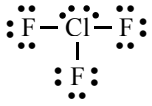
N_2 **molecular** 2 x N (5 ve⁻) 10 e⁻ / 10 e⁻

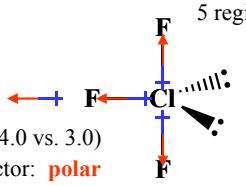
nonpolar

SrF_2 **ionic**

ClF_3 **molecular** 1 x Cl (7 ve⁻) 7 e⁻ / 3 x F (7 ve⁻) 21 e⁻ / 28 e⁻

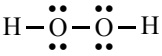


5 regions of **e⁻** density:
T-shaped



EN **F** > **Cl** (4.0 vs. 3.0)
resultant vector: **polar**

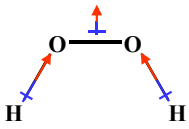
H_2O_2 **molecular** 2 x H (1 ve⁻) 2 e⁻ / 2 x O (6 ve⁻) 12 e⁻ / 14 e⁻



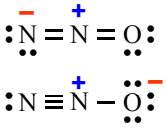
4 regions of **e⁻** density (each O)
bent

EN **O** > **H** (3.5 vs. 2.1)

resultant vector: **polar**



N_2O **molecular** 1 x O (6 ve⁻) 6 e⁻ / 2 x N (5 ve⁻) 10 e⁻ / 16 e⁻



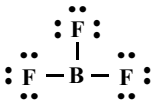
2 regions of **e⁻** density:
linear

EN **O** > **N** (3.5 vs. 3.0)

resultant vector: **polar**

Xe **atomic**

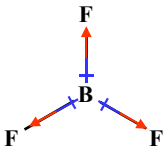
BF_3 **molecular** 1 x B (3 ve⁻) 3 e⁻ / 3 x F (7 ve⁻) 21 e⁻ / 24 e⁻



3 regions of **e⁻** density:
trigonal planar

EN **Cl** > **B** (3.5 vs. 2.0)

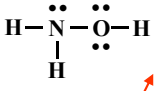
vectors cancel: **nonpolar**



SrO **ionic**

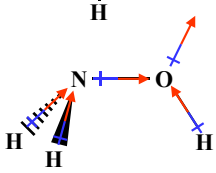
NaBr **ionic**

NH_2OH **molecular** 1 x N (5 ve⁻) 5 e⁻ / 1 x O (6 ve⁻) 6 e⁻ / 3 x H (1 ve⁻) 3 e⁻ / 14 e⁻



4 regions of **e⁻** density (N and O):
N **trigonal pyramidal**
O **bent**

EN **O** > **N** > **H**
(3.5 vs. 3.0 vs. 2.1)



resultant vector: **polar**