

Lesson 52: Bonding Part II Notes

Chemistry with Lab

Oxygen:

symbol _____ atomic number _____

_____ protons _____ electrons

Oxygen has _____ valence electrons

Electron Dot Diagram – atom's _____ surrounded by _____
to represent its _____ electrons

Example electron dot diagrams:

O

Li

Problem Set 1:

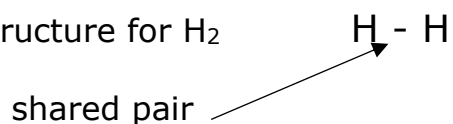
Lewis Structure: diagram representing the arrangement of _____
electrons in a _____.

Most atoms need _____ valence electrons to become stable. The exceptions
are H and He which only need _____ valence electrons to be stable.

Lesson 52: Bonding Part II Notes (cont.)

Chemistry with Lab

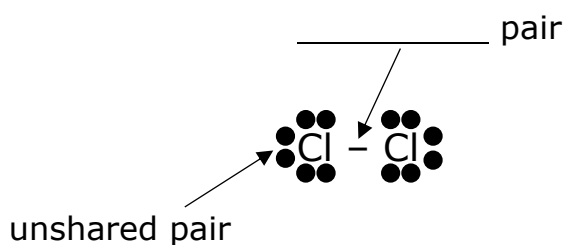
Lewis structure for H_2



- 2 electrons belonging to both _____
- represented by a _____ between symbols

Lewis structure for Cl_2 :

Each CL atom has _____ valence electrons, giving a total of _____ valence electrons to work with.



- electrons belonging to only one _____
- represented by 2 dots

Lewis structure for HCl :



When more than two atoms bond, you must determine which is central.

The central atom is:

- frequently _____
- never _____
- often atom with _____ electronegativity

Lesson 52: Bonding Part II Notes (cont.)

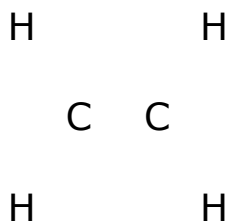
Chemistry with Lab

Lewis structure for CH_3I :

(There are a total of _____
valence electrons to work with.)

Problem Set 2:

Lewis structure of ethene, C_2H_4 (has total of _____ valence electrons)



type of bond	pairs of electrons shared

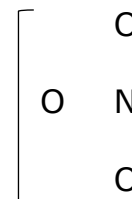
Lesson 52: Bonding Part II Notes (cont.)

Chemistry with Lab

Problem Set 3:

Polyatomic Ion: _____ bonded group of ions with a _____

Example: NO_3^{1-} (has gained _____ electron to give a total of _____ valence electrons to work with)



Problem Set 4:

The Chemistry Quiz

CR1. _____ CR2. _____ 1. _____ 2. _____ 3. _____

4. _____ 5. _____