

## Chapter 17 – The Citric Acid Cycle

Objective	In-text reading	Pre-class materials/activities	In-class materials/activities	Practice problems from text
1. Discuss the reactions that pyruvate can undergo and use your understanding of cellular needs to predict which reaction will occur		Ch. 17: The Citric Acid Cycle (Hayden Lecture) Mystery Diagnosis – Lethal Diet: Pyruvate Dehydrogenase Complex Deficiency Part 1 and 2 (Documentary)	S32 – Exploring Pyruvate and the Citric Acid Cycle	S32 – Post Skill Exercises 4 <sup>th</sup> Edition: #3,
2. Identify which carbons from glucose form CO <sub>2</sub> in this pathway and utilize that knowledge to interpret 14C-CO <sub>2</sub> data.		Ch. 17: The Citric Acid Cycle (Hayden Lecture) Pyruvate Dehydrogenase Complex Deficiency Part 1 and 2 (Documentary)	S32 – Exploring Pyruvate and the Citric Acid Cycle	S32 – Post Skill Exercises 4 <sup>th</sup> Edition: #1
3. Build specific knowledge to understand the citric acid cycle.		Ch. 17: The Citric Acid Cycle (Hayden Lecture) The Citric Acid Song (music video)	S32 – Exploring Pyruvate and the Citric Acid Cycle	S32 – Post Skill Exercises 4 <sup>th</sup> Edition: #5, 11, 13,
4. Process metabolic data presented in a table and use it to make generalizations about cell-specific metabolic activity.		Ch. 17: The Citric Acid Cycle (Hayden Lecture)	S32 – Exploring Pyruvate and the Citric Acid Cycle	S32 – Post Skill Exercises
5. Describe the net reaction of the TCA		Ch. 17: The Citric Acid Cycle (Hayden Lecture) The Citric Acid Song (music video)	S33 – Exploring the Citric Acid Cycle	S33 – Post Skill Exercises 4 <sup>th</sup> Edition: #25
6. Develop your ability to transfer your knowledge from one context to another by applying prior knowledge of regulation to this new pathway.		Ch. 17: The Citric Acid Cycle (Hayden Lecture)	S33 – Exploring the Citric Acid Cycle	S33 – Post Skill Exercises 4 <sup>th</sup> Edition: #5, 21, 23