

Name \_\_\_\_\_

Period \_\_\_\_\_

Date \_\_\_\_\_

SECTION

**4.5**

CELLULAR RESPIRATION IN DETAIL

## Study Guide

### KEY CONCEPT

Cellular respiration is an aerobic process with two main stages.

**MAIN IDEA:** Glycolysis is needed for cellular respiration.

1. What is the function of glycolysis?

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2. What happens to the molecules formed during glycolysis when oxygen is available?

\_\_\_\_\_

3. What is meant by a “net gain of two ATP molecules” from glycolysis?

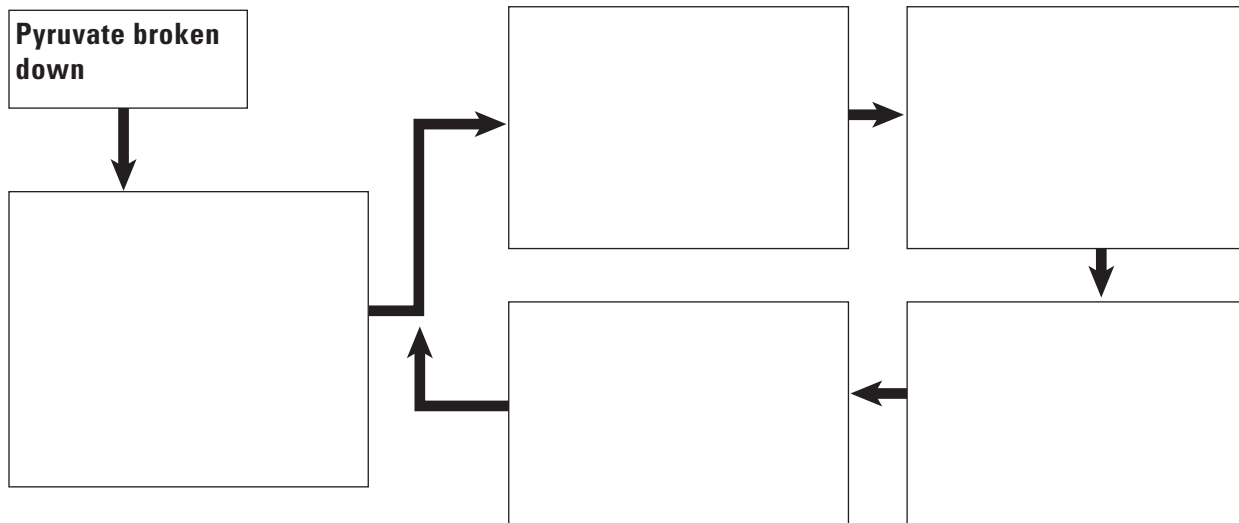
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**MAIN IDEA:** The Krebs cycle is the first main part of cellular respiration.

4. What is the function of the Krebs cycle?

\_\_\_\_\_

Complete the cycle diagram below to summarize the six steps of the Krebs cycle.



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## STUDY GUIDE, CONTINUED

**MAIN IDEA:** The electron transport chain is the second main part of cellular respiration.

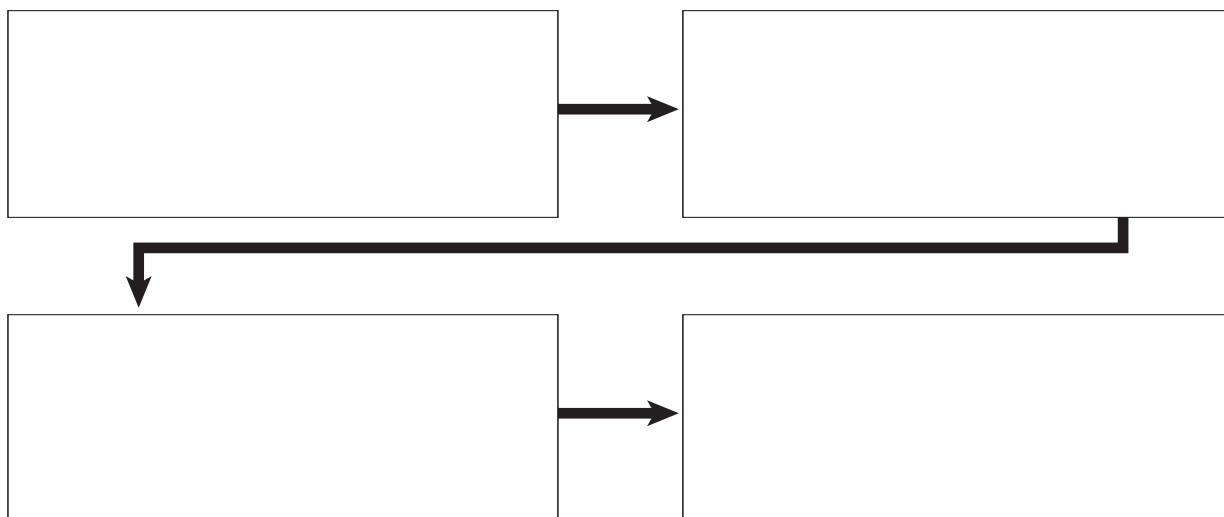
5. Where is the electron transport chain in cellular respiration located?

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6. What is the function of the electron transport chain?

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Fill in the sequence below to take notes on the four steps of the electron transport chain.



7. Why is oxygen needed for cellular respiration?

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