

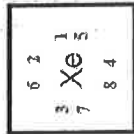
Lewis Structures

Name _____

Period _____

Date _____

Lewis dot structures are a simplified way to show how valence electrons are arranged in the outer shell of an element. This is where chemical bonding takes place. Atoms of elements can either *share* or *give up* electrons in order to obtain a full outer shell of 8 electrons or, in the case of hydrogen or helium, a full outer shell of 2 electrons. Lewis dot structures are created by the element symbol of the atom which is surrounded by dots which represent the appropriate number of valence electrons of that atom. Fill in the modified periodic table below, which shows Groups 1A through 8A (not the transition metals), with the appropriate Lewis dot structure. Use the following pattern below by starting with position number 1.



Examples:



1A

8A

| | 2A | 3A | 4A | 5A | 6A | 7A | 8A |
|----|----|----|----|----|----|----|----|
| H | | | | | | | He |
| Li | Be | B | C | N | O | F | Ne |
| Na | Mg | Al | Si | P | S | Cl | Ar |
| K | Ca | Ga | Ge | As | Se | Br | Kr |
| Rb | Sr | In | Sn | Sb | Te | I | Xe |
| Cs | Ba | Tl | Pb | Bi | Po | At | Rn |

