#### Bio 8.1

#### Goals

- \* Order the three steps of cellular respiration, describing the inputs and outputs of each
- \* Characterize the role of enzymes in cellular respiration

## Plan

Lab: Catalase

Where does fat go when it is "burned?" (5 min)

Video: When You Burn Fat, Where Does it Go? (5 min)

The story of sugar (15 min)

Video: ATP & Respiration: Crash Course Biology #7 (15 min)

Cell respiration questions (remainder)

Bio 8.2

## Goals

- \* Describe the process in each stage of cellular respiration
- \* Describe the input and output of each stage of cell respiration

#### Plan

Reminder of cellular respiration steps (5 min)

Overview of cellular respiration

Glycolysis

Krebs cycle

Electron transport chain

Video:

Hero's journey activity

Bio 8.3

## Goals

- \* Describe the importance of mitochondria to cell respiration
- \* Experiment with the necessary conditions for cell respiration

# Plan

Cell respiration overview (10 min)

*Video*: Cellular Respiration and the Mighty Mitochondria (10 min)

The electron transport chain (5 min)

*Video*: Oxidative phosphorylation (10 min)

The ATP synthase and the contribution of mitochondria (10 min)

Video: ATP synthase (5 min)

Bring up ethanol fermentation

Question: What could be used to distinguish ethanol fermentation from cellular

respiration?