

Section 9-2 The Krebs Cycle and Electron Transport (pages 226-232)

Key Concepts

- What happens during the Krebs cycle?
- How are high-energy electrons used by the electron transport chain?

Introduction (page 226)

1. At the end of glycolysis, how much of the chemical energy in glucose is still unused?

2. Because the final stages of cellular respiration require oxygen, they are said to be _____.

The Krebs Cycle (pages 226-227)

3. In the presence of oxygen, how is the pyruvic acid produced in glycolysis used?

4. What happens to pyruvic acid during the Krebs cycle? _____

5. Why is the Krebs cycle also known as the citric acid cycle? _____

6. When does the Krebs cycle begin? _____

~~7. What happens to each of the 3 carbon atoms in pyruvic acid when it is broken down?~~

8. What happens to the carbon dioxide produced in breaking down pyruvic acid?

~~9. How is citric acid produced?~~

10. During the energy extraction part of the Krebs cycle, how many molecules of CO₂ are released? _____

11. What is the energy tally from 1 molecule of pyruvic acid during the Krebs cycle? _____