

Name:

Date:

Class:

Bacterial Adaptations and Their Application in Genetic Engineering: Student Lab Sheet Part 2

PART 2 – CELL PELLETING AND ANALYSIS

Materials:

Each group needs:

- One 1000 μ L micropipette
- Two 1000 μ L micropipette tips (sterile)
- Two 1.5 ml micro-centrifuge tubes
- A micro-tube rack
- Fine-tip labeling marker

To share with the entire class:

- One micro-centrifuge

Procedure:

1. Put on protective equipment.
2. Pick up your group's two culture tubes in a test tube rack.
3. Discuss and write down your observations of the cell cultures below.
4. Pick up a micro-tube rack with two micro-centrifuge tubes.
5. Label the tubes: Group # E. coli Aerobic and Group # E. coli Anaerobic.
6. Using the micropipettes, draw up all 1000 μ L of the **aerobic** culture and transfer it to the corresponding micro-tube. Dispose of the tip.
7. Using the other tip, repeat the previous step with the **anaerobic** culture.
8. Take your group's two tubes to your teacher to be placed into the centrifuge and spun for 5 minutes at a speed of around 6000 rcf.
9. After the spin, pick up your group's tubes and analyze the resulting cell pellet.
10. Write down observations of the cell pellets below.



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Cell Culture Observations		
	Before Spinning	After Spinning
Aerobic		
Anaerobic		