
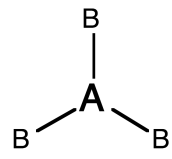
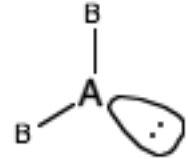
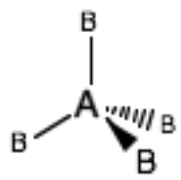
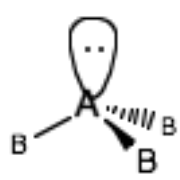
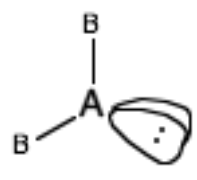
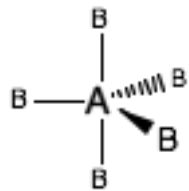
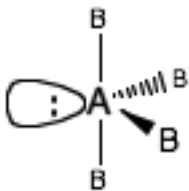
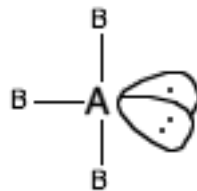
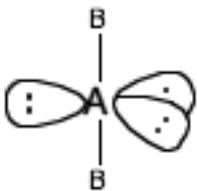

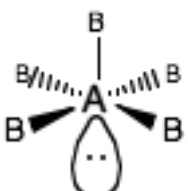
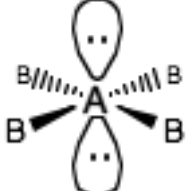


## A Visual Guide to VSEPR

VSEPR Theory considers repulsion between “electron domains” in order to predict molecular geometry. An **electron domain** is a region around a central bonding atom where two or more electrons are grouped together and act as a unit to repel other nearby electrons.

Two types of electron domains exist: a **bonding electron domain** (any type of bond counts – single, double, or triple) and a **non-bonding electron domain** (or lone pair domain). In the picture below, a bonding domain is represented as a line, whereas a non-bonding domain is represented by two dots outlined to better indicate their location.

Number of electron domains	Electron domain geometry	Molecular geometry possibilities
2 electron domains	Linear	 <i>Linear molecule</i>
3 electron domains	Trigonal planar	 <i>Trigonal planar molecule</i>  <i>Bent molecule</i>
4 electron domains	Tetrahedral	 <i>Tetrahedral molecule</i>  <i>Trigonal pyramidal molecule</i>  <i>Bent molecule</i>
5 electron domains	Trigonal bipyramidal	 <i>Trigonal bipyramidal molecule</i>  <i>See-saw shaped molecule</i>  <i>T-shaped molecule</i>  <i>Linear molecule</i>
6 electron domains	Octahedral	 <i>Octahedral molecule</i>  <i>Square pyramidal molecule</i>  <i>Square planar molecule</i> 