

## CH 114 Elements of the Periodic Table

Identify the elements whose symbols spell each of the following definitions, acronyms, etc. related to CH 114. Use the symbols to spell the words and list the full name and the key term for each element. You may find your syllabus helpful.

For example: The combined symbols of three elements, a radioactive alkaline earth metal, a halogen and a non metal spell the weather Oregon is most famous for.

Oregon is famous for RaIN, spelled from the elements radium (Ra), iodine (I) and nitrogen (N). Radium is an alkaline earth metal, iodine a halogen and nitrogen a nonmetal.

From the example above, a few key terms from the periodic table are necessary and listed below. Be sure you know where to find these groups on the periodic table.

**Metals, nonmetals, alkali metals, alkaline earth metals, transition metals, halogens, noble gases, lanthanide and actinide series.** Radioactive elements have 84 or more protons in the nucleus. Elements made in the lab appear in outline print on the periodic table posted in our classroom. These elements also tend to have a large number of protons in their nucleus.

- 1) The combined symbols of three nonmetals to form the name of a popular forensic science drama series.
- 2) The combined symbols of one transition metal and one nonmetal to form the acronym for the analytical technique we will use to analyze ink samples.
- 3) The combined symbols of seven or eight elements to describe the application of science to the criminal and civil laws enforced by police agencies in a criminal justice system. The seven elements include two nonmetals, a transition metal, three more nonmetals and an alkali metal. The eight elements include all the same elements listed except the alkali metal is replaced by two nonmetals.

- 4) The combined symbols of four elements spelling the main topic of chapter 11 forward or three elements spelling it backwards. The forward spelling includes a noble gas and three nonmetals, while the backwards spelling includes a lab-generated actinide series element, a nonmetal and a radioactive alkaline earth metal.
- 5) The combined symbols of a nonmetal, a radioactive halogen and a lab made lanthanide series element give the \_\_\_-ology of forensics involving the investigation of sudden, unnatural, unexplained or violent deaths.