

## Pizza? Bread? Yeast? Food Transformation!

**Focus Lesson:** Yeast transformation

**Materials:**

*The Giant Jam Sandwich* by John Vernon Lord  
*The World in Your Lunch Box* by Claire Eamer  
 One package of yeast  
 Warm water  
 Large bowl  
 1 teaspoon sugar  
 Spoons  
 Observation sheets

**Grade:** 3

**Time:** 45 minutes

**\*Common Core Standards:**

**CCSS.ELA-LITERACY.RI.3.7**

Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

**CCSS.ELA-LITERACY.RI.3.1**

Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

**Thinking Skill:**

Writing observations  
 Reading informational text

**Objective:**

Students will review the set-up of a standard recipe.  
 Students will understand why yeast rises.  
 Students will learn how to record observations for an experiment.

**Connection:**

Let's talk about a popular food that is in all of our lives-Bread! Does anyone know any of the ingredients that would be in a recipe for bread or rolls?

One of the main ingredients for bread is yeast. Yeast is what causes the bread to rise, and helps make it fluffy. Without yeast, bread would be flat like a pancake or pita bread or a tortilla.

In this story we're about to read, you'll see what the townspeople did with a lot of yeast!

**Explicit Instruction:**

Read *The Giant Jam Sandwich* by John Vernon Lord. Ask probing questions-What was the main problem in the story? What happened when the townspeople made the huge sandwich? Why did they put jam on it? Did the story show *how* they made the bread rise?

Explain that yeast is used in a lot of recipes, such as bread and even pizza! Display *Kidspot* pizza dough recipe and read with students. Point out how this recipe calls for yeast, and what it instructs to do with the yeast.

Display page 14 in *The World in Your Lunch Box* and read with students. Help students understand that yeast transforms under different conditions (when it is warm and wet). Explain how yeast is like a science experiment!

**Guided Practice:**

Tell students that we are going to be trying a yeast experiment! Using the direction on the PBS kids activity, guide students through an observation of the changes in yeast. Read through #7 on this page with students to explain the yeast process.

Instruct students to record their observations on the worksheet (below) while they watch what happens to the yeast. Include sketches of what they are observing at different stages including when the yeast is first added to the water.

**Independent Practice:**

Students will record and sketch their observations of the yeast experiment on their worksheet.

**Reflection – Group Share:**

Students will share what they wrote and sketched, in their own words. This can be a group share, or a partner share.

**Reading list:**

[http://www.kidspot.com.au/kitchen/recipes/easy-pizza-dough-1472?ref=collection\\_view%2Cpizza-recipes](http://www.kidspot.com.au/kitchen/recipes/easy-pizza-dough-1472?ref=collection_view%2Cpizza-recipes)

<http://pbskids.org/zoom/activities/sci/yeast.html>

*The Giant Jam Sandwich* by John Vernon Lord

**Teacher Note:**

Name \_\_\_\_\_

## Observation Record Sheet

What did we do? (Ingredients, steps)

---

---

---

---

---

Describe how and why the yeast changed. Why did the water need to be warm? What role did the sugar play? What gas did that process create?

---

---

---

---

---

Sketch what you saw as the yeast changed!