

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

## CITRIC ACID CYCLE (KREB'S CYCLE) Worksheet

1. If \_\_\_\_\_ is present, the two pyruvates enter into the \_\_\_\_\_ via \_\_\_\_\_ transport.
  
2. Before it can enter into the Citric Acid Cycle, pyruvate must first be converted into \_\_\_\_\_
  
3. What are the resulting products from this intermediate step? (Remember, two pyruvates entered)  
\_\_\_\_\_
  
4. The Citric Acid Cycle is an 8 step metabolic pathway. Each step is catalyzed by a \_\_\_\_\_ enzyme.
  
5. The acetyl CoA molecules enter into the Citric Acid Cycle one at a time. The acetyl CoA is received into the cycle by a molecule called \_\_\_\_\_.  
The result is a molecule called \_\_\_\_\_.
  
6. The citrate continues through cycle, oxidized at each step. The last step results in a molecule of \_\_\_\_\_, ready to accept the next acetyl CoA. This is why it is considered a cycle.
  
7. Each turn of the Citric Acid Cycle yields:  
\_\_\_\_\_ NADH    \_\_\_\_\_ FADH<sub>2</sub>    \_\_\_\_\_ ATP    \_\_\_\_\_ CO<sub>2</sub>
  
8. Since the Citric Acid Cycle turns \_\_\_\_\_ for every 1 glucose, the net gain of products is:  
\_\_\_\_\_ NADH    \_\_\_\_\_ FADH<sub>2</sub>    \_\_\_\_\_ ATP    \_\_\_\_\_ CO<sub>2</sub>
  
9. The ATP molecules are formed via \_\_\_\_\_.