

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

## OXIDATIVE PHOSPHORYLATION Worksheet

1. Oxidative Phosphorylation can be broken up into two parts.  
The \_\_\_\_\_ and \_\_\_\_\_
2. The Electron Transport Chain is located in the \_\_\_\_\_  
and consists of many different protein complexes.
3. \_\_\_\_\_ gives up its high energy electrons to the first complex in the chain.
4. This energy is used to pump \_\_\_\_\_ from the \_\_\_\_\_ into the \_\_\_\_\_.
5. \_\_\_\_\_ gives up its high energy electrons to the second complex in the chain
6. This energy is also used to pump \_\_\_\_\_ from the \_\_\_\_\_ into the \_\_\_\_\_.
7. \_\_\_\_\_ molecules accept the electrons at the last complex in the chain which results in the formation of \_\_\_\_\_.
8. Because there is a build up of  $H^+$  in the \_\_\_\_\_  
They diffuse down their concentration gradient through a special protein in the membrane called \_\_\_\_\_.
9. The energy of the moving  $H^+$  is captured by the ATP synthase and used to convert \_\_\_\_\_ to \_\_\_\_\_.
10. Oxidative Phosphorylation produced about \_\_\_\_\_ ATP.