

Names: _____

Bonding & Introduction to 3d Molecular Modeling

This worksheet complements the forthcoming Molecular Modeling Lab. Complete the following exercises and include the names of all group members, who contributed to the work, on the form, It will be collected as the pre-lab assignment; refer to the course calendar for the schedule.

The first column lists formulas for a number of compounds. The bonding type is to be determined for these compounds using differences in their respective electronegativity values (refer to the in class information). The second column is for the electronegativity difference, the absolute value of the difference in electronegativity between the 2 different atoms in the compound, $|EN_2 - EN_1|$. The third column is for the average electronegativity of the two atoms, $(EN_1 + EN_2)/2$.

Compound	$ EN_1 - EN_2 $	$\frac{EN_1 + EN_2}{2}$	Bonding Type
HF			
HCl			
HBr			
HI			
CsF			
NaF			
CaO			
BaO			
NH ₃			
CH ₄			
CCl ₄			
H ₂ O			
N ₂ O			
SO ₂			
H ₂			
O ₂			

