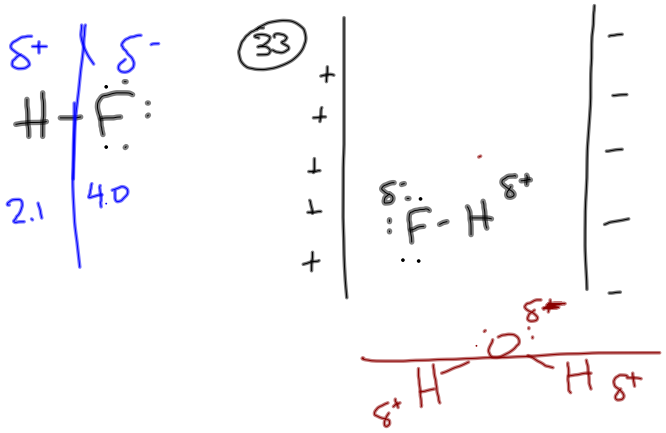
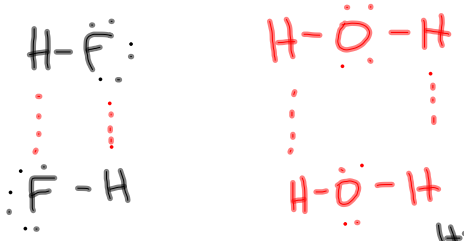
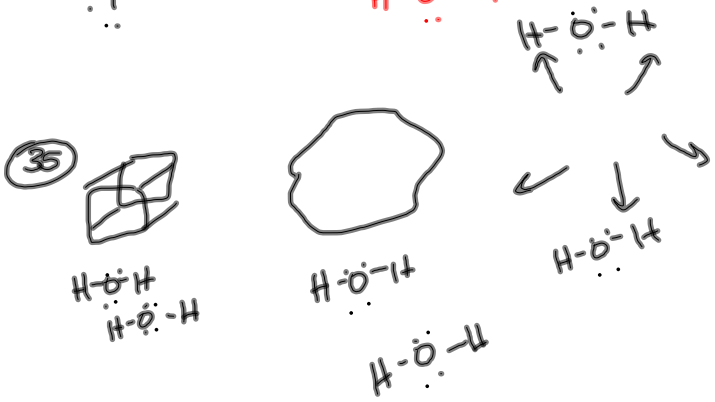
p. 244 #36-38


δ+
δ-
2.1
4.0
33
δ+
δ+
δ+
δ+

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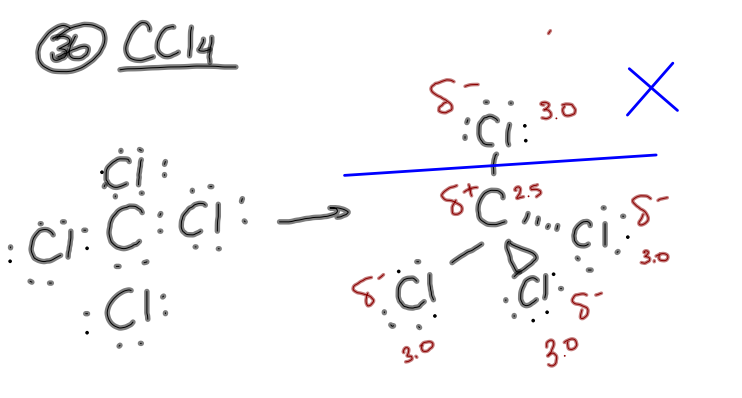
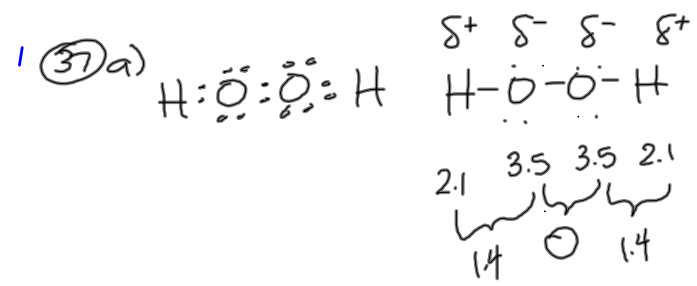
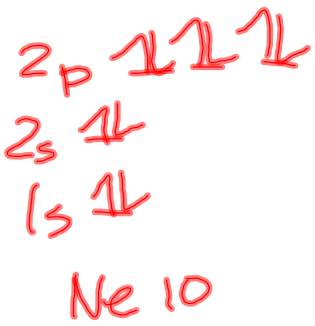
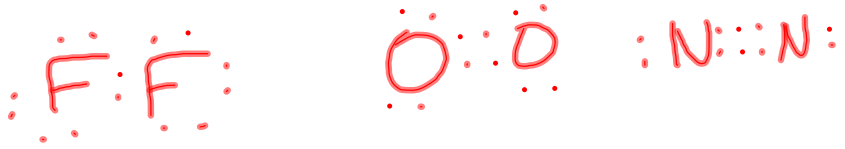
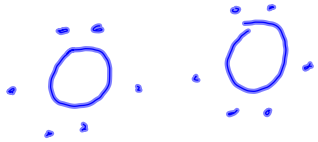

36
CCl4
δ-
3.0
δ+
2.5
δ-
3.0
δ-
3.0
δ-
3.0

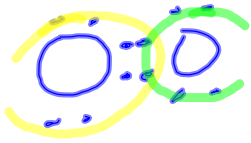

37a)
δ+ δ- δ- δ+
2.1
3.5
3.5
2.1
1.4
1.4

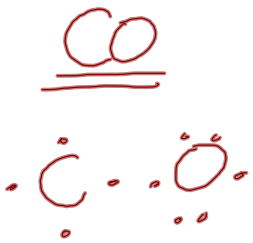


S + Px + Py

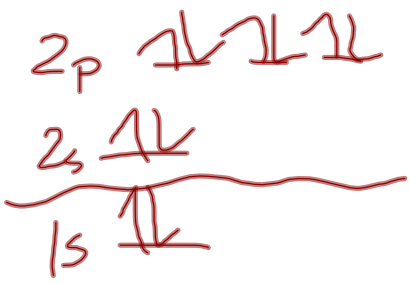


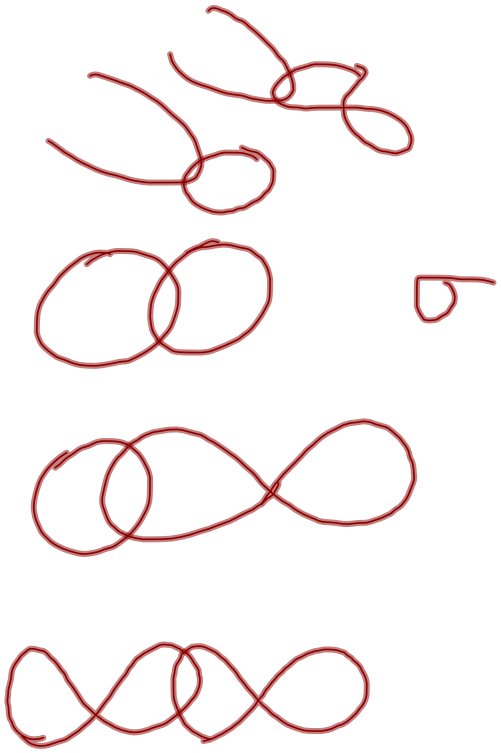


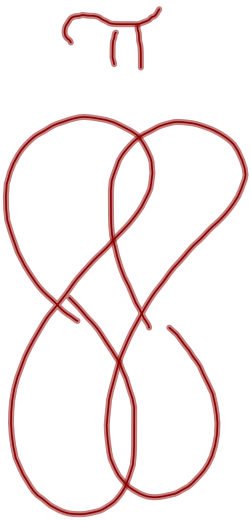




HF







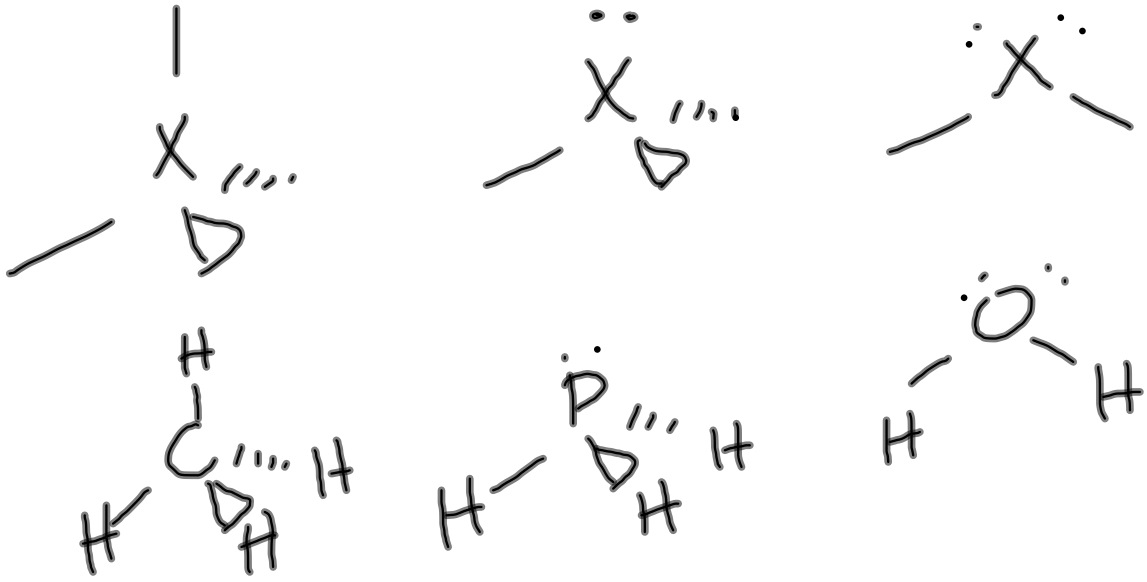
double

triple

Table 8.3 Electronegativity Differences and Bond Types

Electronegativty difference range	Most probable type of bond	Example
0.0-0.4	Nonpolar covalent	H - H (0.0)
0.4-1.0	Moderately polar covalent	H - Cl (0.9)
1.0-2.0	Very polar covalent	H - F (1.9)
≥ 2.0	Ionic	Na^+ Cl^- (2.1)

* No sharp boundary between ionic and covalent



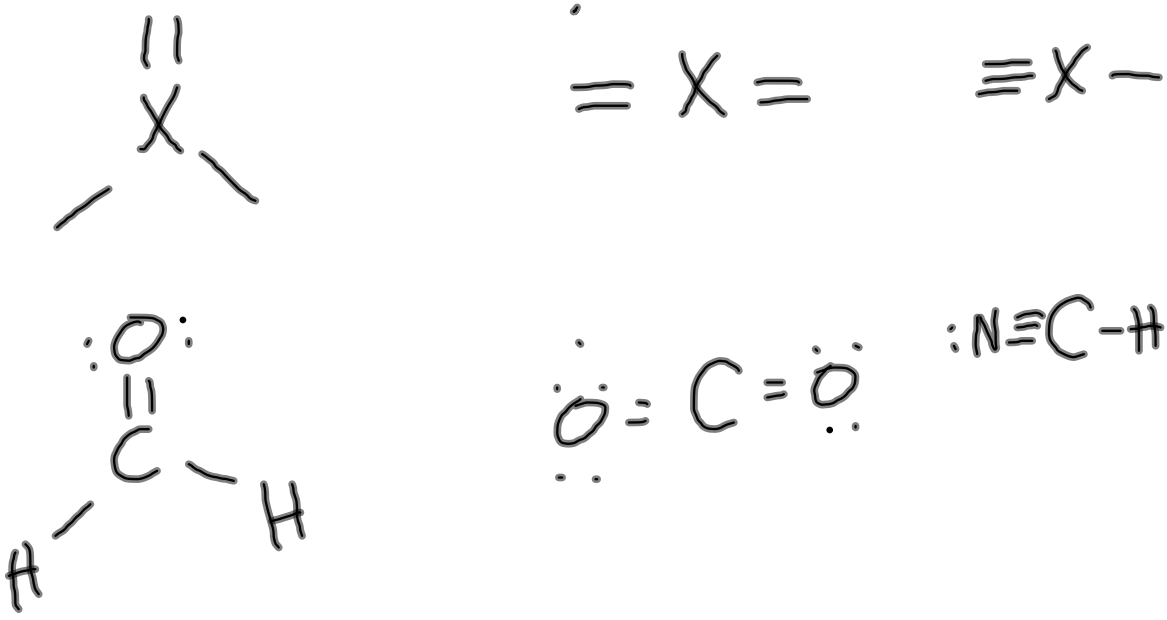


Table 6.2

Electronegativity Values for Selected Elements

H 2.1						
Li 1.0	**Be** 1.5	**B** 2.0	**C** 2.5	**N** 3.0	**O** 3.5	**F** 4.0
Na 0.9	**Mg** 1.2	**Al** 1.5	**Si** 1.8	**P** 2.1	**S** 2.5	**Cl** 3.0
K 0.8	**Ca** 1.0	**Ga** 1.6	**Ge** 1.8	**As** 2.0	**Se** 2.4	**Br** 2.8
Rb 0.8	**Sr** 1.0	**In** 1.7	**Sn** 1.8	**Sb** 1.9	**Te** 2.1	**I** 2.5
Cs 0.7	**Ba** 0.9	**Tl** 1.8	**Pb** 1.9	**Bi** 1.9		

Chapter 8 Review

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Chemical Bonding Topics

- Octet Rule
- Electron Dot Structure
- Metallic Bonding
- Covalent Bonding
- Coordinate Covalent Bonding
- VSEPR Theory
- Hybridization
- Polarity
- Intermolecular Forces
- Properties of Ionic Crystals, Covalent Compounds, Network Solids