**Problem Set 5**  
**Chemistry 109H, Lecture 4 (Weisshaar), Fall, 2003**

**Reading:** Chapter 3, excluding 3.14. We will give VSEPR a light touch.  
**Problem Assignment** (due in class, Monday, Oct. 18)


**Problem 16:** Here are some first ionization energies. Molecular H$_2$: 1488 kJ/mol; atomic H: 1312 kJ/mol; molecular O$_2$: 1165 kJ/mol; atomic O: 1314 kJ/mol. Explain the different trends between homonuclear diatomic and bare atom.