

Cambridge IGCSE® Chemistry – Summer Assignment

By the end of the first week of school, **Friday, August 22nd, 2014**, each Cambridge IGCSE® Chemistry student will have completed the following **TWO** tasks:

1) **A Color-Coded Periodic Table:**

Students will use **the attached** blank periodic table to create **their own** color-coded periodic table to be used for reference during IGCSE Chemistry. All of the following items and groups must be present, labeled, and colored.

- Visit www.ptable.com to start... “roll over” the element groups in the key to see which elements to color.
- **DO NOT COLOR #104 – #118** (*These are synthetic elements and do not behave like other elements in their respective groups.*)
- **Do not color the element boxes so dark that you cannot read the numbers/symbols inside.**

COLOR-CODED PERIODIC TABLE RUBRIC

- It has a Title – “PERIODIC TABLE OF THE ELEMENTS” /2
- The KEY includes the following ELEMENT GROUPS colored and CODED and included in the KEY. /10

<i>Alkali Metals</i>	<i>Metalloids</i>
<i>Alkaline Earth Metals</i>	<i>Other Non-metals (don't forget Hydrogen!)</i>
<i>Transition Metals</i>	<i>Halogens</i>
<i>Lanthanoids</i>	<i>Noble Gases</i>
<i>Actinoids</i>	
<i>Other Metals (Post-Transition Metals)</i>	
- Groups are numbered 1 – 18 /2
- Neatness, presentation, evidence of care & effort /4
 - 0 -1 – seriously ?
 - 2 – little effort shown/looks rushed/unfinished
 - 3 – got the job done, but on a basic level
 - 4 – more effort evident; shows pride in work; creativity

And...

2) Memorize a subset of element names and chemical symbols from the Periodic Table of Elements.

Students will visit www.quizlet.com and type “Mrs. Bromley Element Symbols” into the search bar. This set of online flashcards contains the element names and symbols for the first 36 elements and four other common metals (Silver, Gold, Mercury & Lead). Student mastery of these elements names and their corresponding chemical symbols will increase their success in **IGCSE® Chemistry**. The list of elements to memorize has also been attached, if one cannot gain access to this list online.

A few important things to note...

- Quizlet can be downloaded as an “app” on iPhones and other smartphones
- In addition to the ‘flashcard feature’, Quizlet utilizes a number of games that can be played to learn the Element names and their corresponding chemical symbols.
- Pay particular attention to the **spelling** of each element; some of them are very similar.
- Pay particular attention to the **capitalization** of each chemical symbol: **CO** is **not** the same as **Co**.
- Many element chemical symbols come from the Latin name for the element. For example, the chemical symbol for Gold is Au; this comes from the Latin for Gold, which is *aurum*. Learning the Latin names/roots for the element symbols that are not directly connected to their Element names on the periodic table would be most helpful.
- **Students can expect an “Element Symbols” assessment on Friday, August 22nd, 2014; it will not be multiple choice.**

SCALE: Element Name/Symbol Memorization Assignment

4.0 – Student can correlate the chemical symbols of elements to their names for all 41 terms.

3.0 – Student can correctly match the chemical symbols of elements to their names for 35 or more of the required terms. Student can explain some meaning behind chemical symbols.

2.0 – Student can correctly match the chemical symbols of elements to their names for 32 or more of the required terms.

1.0 – Student can correctly match the chemical symbols of the elements to their names for 26 or more of the required terms.