

Lab Report Outline/Checklist

Title- be descriptive text

Abstract

Purpose, methodology, results, and brief conclusion. (No longer than 1 paragraph)

Background

- What is bacterial transformation?
- Why use E.coli
- What is a plasmid
- What is the pGLO plasmid (2) What genes are in it? (3) What do the genes do?
- Where does GFP gene come from?
- What are competent cells, how do we increase competency
- What's transformation solution (2) Why is it important (3) Why use it
- What is heat shock technique (2) how does it work (3) why use it
- Transformation calculation formula (2) what is it (3) how does it work (3) why do we use it
- Include a picture of the pGLO plasmid

Hypothesis

- If, then statement

Materials & Methods

- What materials were provided
- Be specific on how many microliters you pipetted and any alterations to the lab report

Data

- Write out your data in sentences first
- Put your tables from lab report in there
- Put your pictures of your plates in there too

Analysis

- Restate your hypothesis
- What does your data mean? Use your results from formula and pictures to assess how well you did.
- Are your results expected, If not why? What happened?
- Possible sources of error
- What would you do better if you had to do it again.

Grammar

Aitken, A. (2017). General biology laboratory I manual. *Department of Biological Science*. Dyersburg State Community College, Dyersburg, TN.