

**Project Title:** *Trigonal Planar*      **Teacher:** *John Smith*

**Project Start Date:** *March 22, 2010*    **Project End Date:** *April 22, 2010*

**Applicable Levels:** *10-11*

**Project Description:**

**Project Objectives:**

- Students will be able to construct a trigonal planar molecule.
- Students will be able to describe other molecules using VSEPR notation.
- Students will be able to predict the molecular geometry of molecules according to VSEPR.

**Overview:**

- 11.1.1. Use VSEPR to predict molecular geometry based on a central atom's electron configuration.
- 11.1.1.2. Use VSEPR to predict molecular geometry based on a central atom's electron configuration.
- 11.1.1.3. Use VSEPR to predict molecular geometry based on a central atom's electron configuration.
- 11.1.1.4. Use VSEPR to predict molecular geometry based on a central atom's electron configuration.

**Essential Activities:**

- **Classroom Experiments - Models:** Use ball-and-stick models to illustrate the trigonal planar geometry of  $BF_3$ ,  $SO_3$ , and  $CO_3^{2-}$ .
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**Essential Activities:**

Students will apply their knowledge of VSEPR to predict the molecular geometry of  $BF_3$ ,  $SO_3$ , and  $CO_3^{2-}$ . They will also be able to describe other molecules using VSEPR notation.