

Take-Home Quiz 3
CHEM 325
Spring 2009

Name: _____

Derive a qualitative MO diagram for H_2O using the molecular coordinate system defined below. Determine the SALCs and draw qualitative MO wavefunctions. Label the MOs with their symmetry designation and what type of MO each is (i. e., σ , σ^* , etc.) Show all work for full credit, attach extra sheets as needed. For simplicity, assume that the oxygen 2s orbital is too low in energy to have a large effect on bonding.

