Valence State Electron Pair Repulsion Theory

1. Molecules adopt a shape that minimizes repulsions between pairs of electrons around a central atom.

2. Lone pairs (lp) are more repulsive than bond pairs (bp); so:
   a. There are no molecules with lp-lp repulsions at 90°.
   b. Molecules adopt the shape that minimizes the number of 90° lp-bp interactions.