SCIENCE 10Classifying Elements Laboratory

**Instructions**:

Make sure you have a partner for this lab. See your teacher if you do not have one.

There are stations located around the classroom, each with one element. Your purpose for this lab is to move around the room and write down the properties of 10 elements.

Get ready to record your observations by dividing a piece of paper into 9 sections on both the front and back.

Begin at one station (one group per station) and spend approximately 3-4 minutes recording the following information into one of your sections:

* Name of Element
* Chemical Symbol
* Chemical Formula
* # of Protons
* Atomic Mass
* # of Electrons
* Chemical Family # (& name if applicable)
* Write down at least 4 properties of the element you can observe.

When you are done, wait for the next group to be finished as well and rotate to the next station.

Make sure you visit all 10 different stations. If you still have time, visit more! There are plenty of cool elements in the universe and you do not want to miss them. They would love to get to know you, too!

**Report**:

Place your data (i.e. your observations from above) into a report that is neatly written or typed.

Include the following sections as headings:

* Name, Date, Block
* Title of Lab (Classifying Elements)
* Purpose (Why? What is the reason for doing this lab? What did you learn?)
* Methods (What did you do? **Be concise!**)
* Results (Your data tables.)
* Discussion (Answer the following questions:)
  + *Which was your favourite element? (Pick one you observed.)*
  + *Is it a metal, non-metal, or metalloid?*
  + *Research your element. Find out one thing that it is used for by humans.*
  + *Draw a Bohr model of carbon, magnesium, silicon, or sulfur.*

Hand in your written report to your teacher when you are done! **DUE 15-FEB-2016**

**Marking Checklist**:

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| --- | --- |
| Content (20 points) | 10 elements present with data included (5)  At least 4 observations per element (5) Purpose and methods thoughtfully written (5)  Discussion questions answered thoughtfully (5) |
| Presentation (10 points) | Lab contains all headings (2) Data is organized carefully into tables that are easily readable (3) Effort, including neatness & general quality (5) |

Total: 30 points