

# Computational Pre-lab Exercise-Week 1

Last updated 20 th September 2002

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Name \_\_\_\_\_ TA \_\_\_\_\_

Date \_\_\_\_\_ Lab Section \_\_\_\_\_

**This assignment must be completed individually and turned in to your TA at the beginning of lab. You will not be allowed to begin the lab until you have completed this assignment.**

Draw Lewis structures and VSEPR representations of the following molecules.

## *Alkanes*

Methane (CH<sub>4</sub>)

Ethane (C<sub>2</sub>H<sub>6</sub>)

Propane (C<sub>3</sub>H<sub>8</sub>)

## *Multiple C-C bonds*

Ethylene (Ethene, C<sub>2</sub>H<sub>4</sub>)

Acetylene (Ethyne, C<sub>2</sub>H<sub>2</sub>)

## *C-X triple bonds*

Hydrogen cyanide (HCN)

Carbon monoxide (CO)

*Benzene*

**Benzene (C<sub>6</sub>H<sub>6</sub>)**

*Carbon-Oxygen bonds*

**Methanol (CH<sub>3</sub>OH)**

**Formaldehyde (H<sub>2</sub>CO)**