

Name: _____

Exploring Patterns in the Periodic Table

Use a periodic table (pg. 440 – 441) to answers the following questions.

1.
 - a) How many elements are gases at room temperature (20°C)? Write their chemical **names** and **symbols**.
 - b) How many elements are liquids at room temperature (20°C)? Write their chemical **names** and **symbols**.
2. What element is found in group 2, period 3?
3.
 - a) What is the symbol of the element with the atomic number 82?
 - b) What is the atomic number of arsenic?
4.
 - a) What is the symbol of the element with the atomic mass 238?
 - b) What is the atomic mass of silver?
5. Use the atomic number, atomic mass, and symbol of the elements to indicate the number of subatomic particles in an atom of each of the following elements:
 - a) Electrons in oxygen
 - b) Electrons in Li
 - c) Protons in Na
 - d) Protons in helium

Using the Periodic Table

Use the periodic table to find out how many protons, electrons, and neutrons are in each of the following elements. The mass number is shown beside each element. **Remember:** **The mass of an atom is made up of its protons and neutrons in the nucleus. To find out the number of neutrons, subtract the number of protons from the mass number. What is left over will be the number of neutrons in the nucleus.**

<i>Element</i>	<i>Symbol</i>	<i>Mass</i>	<i>Protons</i>	<i>Electrons</i>	<i>Neutrons</i>
Vanadium	V	51	23 (Atomic #)	23	$51 - 23 = 28 N$
Nickel		58			
Phosphorus		31			
Bromine		79			
Beryllium		9			
Argon		40			
Magnesium		24			
Uranium		238			
Silicon		28			
Chromium		52			
Titanium		48			