

Group \_\_\_\_\_

**Each member of your group must answer at least one question per activity**

**Activity 1.** Trade contact information with everyone in your group.

**Activity 2.** Determine the symbol, number of protons, neutrons and electrons for each neutral atom listed below.

ISOTOPE	SYMBOL	PROTONS	NEUTRONS	ELECTRONS
Magnesium-24				
Iron-56				
Iodine-127				
Selenium-79				
Phosphorus-32				

**Activity 3.** How many electrons do each of the following ions have?



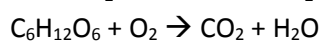
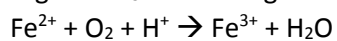
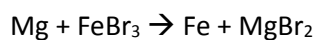
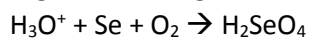
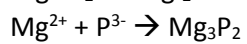
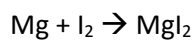
**Activity 4.** Write the condensed electron configuration for each element from Activity 2.

**Activity 5.** Determine how many valence electrons are present in each element in Activity 2.

**Activity 6.** Sketch the orbital that contains the highest energy electron in the elements in Activity 2.

**Activity 7.** Draw a Lewis symbol for each atom in Activity 2.

**Activity 8.** Balance each of the reactions below:



**Activity 9.** Each element we explored in this exercise is an important dietary micronutrient. Part of your homework for this coming week is to explore each of these, figure out common places we get them in our diet, and why we need them (that is, what biological role do they play?).