**VSEPR THEORY CHART**

**Type of Molecule Example Molecular Geometry Bond Angles**

 **AB2 CO2  Linear 180o**

 **AB3 SO3  Trigonal Planar 120o**

 **AB2E SO2  Bent < 120o**

 **AB4 CH4  Tetrahedral 109.5o**

 **AB3E NH3  Trigonal Pyramidal < 109.5o**

 **AB2E2 H2O Bent < 109.5o**

 **AB5 PCl5  Trigonal Bipyramidal 120 o and 90o**

 **AB4E SF4  Seesaw/ Sawhorse 120 o and 90o**

 **AB3E2 ClF3  T-shape 90o**

 **AB2E3 XeF2  Linear 180o**

 **AB6 SF6  Octahedral 90o**

 **AB5E BrF5  Square Pyramidal 90o**

 **AB4E2 XeF4  Square Planar 90o**

**Standard Examples**

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**Examples that violate the Octet Rule – (Trigonal bipyramidal electron geometries)**

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**Examples that violate the Octet Rule – (Octahedral electron geometries)**





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