

Cellular respiration

A. Objectives

After this lab you should have gained a deeper understanding of glycolysis.

B. Before coming to lab

Review chapter 9, especially Fig. 9.9, 9.12, and 9.16. Bring your book or a copy of those three figures as well as your study guide to lab.

C. During lab

1. You will first watch a video on glycolysis. Try to fill in the tally sheets for glycolysis in your study guide (20 minutes).
2. Next, you will go to the computer lab and do the “Do it yourself” glycolysis exercise at <http://www.terravivida.com/vivida/diygly/> (accessed 7/06) designed by Jon Maber. You need to first read the introduction, strategy, task ahead, and keeping track parts. Then click on the glucose molecule to start the exercise (60 minutes).
3. Come back to lab, and watch the video parts on the citric acid cycle and oxidative phosphorylation

D. After lab

Prepare for a quiz on glycolysis based on the DIY glycolysis exercise.

Worksheet for Do It Yourself Glycolysis

The goal of glycolysis is to: _____

Step	What happens	What this step accomplishes

Tally of input and output of glycolysis (make sure input and output are balanced)

Input	Output