

Review Questions for Unit 1
Chem 1010

Each of the following statements is FALSE. Correct it so that it is true.

A mole of atoms is a certain mass of atoms.

All boron atoms have a mass of 10.81 Daltons.

All of the elements on the left side of the Periodic Table are metals.

All of the elements that are naturally occurring can be found in their pure form in nature.

All of the halogens are gases, and don't react with other elements to form compounds.

Alloys have a set ratio of elements.

Aluminum is in the 4th period in the Periodic Table.

Argon, xenon, krypton, and neon were discovered by Humphry Davy using electrolysis to separate them from their compounds.

Arsenic is in the carbon family.

Astatine is likely to have very similar properties to radon.

Atomic number decreases as you go down a column of the Periodic Table.

Atoms are so small that you can only see them with a microscope.

Chemistry is the study of molecules.

Columns on the Periodic Table are called periods.

Compounds only contain one kind of atom.

Covalent compounds contain both metal and nonmetal atoms.

Ionic compounds are made of molecules.

Dmitri Mendeleev published the first modern atomic theory in 1805.

Fluorine is found as a metal in its pure form.

Francium chloride FrCl is a covalent compound.

Graphite is a compound containing carbon and oxygen atoms.

If you change the number of electrons in an atom, you get an isotope.

Inner transition metals are found in the block with corners of Sc, Ac, Zn, Cn.

Ions are atoms with a neutral charge.

Isotopes are different physical forms of the same pure element.

Lithium is an alkaline earth metal.

Metalloids are shiny, conduct light and heat, and bend when hammered.

Molecules are only found in covalent compounds.

Noble gases are found as diatomic molecules.

Six elements have been found or made in such small amounts that their physical properties are unknown.

The atoms found in bronze have ionic bonds holding them together.

The atoms in metals are connected together in diatomic molecules.

The most abundant element on the earth is hydrogen.

The most common isotope of gallium has a mass of 69 Daltons.

The nucleus of an atom contains the protons, neutrons, and electrons.

The number of neutrons determines the kind of element an atom is.

The symbol for the element mercury is Me.

The word “atom” comes from the Greek word for small, and was first suggested by Leucippus.

There are 118 naturally occurring elements.

There are 9 periods on the Periodic Table of Elements.

There are more nonmetals than there are metals.

When atoms are connected together, they form an element.