

CONCEPT: PERIODIC TABLE: ELEMENTAL FORMS

- The elements of the Periodic Table exist in different forms in the natural world.

□ **Monoatomic Elements:** Elements that are stable alone when found in nature. (Mono = _____)

□ **Diatomic Elements:** Elements that are stable as pairs when found in nature. (Di = _____)

MEMORY TOOL Have No Fear Of Ice Cold Beer

□ **Polyatomic Elements:** Elements that are stable in numbers greater than two. (Poly = _____)

1A (1)		2A (2)																	8A (18)
1	Hydrogen													3A (13)	4A (14)	5A (15)	6A (16)	7A (17)	He Helium
2	Li Lithium	Be Beryllium												B Boron	C Carbon	N Nitrogen	O Oxygen	F Fluorine	Ne Neon
3	Na Sodium	Mg Magnesium												Al Aluminum	Si Silicon	P Phosphorus	S Sulfur	Cl Chlorine	Ar Argon
4	K Potassium	Ca Calcium	Sc Scandium	Ti Titanium	V Vanadium	Cr Chromium	Mn Manganese	Fe Iron	Co Cobalt	Ni Nickel	Cu Copper	Zn Zinc		Ga Gallium	Ge Germanium	As Arsenic	Se Selenium	Br Bromine	Kr Krypton
5	Rb Rubidium	Sr Strontium	Y Yttrium	Zr Zirconium	Nb Niobium	Mo Molybdenum	Tc Technetium	Ru Ruthenium	Rh Rhodium	Pd Palladium	Ag Silver	Cd Cadmium		In Indium	Sn Tin	Sb Antimony	Te Tellurium	I Iodine	Xe Xenon
6	Cs Cesium	Ba Barium	La Lanthanum	Hf Hafnium	Ta Tantalum	W Tungsten	Re Rhenium	Os Osmium	Ir Iridium	Pt Platinum	Au Gold	Hg Mercury		Tl Thallium	Pb Lead	Bi Bismuth	Po Polonium	At Astatine	Rn Radon
7	Fr Francium	Ra Radium	Ac Actinium	Rf Rutherfordium	Db Dubnium	Sg Seaborgium	Bh Bohrium	Hs Hassium	Mt Meitnerium	Ds Darmstadtium	Rg Roentgenium	Cn Copernicium		Nh Nihonium	Fl Flerovium	Mc Moscovium	Lv Livermorium	Ts Tennessine	Og Oganesson

Ce Cerium	Pr Praseodymium	Nd Neodymium	Pm Promethium	Sm Samarium	Eu Europium	Gd Gadolinium	Tb Terbium	Dy Dysprosium	Ho Holmium	Er Erbium	Tm Thulium	Yb Ytterbium	Lu Lutetium
Th Thorium	Pa Protactinium	U Uranium	Np Neptunium	Pu Plutonium	Am Americium	Cm Curium	Bk Berkelium	Cf Californium	Es Einsteinium	Fm Fermium	Md Mendelevium	No Nobelium	Lr Lawrencium

EXAMPLE: Which of the following choices represents a monoatomic element that is also a chalcogen?

- a) Boron, B b) Sulfur, S c) Tellurium, Te d) Chlorine, Cl e) Lithium, Li

- Homonuclear Compounds:** Compounds composed of _____ elements.

Homonuclear

- Heteronuclear Compounds:** Compounds composed of _____ elements.

Heteronuclear

PRACTICE: Which of the following is a homonuclear polyatomic element?

- a) Chlorine b) Oxygen c) Hydrogen d) Iron e) Selenium