

POSTLAB QUESTIONS 7.A

1. What gas is produced by fermentation of yeast?

2

2. Is fermentation in yeast aerobic or anaerobic respiration?

3. What advantage does fermentation offer yeast?

2

4. Did the tubes show varying amounts of gas production? Why?

Tube Number	Carbohydrate Solution	Gas Produced (mm)
1	Distilled Water	
2	Starch	
3	Sucrose	
4	Glucose	

5. What tube showed the greatest rate of gas production? Why?

POSTLAB QUESTIONS 7.C

1. In this exercise, methylene blue substitutes for what molecule as the final electron acceptor in the electron transport system of yeast cells?

2. What does a decrease in the blue color of methylene blue indicate about the activity of the electron transport system?

3. Identify the tubes that retained their original blue color. Which compounds deactivated the enzymes of cellular respiration?

4. Why does the reduction of methylene blue occur in tube 4, but not in tube 2?

5. Why do you think formaldehyde was used in the past as a preservative for keeping animal specimens?

Tube Number	Contents	Color Scale
1	MgCl	
2	Iodoacetamide	
3	Citrate	
4	Iodoacetamide + Citrate	
5	Formaldehyde	
6	Distilled Water	