

This list is a general guideline to help you study. It is NOT a definitive list. There are potentially things on here that will not show up on the test, and there are potentially things not on this list that will show up on the test. Material that appeared in Warm Ups, Notes, Homework, Classwork, Labs, Study Materials, etc are all have the potential to appear on the test.

+ denotes calculations

Periodic Table

- Know the names of the groups on the periodic table
 - o Alkali metals, alkaline earth metals, transition metals, semi-metals(metalloids), other non-metals, halogens, noble gases, rare earth metals
- Know how to use the periodic table to find the number of valence electrons for s and p block
- Know how to use the periodic table to find the charge each element likes to make
- Define the following trends
 - o Atomic radius
 - o Electronegativity
 - o Ionization energy
 - o Electron affinity
 - o Ionic radius
 - o Reactivity
- Describe how the trends above change as you go up/down left/right on the periodic table
- Explain WHY the trends above change as you go up/down left/right on the periodic table
 - o Make sure you are including terms such as greater effective nuclear charge, shielding, energy levels, etc – BUT make sure you are also explaining what those mean in terms of distance from nucleus and the attraction strength between nucleus and valence electrons
 - Make sure you are thinking about the difference between an ok answer, a better answer, and the BEST answer!
- Be able to rank elements from small to big, or big to small for the trends listed above.
 - o Do not worry about exceptions for simple ranking problems