

Name: _____ Period: _____ Date: _____

Atomic Structure Practice

Part I: Reading the Periodic Table

The following table includes information about the name, symbol, atomic number, atomic mass, and numbers of protons, neutrons, and electrons for several elements. Use your periodic table to fill in all of the blanks.

Element	Symbol	Atomic Number	Atomic Mass	Protons	Neutrons	Electrons
Lithium	Li	3	6.941	3	4	3
Hydrogen						
		17				
	Au					
			30.974			
Tungsten						
				30		
			126.90			
		14				

Part II: Electron Configuration

Determine how many electrons are contained in the outer orbital of each atom below. (Use your periodic table to determine the total number of electrons)

5	Phosphorus		Hydrogen		Ne
	Lithium		Chlorine		Na
	Helium		Magnesium		F
	Oxygen		Boron		C

Two of the above elements have stable electron configurations. Circle them.

Part III: Ions

Use your periodic table to determine the number of electrons and protons found in each of the following ions.

	Protons	Electrons
Na ⁺	11	10
O ²⁻		
Li ⁺		
Mg ²⁺		

	Protons	Electrons
S ²⁻		
H ⁺		
Ca ²⁺		
F ⁻		