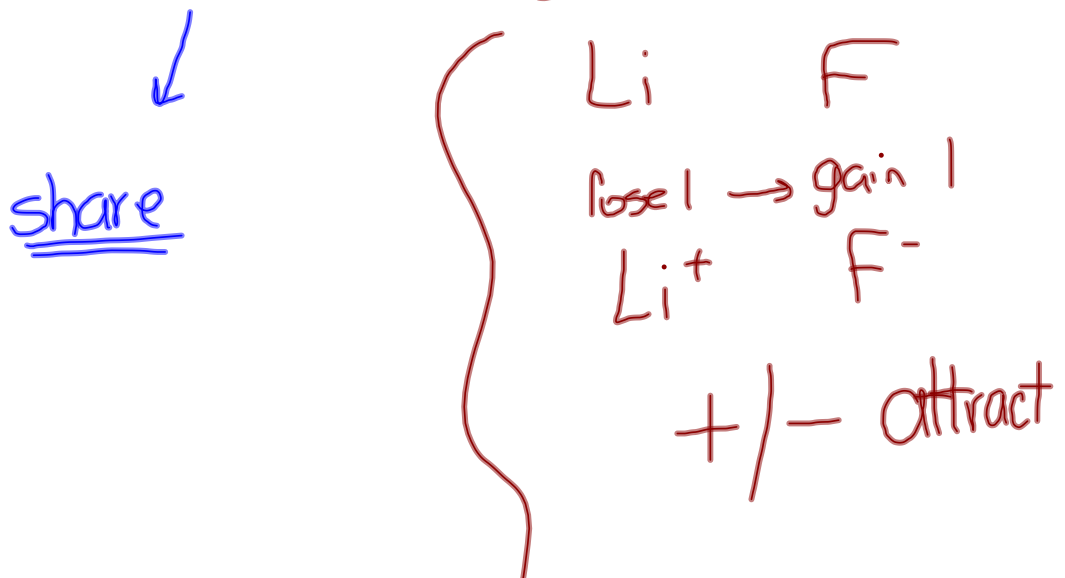


Review of Concepts

Molecular Compounds vs. Ionic Compounds



Covalent Bonds vs. Ionic Bonds



Naming Molecular Compounds

- named similarly to ionic compounds
- name first element listed, with a prefix to count number of atoms
(do not use a prefix for one atom of the first element)
- name second element, with a prefix to count number of atoms.
Change the suffix to -ide

# of Atoms	Prefix

Ex. CS₂

Ex. CF₄

Ex. N₂O

Name the following molecular compounds:

PCl_5 phosphorous pentachloride

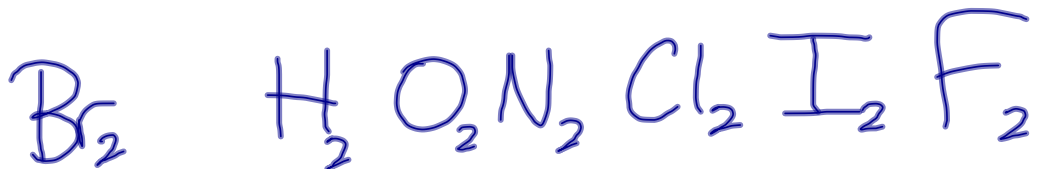
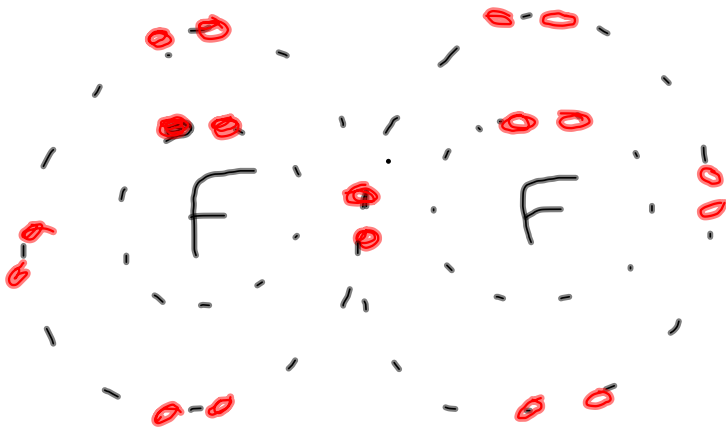
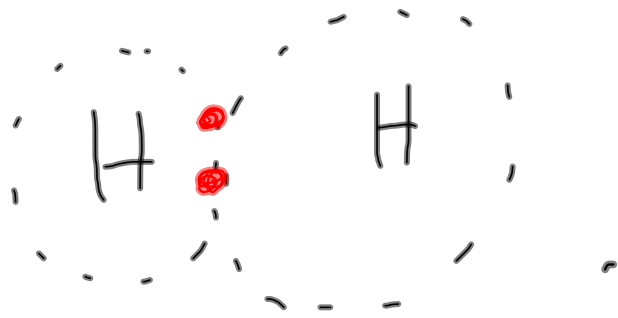
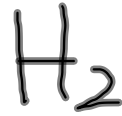
NO nitrogen monoxide (OH^-)

NH_3 nitrogen trihydride

N_2O_5 dinitrogen pentoxide



Diatomic Molecules



Homework

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Molecular Compounds Sheet

Hydrocarbons

- substances made from molecules of once living things are called **organic**
 - they must contain carbon
 - the simplest organic compound is methane
 - CH_4
 - carbon has a combining capacity of four
 - it can make four bonds making it very versatile
 - two major sources of organic materials are the decomposition of plants and photosynthesis
 - hydrocarbons are the result of plants that lived millions of years ago and died, being trapped underground
 - they are compounds of carbon and hydrogen found in various combinations
 - they are also called **fossil fuels**

Synthetic Substances

- natural products are obtained from natural sources
 - animals, plants, and minerals
- synthetic substances are artificially made
 - manufactured in the chemical industry
 - they mainly come from petrochemicals
 - when many molecules are linked together in long chains, polymers are formed
 - when polymers can flow, they are called plastic
 - artificial substances can be made into fibre and fabric
 - polyester and nylon are two examples