

Name: \_\_\_\_\_

Student #: \_\_\_\_\_

## Chem Assignment: M.O. Diagrams

1. For the ion  $\text{OCl}^-$ : Draw and label the M.O. diagram  
Give the bond order  
Give the magnetism

Name: \_\_\_\_\_

S# : \_\_\_\_\_

## Chem Assignment - Band Diagrams

For each of the following, draw and label the band diagram (s+p bands if applicable, \* valence & conduction bands)

a) Mg

b) Na

e) Si

d)  $\text{Si}_N \text{Ga}_m$  ( $m \ll N$ )