Chemistry Name: _____ Block_____

Virtual Lab: Identifying Elements

[Please silence your computer and click on CC in the lower-left to read text]

1. Click on the Perform tab and select mineral #1.
2. Procedures:
   (a) Bring the HCl dropper to the beaker
   (b) Bring the hammer to the mineral (rock)
   (c) Bring the paper to the beaker
   (d) Bring the wire loop to the beaker
   (e) Bring the wire loop into the flame
   (f) Record color of the flame
3. Record the possible elements from the list that appears.
4. Click the yellow Get Spectrum Results button and use the comparison of atomic spectra to identify the element in the mineral.
5. Repeat steps 1-4 for mineral #2 and #3.

	Mineral 1	**Mineral 2**	**Mineral 3**
Flame Color			
Possible element(s) in mineral			
Element identity			

6. Use noble gas notation to write the electron configuration for the identified elements.

Mineral #1 Element Symbol: ____

Electron configuration: _____

Mineral #2 Element Symbol: ____

Electron configuration: _____

Mineral #3 Element Symbol: ____

Electron configuration: _____

(over)

7. After some analysis, it was determined that each of your identified elements actually were ions with a +2 charge each. With this information and using noble gas notation, write the correct electron configuration for these ions.

Mineral #1 Ion Symbol: _____

Electron configuration: _____

Mineral #2 Ion Symbol: _____

Electron configuration: _____

Mineral #3 Ion Symbol: _____

Electron configuration: _____