

Glycolysis and Fermentation Lab (A.K.A The Dough Lab)

Pre-Lab Questions (answer in complete sentences):

1. What is the first step in the process of harvesting energy available in glucose? _____
2. What are the energy requirements for glycolysis? _____
3. In what conditions will anaerobic fermentation occur? _____

Experimental Question:

Experimental Design:

Control Group	Independent Variable (s)	Dependent Variable

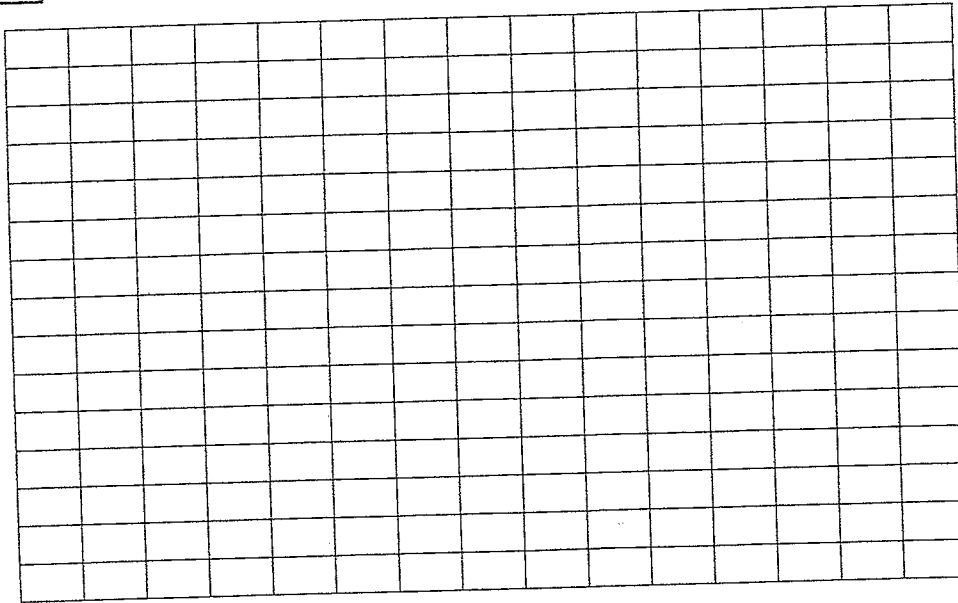
Claim Statement:

Evidence:

Data Table: Height of Dough (mm) under Various Temperatures

Temperature of Yeast ($^{\circ}\text{C}$)	0 min	5 min	10 min	15 min	20 min	25 min	30 min

Evidence: Line Graph: Height of Dough (mm) at Five Minute Time Intervals



Color Key:

- ___ °C
- ___ °C
- ___ °C
- ___ °C
- Control

Conclusion Questions:

1. What organism caused your dough to rise? _____
2. What molecule is broken down to provide the carbon? _____
3. What is the name of the process that breaks glucose into pyruvate? _____
4. Where in the cell does this process take place? _____
5. What is the name of the process that turns pyruvate into alcohol? _____
6. What purpose does this process serve?

Reasoning:

A large empty rectangular box for reasoning, intended for students to write their answers to the conclusion questions.