

CEM 101, Unit 4
Answers to Practice Problems

Write the number of the term below that is described by each of the following:

1. Atomic Number 2. Mass Number 3. Isotopes

 2 # protons + # neutrons

 1 symbolized by Z

 1 # protons

 2 symbolized by A

 1 determines identity of an atom

 3 atoms with same Z but different A

 1 in a neutral atom, same as the number of electrons

 3 atoms of same element but with different # neutrons

Classify each of the following elements as:

a) metal, nonmetal, or metalloid
and

b) representative element, transition element, lanthanide, or actinide

copper	Metal	carbon	Nonmetal	helium	Nonmetal
(<i>transition metal</i>)		(<i>representative</i>)		(<i>representative</i>)	

silicon	Metalloid	potassium	Metal	iodine	Nonmetal
(<i>representative</i>)		(<i>representative</i>)		(<i>representative</i>)	

sulfur	Nonmetal	iron	Metal	boron	Metalloid
(<i>representative</i>)		(<i>transition</i>)		(<i>representative</i>)	

barium	Metal	silver	Metal	phosphorus	Nonmetal
(<i>representative</i>)		(<i>transition</i>)		(<i>representative</i>)	

cerium (Ce)	Metal	cesium (Cs)	Metal	uranium (U)	Metal
(<i>lanthanide</i>)		(<i>representative</i>)		(<i>actinide</i>)	