

## Quiz 8.2 – Valence Bond Theory

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

**Problem 1**

Consider the ion  $\text{NCO}^-$ . List what sorts of bonds are present in this ion, what sorts of orbitals overlap to form the bonds, and what sorts of orbitals hold lone pairs.

**Problem 2**

Consider the ion  $\text{NO}_3^-$ . List what sorts of bonds are present in this ion, what sorts of orbitals overlap to form the bonds, and what sorts of orbitals hold lone pairs.

*When You See Water*

By Alice Walker

When you see water in a stream  
you say: oh, this is stream  
water;  
When you see water in the river  
you say: oh, this is water  
of the river;  
When you see ocean  
water  
you say: This is the ocean's  
water!  
But actually water is always  
only itself  
and does not belong  
to any of these containers  
though it creates them.  
And so it is with you.