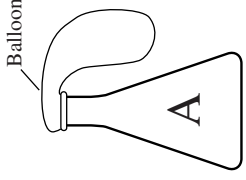
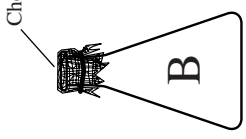
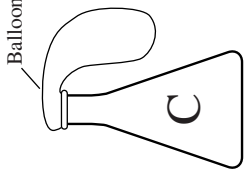

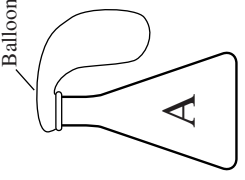
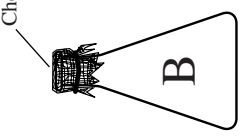
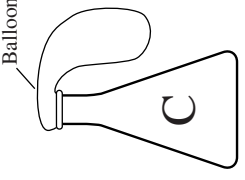



Yeast — On the Job Worksheet #1

| DAY 1 | O | B | S | E | R | V | A | T | I | O | N | S | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|-----------------|-----------------|-----------------|--|-------|--|---------|--|--|-------|------|-------|--|-------|--|---------|--|--|-------|------|-------|--|-------|--|---------|--|
| <p>A</p>  <p>Balloon</p> <table border="1" data-bbox="186 1438 381 1606"> <tr><td>Water</td><td>AMT.</td></tr> <tr><td>Flour</td><td></td></tr> <tr><td>Yeast</td><td></td></tr> <tr><td>Glucose</td><td></td></tr> </table> <p>Glucose test: _____</p> <p>pH test: _____</p> <p>Observations: _____</p> | Water | AMT. | Flour | | Yeast | | Glucose | | <p>B</p>  <p>Cheesecloth</p> <table border="1" data-bbox="186 1029 381 1197"> <tr><td>Water</td><td>AMT.</td></tr> <tr><td>Flour</td><td></td></tr> <tr><td>Yeast</td><td></td></tr> <tr><td>Glucose</td><td></td></tr> </table> <p>Glucose test: _____</p> <p>pH test: _____</p> <p>Observations: _____</p> | Water | AMT. | Flour | | Yeast | | Glucose | | <p>C</p>  <p>Balloon</p> <table border="1" data-bbox="186 619 381 787"> <tr><td>Water</td><td>AMT.</td></tr> <tr><td>Flour</td><td></td></tr> <tr><td>Yeast</td><td></td></tr> <tr><td>Glucose</td><td></td></tr> </table> <p>Glucose test: _____</p> <p>pH test: _____</p> <p>Observations: _____</p> | Water | AMT. | Flour | | Yeast | | Glucose | | <p>D</p>  <p>Cheesecloth</p> <table border="1" data-bbox="186 210 381 378"> <tr><td>Water</td><td>AMT.</td></tr> <tr><td>Flour</td><td></td></tr> <tr><td>Yeast</td><td></td></tr> <tr><td>Glucose</td><td></td></tr> </table> <p>Glucose test: _____</p> <p>pH test: _____</p> <p>Observations: _____</p> | Water | AMT. | Flour | | Yeast | | Glucose | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water | AMT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yeast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glucose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>DAY 2</p> | <p>O</p> | <p>B</p> | <p>S</p> | <p>E</p> | <p>R</p> | <p>V</p> | <p>A</p> | <p>T</p> | <p>I</p> | <p>O</p> | <p>N</p> | <p>S</p> | | | | | | | | | | | | | | | | | | | | | | | |

Yeast — On the Job Worksheet #2

Analysis of Observations

1. Was there a change in glucose levels in any of the flasks after two days? If so, which one(s)? Explain why.
2. Was there a change in pH in any of the flasks after two days? If so, which one(s)? Explain why.
3. What happened in the flasks with sugar added compared to the flasks without sugar?
4. What happened to the balloon on flask A? What happened to the balloon on flask C? Explain.
5. What did the contents of each flask smell like? Were any of them different from the others?
6. Did the amount of yeast in any of the flasks increase? Which one(s)?
7. Did any of the flasks produce a chemical that was not there before? Which one(s)?
8. Did any of the flasks use energy? Which one(s)?

Conclusions:

Based on your responses to the analysis questions, answer the following questions about what cells do.

1. What are four different activities or tasks that yeast cells perform?
2. What evidence do you have that these activities or tasks took place?
3. If all cells perform the activities that yeast cells do (your answer to question 1), then how might scientists define what makes something a cell?
4. Since most living things are made of cells, use your answer to question 3 to explain how a biologist might answer the question, "What makes something alive?"