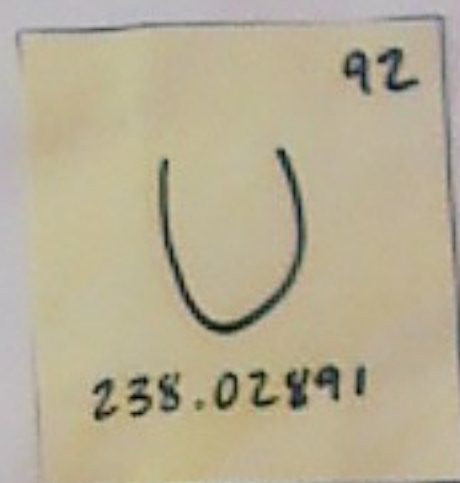
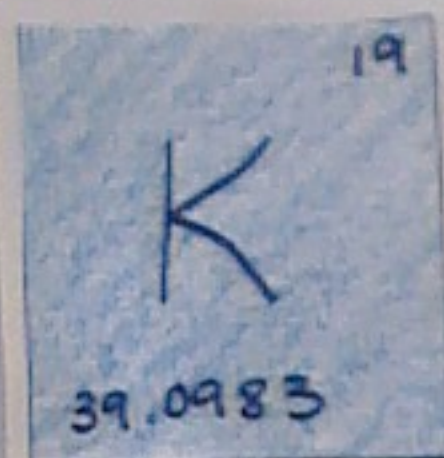
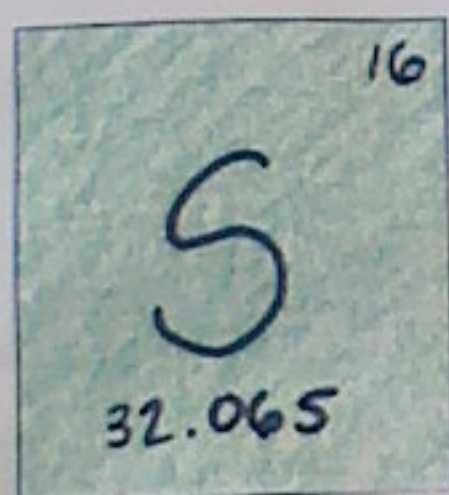
Monday	Tuesday	Wednesday	Thursday	Friday

Summary of Assignments and Due Dates:

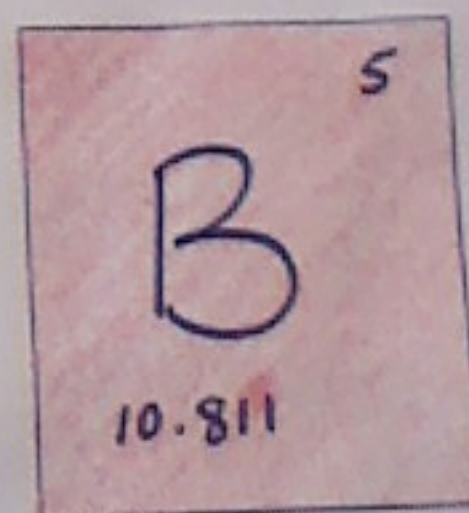
Assignment	Due Date
<ul style="list-style-type: none">• Parent Signature on Project• Key Questions and Bibliography• Planning Sheet• Handwritten Letter• Typed Rough Draft• Typed Final Draft• Foldable	

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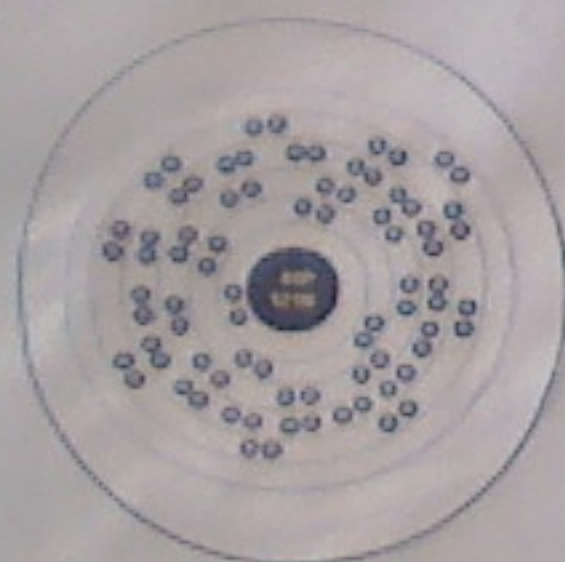
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Mrs. Kuebler
Mercury Mania

Element Symbol

Hg



Location on
Periodic Table

Mercury
Hg



Mercury Mania
80 Science Lane
Silvery Metal, CT 20059
October 27, 2010

World Element Corporation
118 Periodic Table Street
Science Town, CT 12345

Dear Executive Board,

Before I introduce myself, I would like to start off by saying that I am one of the most important employees at the World Element Corporation. My name is Mercury Mania, but my friends call me Hg. This letter will explain exactly why you should keep me, Mercury, on your staff at the World Element Corporation. There may be some other elements that you could fire, but I am not one of them!

I have been working at the World Element Corporation for as long as I can remember. In fact, I've been here since ancient times! It has been such a long time that I can't even remember the name of the person who discovered me and brought me to work at your company. In case you can't remember what I look like, I have some very special properties that make me stand out among everyone else. First of all, I'm the only liquid metal in the entire World Element Corporation. I have a beautiful silver coloring that really brings out my personality! In addition, if you looked inside my atom, you would see that I have 80 protons, 80 electrons, and 121 neutrons. All of these atomic parts help me be a better worker here at the World Element Corporation.

I have many very important jobs at this company. For starters, I am used in thermometers to measure temperature, barometers to measure air pressure, and in some batteries to make electricity. I'm also very important in lighting the World Element Corporation because I am found in the fluorescent lamps that light up our hallways. Some people would call me a team player because I'm very good at working with the other elements in the company. For instance, chlorine and I have teamed up to make skin whitening makeup. Also, I've worked with sulfur to make a toxic paint called vermilion pigment. Since I work so well with others, I have many friends at the company.

You may be wondering why my friends call me Hg. It is because when I was discovered, I was named after the Latin word *hydrargyrum*, which means liquid silver. My first name comes from the planet Mercury. At this time I'd like to also clear up any rumors about me being crazy. I've heard some gossip going around the company that I cause people to go a little loony when I get into their system. I must admit that I am very toxic if people eat me or eat any foods such as fish that may contain traces of mercury. I sneak into the blood system and do some major damage to people's brains. However, that's their fault for eating me! I'm not the crazy one...the people that eat me are the lunatics! If anything, I am the most important element in the entire World Element Corporation. Without me, vaccines to prevent many diseases wouldn't be what they are today. When they were first developed, vaccines contained Thiomersal which is partly made up of mercury.

If you fire me, the rest of the World will be so mad at you. They will never see a liquid metal at room temperature again! Can you imagine a world without such a beautiful substance as me? Sure, less people may be poisoned if you fired me, but that's beside the point. Please, oh please don't fire me from the World Element Corporation!

Sincerely,
Mercury Mania

Photo
Album

80 Science Lane
Silvery Metal, CT 2

World Element Corp
mercury mania

Business Card



World Element Corporation

Student Name: _____

Today's Date: _____

Due Date: _____

Key Questions

Be sure to answer #5-10 in COMPLETE SENTENCES to receive full credit!

1. **What is your name?** (the name of the element)

2. **What is your nickname?** (the element symbol)

3. **How long have you been working for the World Element Corporation?**
(When were you discovered?)

4. **Who hired you at the World Element Corporation?** (Who discovered you?)

5. **What do you look like?** (Describe the physical properties of your element in a complete sentence.)

6. **What are your specific job(s) at the World Element Corporation?** (What is your importance on Earth? *Answer in a complete sentence.*)

7. **What are some examples of how you work with other "departments" (other elements) within the World Element Corporation?** (*Answer in a complete sentence.*)

8. **What are three interesting facts about you, as an element?** (*Answer in complete sentences.*)

- ---

- ---

- ---

9. **What makes you the most important employee of the World Element Corporation?** (Use facts to back up your opinions and *answer in a complete sentence.*)

10. **What would happen to the World Element Corporation if you were 'fired'?** (If your element did not exist on Earth, what would be different?) Try to be as specific as possible and *answer in a complete sentence.*

Bibliography

Give credit for where you got your information.



1. Book

Title of the book

Author's Last Name

Author's First Name

Place of publication (city)

Publisher (ends with Co. Inc., Press)

Copyright (date published)

2. Encyclopedia

Title of the encyclopedia

Title of the Article: _____

Author of the Article: _____ Volume: _____ Year: _____

3. **Website:** www._____

Date you viewed the website: _____

4. **Website:** www._____

Date you viewed the website: _____

Name: _____

Key Questions/Bibliography Rubric**Score: ____ / 30**

Question Number	3 points	2 points	1 points
1 & 2	Answer is completely correct. Element symbol is written correctly.	Answer may be slight spelling error. Element symbol does not have correct capitalization.	Answer is spelled incorrectly OR not readable. Element symbol is wrong.
3	Answer is correct.		Answer is incorrect.
4	Answer is completely correct.	Discover's name may be misspelled.	Answer is incorrect.
5	Several physical properties are described correctly.	A few physical properties are listed.	Only one physical property is listed.
6	Answer is detailed and in a complete sentence.	Answer is detailed but not in a complete sentence.	Answer is not very detailed.
7	Answer describes how the element works with other departments and what they make. It is in a complete sentence.	Answer describes how the element works with other departments and what they make. It is not in a complete sentence.	Answer does describe how the element works with other departments or what they make.
8	Facts are detailed and in complete sentences. There is no plagiarism.	Facts may be missing some detail OR are not in complete sentences.	Facts may be missing some detail AND are not in complete sentences.
9	Facts are used to back up the answer and it is in a complete sentence.	Facts are used to back up the answer but it is not in a complete sentence.	No facts are used to back up the answer.
10	Answer is complete and detailed. It is in a complete sentence.	Answer is complete and detailed but is not in a complete sentence.	Answer is not complete and is not detailed.
Bibliography Sheet	Bibliography sheet giving credit to sources used are complete with all required components of all books, websites, encyclopedia used for research.	Bibliography sheet is partially complete and/or contains spelling errors.	Bibliography sheet is not complete or no credit is given to resources used. Entries are incomplete and/or contain spelling/punctuation errors.

Sample Letter

Mercury Mania
80 Science Lane
Silvery Metal, CT 20059
November 28, 2011

World Element Corporation
118 Periodic Table Street
Science Town, CT 12345

Dear Executive Board,

Before I introduce myself, I would like to start off by saying that I am one of the most important employees at the World Element Corporation. My name is Mercury Mania, but my friends call me Hg. This letter will explain exactly why you should keep me, Mercury, on your staff at the World Element Corporation. There may be some other elements that you could fire, but I am not one of them!

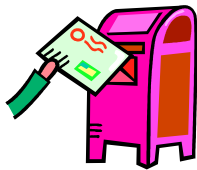
I have been working at the World Element Corporation for as long as I can remember. In fact, I've been here since ancient times! It has been such a long time that I can't even remember the name of the person who discovered me and brought me to work at your company. In case you can't remember what I look like, I have some very special properties that make me stand out among everyone else. First of all, I'm the only liquid metal in the entire World Element Corporation. I have a beautiful silver coloring that really brings out my personality! In addition, if you looked inside my atom, you would see that I have 80 protons, 80 electrons, and 121 neutrons. All of these atomic parts help me be a better worker here at the World Element Corporation.

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If you fire me, the rest of the World will be so mad at you. They will never see a liquid metal at room temperature again! Can you imagine a world without such a beautiful substance as me? Sure, less people may be poisoned if you fired me, but that's beside the point. Please, oh please don't fire me from the World Element Corporation!

Sincerely,
Mercury Mania



Planning Your Five Paragraph Letter

Your Element Name _____
Street address (atomic #) _____
City, state and zip code (atomic mass) _____
Project Due Date _____

World Element Corporation
118 Periodic Table Street
Science Town, CT 12345

Dear _____, (You are writing this to the Executive Board)

Paragraph 1: *Main Idea, Introduction, Answers to questions 1 & 2*

The point of this letter is...

Introduction...

My name is...

My nickname is...

Paragraph 2:

Answers to questions 3,4,5

3) I've been working at the
World Element Corporation since...

4) The person who hired me was...

5) I look like...

Paragraph 3:

Answers to questions 6,7

6) I am important because...

7) I work with other elements such as

to make...

Paragraph 4:

Answers to questions 8,9

8) Some interesting facts about me are...

9) I am the most important employee
Because...

Paragraph 5: *Answer to question 10 , conclusion statement*

10) If you fire me then...

In conclusion...

Today's Date: _____

Final Typed Copy Due Date: 12/16

To help you write your letter, you will use the answers from your ten key questions to write each paragraph. **(Paragraphs need to be at least FIVE sentences!)** You may follow the suggested guide to help you organize your paragraphs. Be sure to use transition words between sentences and paragraphs. Pretend this is a sales pitch to a REAL company about why you should **NOT** be fired!

- Introduction
- Answers to questions 1, 2

Dear _____,

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There is no handwriting or other markings on the paper.

Paragraph 2

- Answers to questions 3, 4, 5

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There is no handwriting or other markings on the paper.

Paragraph 3

- Answers to questions 6, 7

[illegible]

Foldable Presentation Board

Today's Date: _____

Foldable Presentation Due Date:

Use the pictures of your teacher's sample as a guide to help you design your foldable presentation. Once you have completed each of the required components, check them off on the checklist provided.

CHECKLIST

Your foldable presentation **MUST** include:

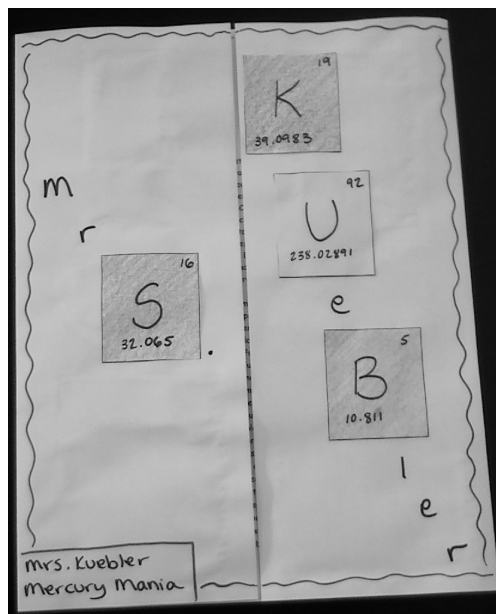
Cover of Foldable:

- _____ Student name and made-up element name on front lower corner
- _____ Student name with element symbols substituted for letters in name

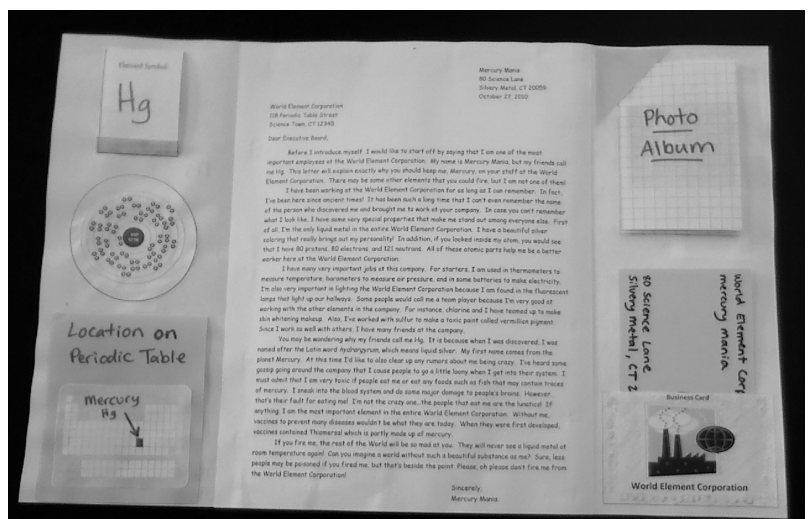
Inside Foldable:

- Left Side** {
- _____ Element information foldable
 - _____ Picture or drawing of atomic structure (nucleus with protons and neutrons, electron cloud with electrons)
 - _____ Flip Foldable (element's location on periodic table on outside, periodic table picture on inside)
- Middle** _____ Letter to the WEC glued to center of presentation board
- Right Side** {
- _____ Photo Album (graph paper accordion foldable with at least three pictures)
 - _____ Business Card (pocket with WEC labeled, business card made on index card)

Cover of Foldable:



Inside Foldable:



Student Name: _____

Assignment: Element Project

	12	10	8	6	4	2
Elaboration	Has fully elaborated and strong reasons with specific details about the element	Has moderately well elaborated and strong reasons with mostly specific details about the element	Has adequately elaborated and substantial reasons with a mix of general and specific details about the element	Has reasons with minimal elaboration and/or weak reasons with more general than specific details about the element	Contains only general reasons with unelaborated and/or list-like details about the element	Contains few or vague details about the element
Organization	Exhibits strong organization	Exhibits generally strong organization	Shows satisfactory organization	Shows some organization	Shows little or no evidence of organization	Is awkward and fragmented
Fluency	Is fluent and uses sophisticated transitional language	Is moderately fluent with transitional language throughout	Is somewhat fluent with some transitional language	Is awkward in parts with few transitions	Is awkward and confused or simplistic	Is difficult to read and understand
Audience Awareness/ Task	Shows a heightened awareness of audience and task	Shows a consistent awareness of audience and task	Shows adequate awareness of audience and task	Shows some awareness of audience and task	Shows little awareness of audience and/or task	Does not show awareness of audience and/or task
Grammar and Mechanics	Has very few or no errors	Has few errors in spelling, capitalization, punctuation, grammar/usage, paragraphing	Has some errors in spelling, capitalization, punctuation, grammar/usage, paragraphing	Has frequent errors in spelling, capitalization, punctuation, grammar/usage, paragraphing	Has a distracting number of errors	Errors block meaning

**Key Questions
(30)**

**Rough Draft
(20)**

**Final Typed Copy
(60)**

**Foldable Presentation
(40)**

**Final Grade
(150)**

_____ = _____

1) Write your first and last name on the spaces below. (Make sure to put spaces between each letter. Then, circle the individual letters or letter combinations that appear as element symbols on the Periodic Table. *(See the example to help you.)*)

Last

Ex. M r (s) (K) (u) e (b) l e r

2) In the blank squares below, fill out a box for each letter or pair of letters you circled. Each box must include the element symbol, atomic number, and atomic mass. Use the model to help you. These will be cut out and glued on the front of your elements project.

Element Name: _____

Symbol:

This element was discovered in

_____.

It was discovered by

_____.

Interesting facts about this element:

- _____

- _____

Element Name: _____

Symbol:

This element was discovered in

_____.

It was discovered by

_____.

Interesting facts about this element:

- _____

- _____

Element Name: _____

Symbol:

This element was discovered in

_____.

It was discovered by

_____.

Interesting facts about this element:

- _____

- _____

Element Name: _____

Symbol:

This element was discovered in

_____.

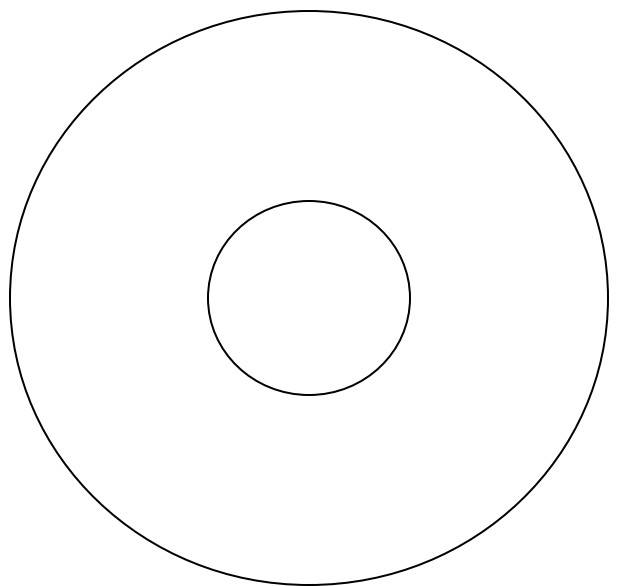
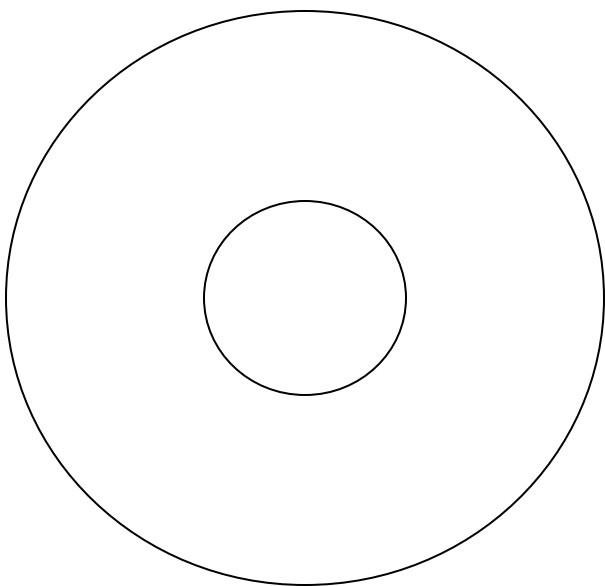
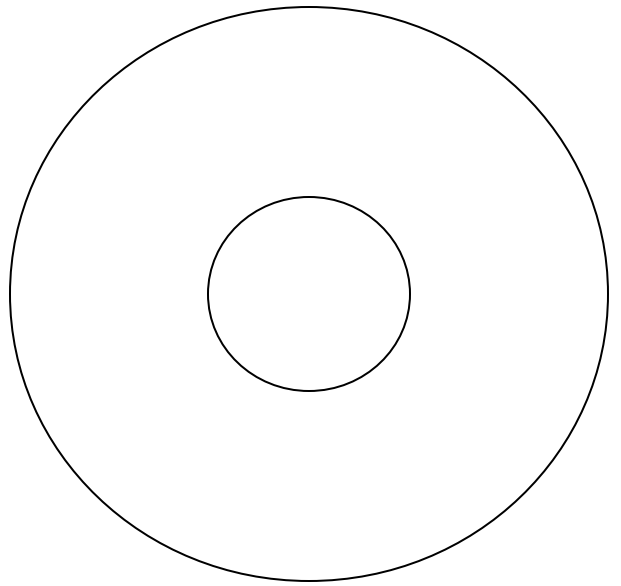
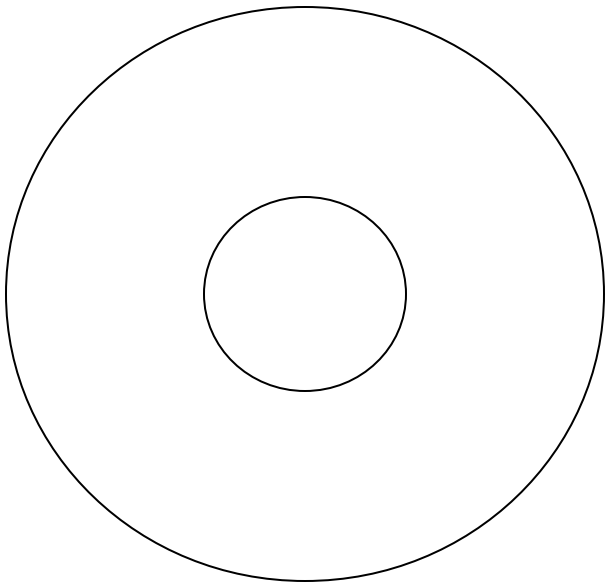
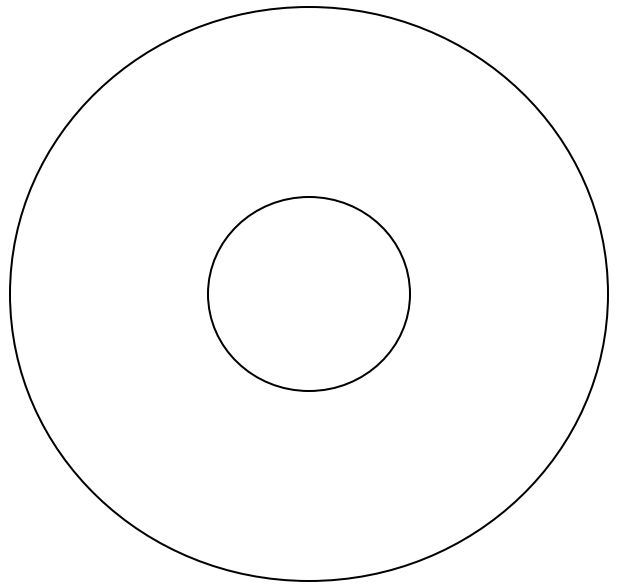
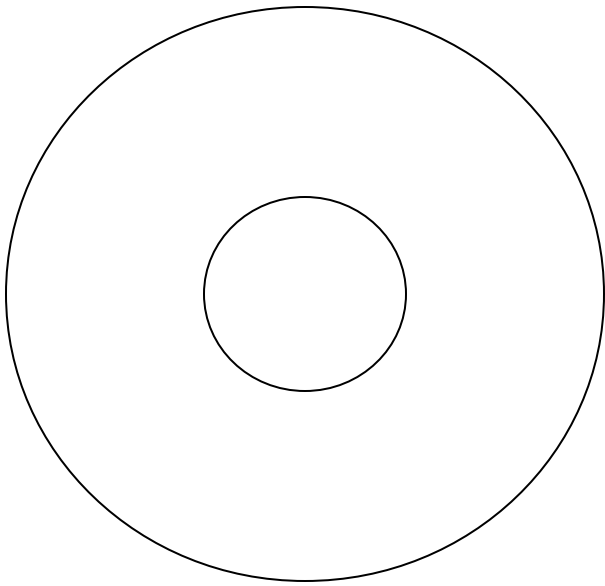
It was discovered by

_____.

Interesting facts about this element:

- _____

- _____



	Year Discovered:
	Name of Discoverer:

	Year Discovered:
	Name of Discoverer:

Element Symbol:	
	<p>Element Name:</p> <p>_____</p> <p>Atomic # _____</p> <p>Atomic Mass _____</p> <ul style="list-style-type: none">• Protons (+) =• Electrons (-) =• Neutrons (0) =

Element Symbol:	
	<p>Element Name:</p> <p>_____</p> <p>Atomic # _____</p> <p>Atomic Mass _____</p> <ul style="list-style-type: none">• Protons (+) =• Electrons (-) =• Neutrons (0) =

When writing the rough draft of your letter today:

- Try to write as neatly as possible.
- Be sure to write in complete sentences.
- Use lots of detail!
- Use good transition words so sentences and paragraphs don't sound awkward.
- Paragraphs should be at least 5 sentences!
- Use a little bit of humor to make the letter interesting.