

Covalent bonds

Characteristics

- molecule
- type of elements - non metallic
- melting pt = low
- appearance = dull
- conductivity no

ionic characteristics

- rep unit - metal / nonmetal
- physical state = metal + nonmetal
- melting pt = high
- appearance
- conductivity = only when dissolved

sigma bond

- anytime perfectly overlapping
- singular straight line

double bond = 2 lines

- that is a pi bond
- triple bond is a pi bond

VESPR THEORY

- valence shell electron pair repulsion
- since electron pairs repel molecules will adjust shapes so that valence electron pairs are as far apart as possible
- this gives 3-D representations of molecules