

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

Section \_\_\_\_\_

**Mito Lab Pre-lab Quiz**

*Fall 2005 (10 pts total)*

1. (2 pts) Which electron donor will you be using for the Mito Lab? How many ATPs do you expect to be generated for each pair of electrons donated from this substrate?
2. (2 pts) What is the difference between state 3 and state 4? Under which state do you expect to see higher oxygen utilization?
3. (2 pts) In your own words, explain what is meant by the statement that “respiration is coupled to ATP synthesis”. Explain what “uncoupling” means.
4. (2 pts) How does CCCP uncouple electron transport from ATP synthesis?
5. (2 pts) Why does shearing mitochondria uncouple electron transport from ATP synthesis?