

NAME _____ PERIOD _____ DATE _____

BOHR MODEL

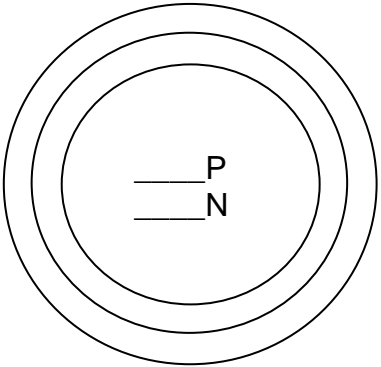
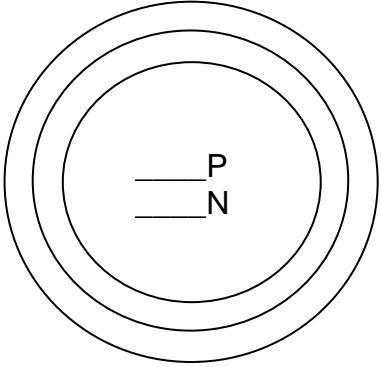
Electrons always want to be as close to the nucleus as possible. Unfortunately, each electron shell can only hold a certain number of electrons.

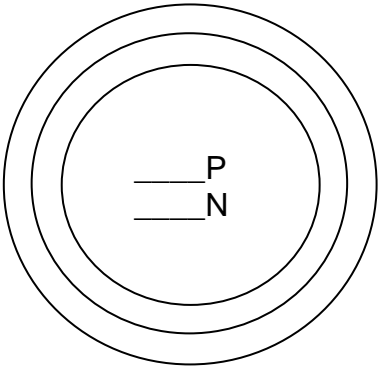
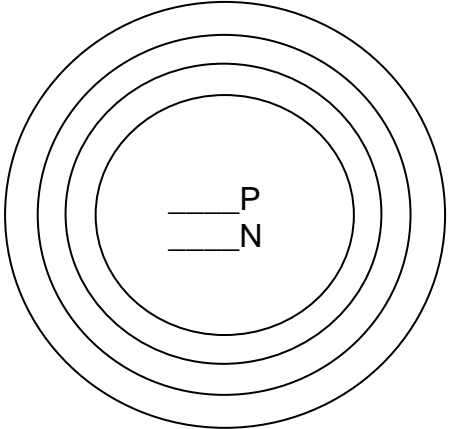
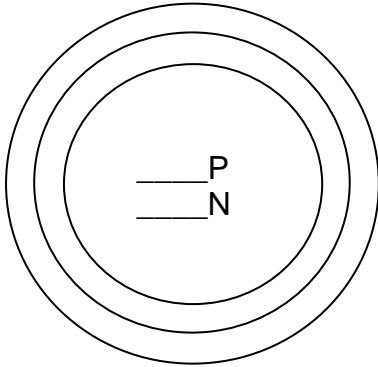
Level 1: 2 electrons
Level 2: 8 electrons
Level 3: 8 electrons (at first)

Use the periodic table to find the atomic number and atomic mass of each element. Then figure out the number of:

protons = atomic number
neutrons = atomic mass – protons
electrons = number of protons

Draw a Bohr model of each element shown below. You may not need all of the electron levels shown in each picture!

<p>Carbon</p> <p>Atomic Number: _____</p> <p>Atomic Mass: _____</p> <p>Protons: _____</p> <p>Neutrons: _____</p> <p>Electrons: _____</p>	<p><u># of Electrons in:</u></p> <p>Level #1: _____</p> <p>Level #2: _____</p> <p>Level #3: _____</p>	
<p>Oxygen</p> <p>Atomic Number: _____</p> <p>Atomic Mass: _____</p> <p>Protons: _____</p> <p>Neutrons: _____</p> <p>Electrons: _____</p>	<p><u># of Electrons in:</u></p> <p>Level #1: _____</p> <p>Level #2: _____</p> <p>Level #3: _____</p>	

<p>Phosphorus</p> <p>Atomic Number: _____</p> <p>Atomic Mass: _____</p> <p>Protons: _____</p> <p>Neutrons: _____</p> <p>Electrons: _____</p>	<p><u># of Electrons in:</u></p> <p>Level #1: _____</p> <p>Level #2: _____</p> <p>Level #3: _____</p>	
<p>Calcium</p> <p>Atomic Number: _____</p> <p>Atomic Mass: _____</p> <p>Protons: _____</p> <p>Neutrons: _____</p> <p>Electrons: _____</p>	<p><u># of Electrons in:</u></p> <p>Level #1: _____</p> <p>Level #2: _____</p> <p>Level #3: _____</p> <p>Level #4: _____</p>	
<p>Sulfur</p> <p>Atomic Number: _____</p> <p>Atomic Mass: _____</p> <p>Protons: _____</p> <p>Neutrons: _____</p> <p>Electrons: _____</p>	<p><u># of Electrons in:</u></p> <p>Level #1: _____</p> <p>Level #2: _____</p> <p>Level #3: _____</p>	
<p>Silicon</p> <p>Atomic Number: _____</p> <p>Atomic Mass: _____</p> <p>Protons: _____</p> <p>Neutrons: _____</p> <p>Electrons: _____</p>	<p><u># of Electrons in:</u></p> <p>Level #1: _____</p> <p>Level #2: _____</p> <p>Level #3: _____</p>	