

CH 222 VSEPR Guide

<i>Number of Electron Clouds</i>	<i>VSEPR Hybridization</i>	<i>Example</i>	<i>Electron Pair Geometry</i>
2	sp	<p style="text-align: center;"> $\text{F} - \text{Be} - \text{F}$ 180° </p>	<i>linear</i>
3	sp^2	<p style="text-align: center;"> F $$ B $\diagup \quad \diagdown$ $\text{F} \quad \text{F}$ 120° </p>	<i>trigonal planar</i>
4	sp^3	<p style="text-align: center;"> H $$ C $\diagup \quad \diagdown$ $\text{H} \quad \text{H}$ 109° </p>	<i>tetrahedral</i>
5	dsp^3	<p style="text-align: center;"> 90° F $$ $\text{F} - \text{P} \begin{matrix} \diagup \text{F} \\ \diagdown \text{F} \end{matrix}$ $$ F 120° </p>	<i>trigonal bipyramid</i>
6	d^2sp^3	<p style="text-align: center;"> 90° F $$ $\text{F} \begin{matrix} \diagup \text{S} \diagdown \\ \diagup \text{F} \diagdown \end{matrix}$ $$ F 90° </p>	<i>octahedral</i>