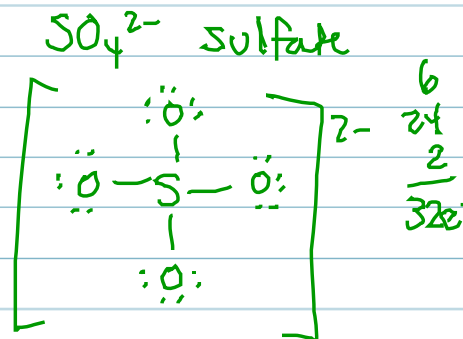
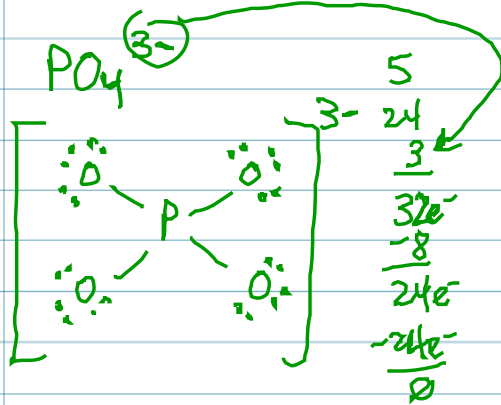
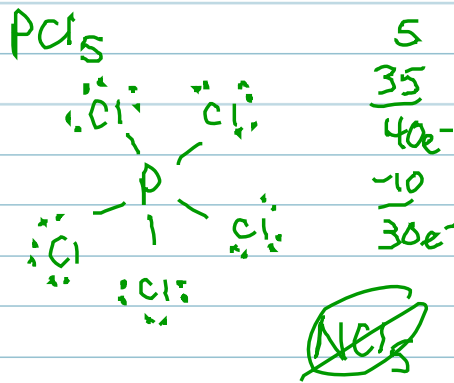
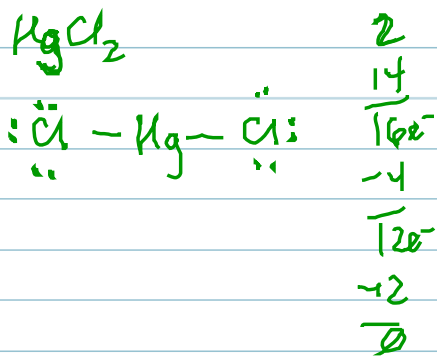
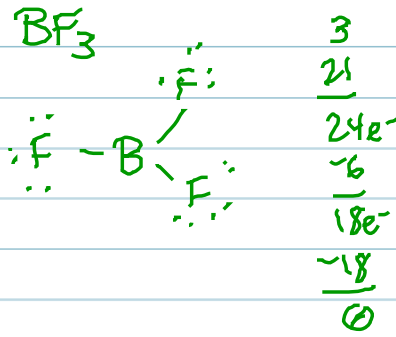
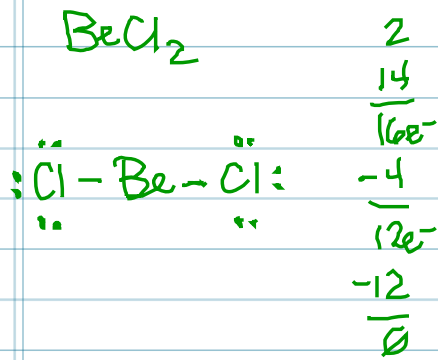


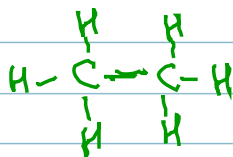
$\text{BeCl}_2$ $\begin{array}{r} 2 \\ 14 \\ \hline 16e^- \\ -4 \\ \hline 12e^- \\ -12 \\ \hline 0 \end{array}$ $\text{:}\ddot{\text{Cl}}-\text{Be}-\ddot{\text{Cl}}\text{:}$	$\text{BF}_3$ $\begin{array}{r} 3 \\ 21 \\ \hline 24e^- \\ -6 \\ \hline 18e^- \\ -18 \\ \hline 0 \end{array}$ $\begin{array}{c} \text{:F:} \\ \text{:F}-\text{B}-\text{:F:} \\ \text{:F:} \end{array}$
$\text{K}_2\text{Cl}_2$ $\begin{array}{r} 2 \\ 14 \\ \hline 16e^- \\ -4 \\ \hline 12e^- \\ -12 \\ \hline 0 \end{array}$ $\text{:}\ddot{\text{Cl}}-\text{K}-\ddot{\text{Cl}}\text{:}$	$\text{PCl}_5$ $\begin{array}{r} 5 \\ 35 \\ \hline 40e^- \\ -10 \\ \hline 30e^- \end{array}$ $\begin{array}{c} \text{:Cl:} \quad \text{:Cl:} \\ \text{:Cl}-\text{P}-\text{Cl:} \\ \text{:Cl:} \quad \text{:Cl:} \end{array}$ <p style="text-align: right;"><del>PCl<sub>5</sub></del></p>
$\text{PO}_4^{3-}$ $\begin{array}{r} 5 \\ 24 \\ \hline 3e^- \\ 30e^- \\ -8 \\ \hline 24e^- \\ -24e^- \\ \hline 0 \end{array}$ $\left[ \begin{array}{c} \text{:O:} \quad \text{:O:} \\ \text{:O}-\text{P}-\text{O:} \\ \text{:O:} \quad \text{:O:} \end{array} \right]^{3-}$ <p style="text-align: center;">phosphate</p>	$\text{SO}_4^{2-}$ sulfate $\begin{array}{r} 6 \\ 24 \\ \hline 2e^- \\ 26e^- \\ -2 \\ \hline 24e^- \end{array}$ $\left[ \begin{array}{c} \text{:O:} \\ \text{:O}-\text{S}-\text{O:} \\ \text{:O:} \end{array} \right]^{2-}$
$\text{C}_3\text{H}_8 \text{ propane}$ $\begin{array}{c} \text{H} \quad \text{H} \\   \quad   \\ \text{H}-\text{C}-\text{C}-\text{H} \\   \quad   \\ \text{H} \quad \text{H} \end{array}$ <p style="text-align: center;">longest weakest</p>	
$\text{C}_2\text{H}_4 \text{ ethylene}$ $\begin{array}{c} \text{H} \quad \text{H} \\ \diagdown \quad \diagup \\ \text{C}=\text{C} \\ \diagup \quad \diagdown \\ \text{H} \quad \text{H} \end{array}$	
$\text{C}_2\text{H}_2 \text{ acetylene}$ $\text{H}-\text{C}\equiv\text{C}-\text{H}$ <p style="text-align: center;">shortest strongest</p>	



phosphate

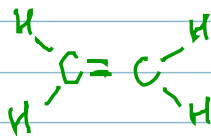
C<sub>n</sub>H hydrocarbons

C<sub>2</sub>H<sub>6</sub> ethane



longest  
weakest

C<sub>2</sub>H<sub>4</sub> ethylene

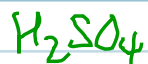


C<sub>2</sub>H<sub>2</sub> acetylene

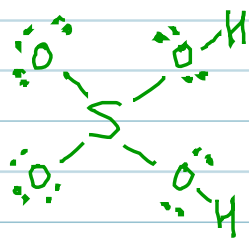


shortest  
strongest

oxoacids

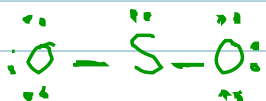


sulfuric acid

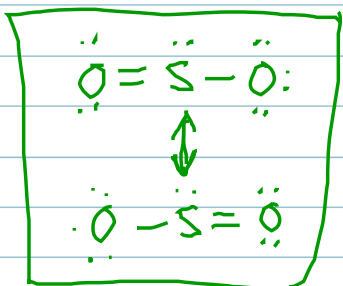


$$\begin{array}{r}
 6 \\
 24 \\
 \underline{2} \\
 32e^- \\
 -12 \\
 \underline{\quad} \\
 20e^- \\
 -20 \\
 \underline{\quad} \\
 0
 \end{array}$$

SO<sub>2</sub>



$$\begin{array}{r}
 6 \\
 12 \\
 \underline{18e^-} \\
 -1 \\
 \underline{\quad} \\
 17e^- \\
 -12 \\
 \underline{\quad} \\
 2e^- \\
 -2 \\
 \underline{\quad} \\
 0
 \end{array}$$



RESONANCE STRUCTURE

