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Example Yeast Incubator Experiment

Objective/Purpose:

- become familiar with lab equipment and method
- record a lab write up properly
- conduct a fermentation experiment to generate Co2
- get data to write a "SOP"

Background/Research:

- yeast smells funny
- yeast is an adaptable organism
- yeast can help produce human insulin
- tap water + yeast + O_2 +sugar $\rightarrow CO_2 + H_2O$ + ATP + metabolites

Safety Precautions:

- wear a lab coat
- wear goggles
- Watch out for hot plate!

Material and Equipment:

- Graduated cylinder. (500mL)
- Magnetic hot plate
- Erlenmeyer flask(250mL)
- Tape measure
- 10mL yeast (production 11/08)
- 5mL sugar –western family pure granulate sugar
- 100mL tap water
- Yeast (product date:11/08) (expiration date (11/10) Lot # 37214

Hypothesis:

- The balloon will explode.

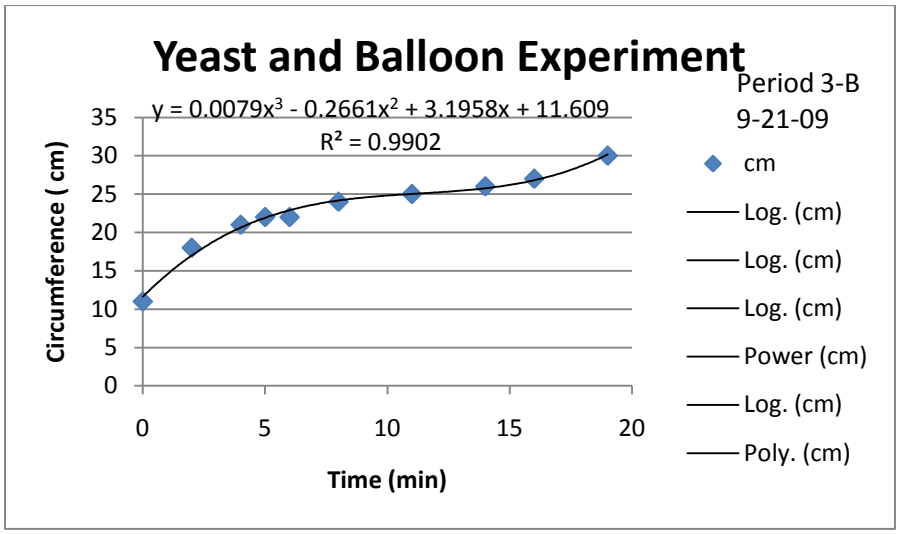
Procedure:

- Heat 125mL of water on VWR magnetic hotplate/stirrer
- Blow up balloon to stretch it out
- Add 100mL water, 10mL yeast, 5mL sugar
- Put balloon on flask, tape it.
- Swish mixture
- Put back on hot plate

- Measure every 3 min.

DATA

Time	cm
1:09	11
1:11	18
1:13	21
1:14	22
1:15	22
1:17	24
1:20	25
1:23	26
1:25	27
1:28	30



Conclusion

Yeast Incubator Experiment

Objective/Purpose:

Background/Research:

Safety precautions:

Material and Equipment:

Materials:

Equipment:

Hypothesis/Thesis Statement:

Procedure/Methods:

Data:

Result:

Conclusion: