Watch Yeast Feast!

Procedure

1. **Collaborate** Work in a small group.

2. **Experiment** Pour 100 mL of warm water (not hot) into a cup or bowl. Stir in 15 g of sugar and 5 g of yeast. Pour the mixture into a sealable plastic bag. Squeeze out as much air as you can. Seal the bag completely.

3. **Use Variables** Repeat step 2 using a second bag, but this time do not include sugar.

4. Place both sealed bags on a tray lined with a paper towel. Set the tray on a shelf or tabletop under a lit lamp.

5. **Record Data** Check the bags throughout the next 24 hours. Record what you observe. Use either words or pictures to describe what you see below.

<table>
<thead>
<tr>
<th>Time</th>
<th>Yeast + Water + Sugar</th>
<th>Yeast + Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hour</td>
<td></td>
<td></td>
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<tr>
<td>2 hours</td>
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<tr>
<td>4 hours</td>
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<tr>
<td>8 hours</td>
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<tr>
<td>24 hours</td>
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</tbody>
</table>
Conclusion

1. **Compare** Describe how the content of the two bags changed over time. Note important differences in the bags.

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2. **Hypothesize** What do you think might have caused the effects you observed? Propose a hypothesis. Describe how you could test this hypothesis.

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3. **Use Variables** In this experiment, what were the independent and dependent variables? Which variables did you control?

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4. **Communicate** Write a report describing your investigation.

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**Experiment**

Do yeasts grow better in warm or cold temperatures? Do they need light to grow? **Ask questions** about yeast growth. Plan and carry out an experiment to test one of these questions.