

“Be a Microbiologist”

Job Task:

You are a microbiologist, a scientist who studies the growth, structure, development, and general characteristics of microorganisms. If we did not have microorganisms, a lot of the food and drinks we enjoy would not exist. One of the key ingredients in making many foods and drinks is yeast. Yeast is a eukaryotic, single-celled microorganism classified as a fungus. Your job is to investigate how yeast works and why it is used to produce a lot of our foods and drinks.

Time Frame: 1-2 hours

Materials:

- One packet of active dry yeast
- Two empty water bottles
- A teaspoon
- Sugar
- A permanent marker
- A measuring cup
- Warm water
- Two balloons

Procedure:

1. Begin by pouring half a packet of yeast into each bottle.
2. Add eight teaspoons of sugar into one of the two bottles. Mark this one with the permanent marker so you know it has the sugar in it.
3. Pour 1 ½ cups warm water into each bottle.
4. Replace the cap on the water bottles, shake, then remove the cap.
5. Stretch a balloon over the opening of each water bottle.
6. Observe.