Valence Electron Worksheet

1. How many Protons are in the following elements?
   A. Carbon       B. Hydrogen       C. Oxygen       D. Phosphorus       E. Calcium

2. Draw the Atomic Structures. Label the number of Protons, Neutrons and draw the Electrons in their orbits
   A. Silicon      B. Potassium
   C. Sulfur       D. Beryllium
   E. Argon        F. Helium

3. Indicate whether the following elements will GAIN or LOSE electrons to get a full outer shell, and how many electrons they will need to GAIN or LOSE.
   Example: Chlorine has 7 outer shell electrons, so it will GAIN 1 electron to get a full outer level
   A. Lithium       C. Calcium       E. Boron
   B. Bromine       D. Oxygen       F. Argon

4. What will the charge be of the following element when they LOSE or GAIN electrons to become more stable?
   A. Aluminum       B. Phosphorus       C. Sulfur
   D. Iodine         E. Fluorine       F. Neon
Label the parts of the atom. Use these choices:

energy level  electron  neutron  proton  nucleus

(1) ____________
(2) ____________
(3) ____________
(4) ____________
(5) ____________

<table>
<thead>
<tr>
<th>Atomic #</th>
<th>Atomic Mass</th>
<th># of Protons</th>
<th># of Neutrons</th>
<th># of Electrons</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>O</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>30</td>
<td>Zinc</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Li</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Atomic # =
Atomic Mass =
# of Protons =
# of Neutrons =
# of Electrons =