**Respiration: Yeast Feast**

**What is the product of Respiration?**

**Pre-lab questions**:

1. What is respiration?
2. What are the products of respiration?
3. What is yeast?

**Problem:** How does the presence of sugar affect respiration in yeast?

**Materials:**

2 flasks

Warm water

1 tablespoon of sugar

2 tablespoons of yeast

2 balloons

Goggles

**Procedure:**

1. Put on your goggles
2. Label flasks “A” and “B”
3. Fill the two flasks halfway with warm water.
4. Add 1 tablespoon of yeast to each flask and swirl the flasks
5. Add 1 tablespoon of sugar to flask “B” ONLY.
6. Place a balloon over the lip/top of each flask. Squeeze the balloon gently to remove air and make sure balloon is secure over the lip of the flask.
7. Observe any changes that occur in the two flasks over the next 10 to 15 minutes.

**Variables:**

1. What is the manipulated variable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What are the 3 controlled variables? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. What is the dependent (responding) variable in this experiment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Hypothesis:**

What do you think will happen in each flask? (If…then…)

Flask A:

Flask B:

Analysis:

1. Draw what each flask looks like after 15 minutes and label each of the materials used. (flask, balloon, water, sugar, yeast)
2. What changes did you observe in each flask?

Flask A:

Flask B:

**Conclusion:**

What do you think caused the different reactions in Flask A and Flask B (Be sure to refer to your materials list and pre-lab questions for hints). Bullet your conclusions.