

# Biotechnology Unit

Packet Due Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Partner: \_\_\_\_\_

Period: \_\_\_\_\_

# Biotechnology Packet Grading Rubric

## 1. Introduction to Biotechnology

title page with picture, Name, partner & Per \_\_\_\_\_/5 points  
Table of Contents \_\_\_\_\_/5 Points  
DNA lab series overview & pre-lab sheets \_\_\_\_\_/36 Points

## 2. Lab 2a

Lab 2 handout  
Pre-lab questions (before the lab and stop and think) \_\_\_\_\_/12 Points  
Post Lab Question Lab 2 (C17) \_\_\_\_\_/10 Points

## 3. Lab 4a

Lab 4 handout  
Pre-lab questions – Lab 4a \_\_\_\_\_/12 Points  
Post Lab Question Lab 4 (C33) \_\_\_\_\_/16 Points  
Labeled gel picture & graph \_\_\_\_\_/16 Points  
Computer generated graph \_\_\_\_\_/+5 bonus!

## 4. Lab 5

Lab 5 handout  
Pre-lab questions – Lab 5 \_\_\_\_\_/16 Points  
Post Lab Question Lab 5 \_\_\_\_\_/12 Points  
Predictions and results data table \_\_\_\_\_/10 Points  
Picture of results \_\_\_\_\_/5 Points

## 5. E. Coli Insulin Factory

Created correct plasmid \_\_\_\_\_/5 Points  
Data Sheet & Questions \_\_\_\_\_/15 Points

**REE PE PA** For Labs 2-4(confirmation of plasmid restriction) \_\_\_\_\_/15 Points

(Explanation of restriction and how plasmids are made, 2 potential errors and ways to fix it, how the lab can be used to determine band size, application of recombinant plasmids)

**REE PE PA** For lab 5 (transformation) \_\_\_\_\_/30 Points

(Explanation of results on all three plates, two rationales on what potentially went wrong and how to avoid them in the future, **operon elaboration**, explaining the role of the arabinose plates)

## Organization

Answers are in complete sentences \_\_\_\_\_/5 Points  
Labs have been actively read \_\_\_\_\_/30 Points  
(annotations, notes, drawings etc)  
Folder is organized in order and **BOUND!** \_\_\_\_\_/5 Points

**TOTAL BIOTECHNOLOGY PACKET GRADE: \_\_\_\_\_/250 POINTS**