

LO: Identify inputs & outputs of a respiration-like process

SLE: Work collaboratively

Problem: How does salt affect the breakdown of sugar by yeast cells?

Hypothesis:

Independent variable:

Dependent variable:

3 controls:

Procedure:

1. Place a spoonful of yeast and a spoonful of sugar into each of 2 glass bottles.
2. Fill each bottle 2/3 full of warm water.
3. Add 2 spoonfuls of salt to one bottle.
4. Place a deflated balloon over the mouth of each bottle.
5. Wait 10-15 minutes.
6. Make qualitative observations.

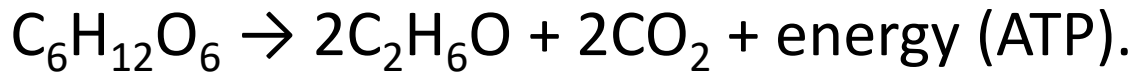
Data: Draw a picture of each bottle.

Conclusion:

Homework (due Oct. 10)

(Your textbook will be helpful.)

In today's experiment, yeast broke down glucose by a process called fermentation, whose chemical equation is:



- (1) Explain how fermentation is similar to aerobic respiration.
- (2) Explain how fermentation is different from aerobic respiration.
- (3) List three main groups of organisms that are capable of fermentation.
- (4) How is yeast fermentation useful to bakers?
- (5) OPTIONAL: How is yeast fermentation useful to beer/wine brewers?