

Bread in a Bag



A lesson based on the book, *Celebrate Wheat*, by Dan Yunk.

America's food supply is safe, affordable and abundant but misunderstood by the public. Kansas Farm Bureau seeks to improve consumer knowledge of the importance of farming and ranching through the *Kailey's Ag Adventure Series*, of which this book is a part.

BACKGROUND INFORMATION:

After reading *Celebrate Wheat*, students should have a better understanding of some of the crops and agriculture products needed to make bread and butter. This lesson is a hands-on experience demonstrating how everyday food such as bread and butter is created. Although the process is completely different in industry, the procedure still follows the same basic principles. This is a great experience that students will not only remember, but also taste!

SUPPLY LIST

Table paper (waxed or butcher)
Knife to cut bread dough
Water pitcher
Rubber spatula
Disposable dishcloths
Small pans
Paper towels
Large plastic bags
Marker pen
Spray pan coating (or use oil)
Paper cup marked with $\frac{3}{4}$ & $\frac{1}{2}$ cup marks
Tablespoon or a cup marked with 1 tablespoon

INGREDIENT LIST

White flour
Whole wheat flour
Sugar
Salt
Dry milk
Vegetable oil
Warm water

LEVEL: 1-3 Grade

SUBJECTS/STANDARD

Math: 3rd Grade

Measurement and Data

CCSS.Math.Content.3.MD.A.2

Measure and estimate liquid volumes and masses of objects using standard units

Numbers and Operations—
Fractions

CCSS.Math.Content.3.NF.A.1

Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.

Standards may be adjusted to fit other grade levels.

ACTIVITY DESCRIPTION:

Students will actively take part in creating their own bread and butter. They will recognize and measure out the ingredients being used during the process and have a better understanding of agricultural products.

INCLUDED IN THIS LESSON:

Bread in a Bag instructions
Butter in a Jar instructions

ACTIVITY:

Management:

Gather all ingredients listed below, then prepare the kits for each pair of students. This will produce one small loaf per student. To prepare a kit, assemble four bags for every pair of students. To make bread working in pairs, you'll need one "kit" of BAGS plus two pans, one for each student.

BREAD MAKING KIT –

BAG 1

½ cup white flour
1 pkg dry yeast
1 teaspoon sugar

BAG 2

1 2/3 cups whole-wheat flour
¼ cup dry milk
1 ½ teaspoon salt
1 teaspoon sugar

BAG 3

1 ¼ cup white flour

BAG 4

extra flour for kneading



STUDENT LEARNING

**ESTIMATED
TEACHING TIME:** 2 hours

MATERIALS INCLUDED IN THIS LESSON:

Bread in a Bag instructions
Butter in a Jar instructions
What's Growing in Kansas
handout
Wheat Fun Fact Sheets

ADDITIONAL MATERIALS NEEDED:

Celebrate Wheat book

PREPARE AHEAD:

Gather all ingredients
Gather all measuring utensils
and pans

Procedure:

1. To BAG 1 add ½ cup warm water. "Mix" by hand in the bag until mixture is well mixed. Let set 15 minutes. Mixture will get foamy to make a sponge. After the 15-minute rest, add the following to the sponge and mix in ¾ cup warm water and 1 tablespoon oil.
2. Add BAG 2 (whole wheat mixture) to BAG 1 (sponge) and mix.
3. Add BAG 3 (white flour), mix until all combined and flour is no longer visible.
4. Place on waxed paper or white butcher paper and let the students knead bread for several minutes. (If dough is too sticky, add flour from BAG 4. More flour will result in heavier bread but less mess.) Cut the bread in half and let each student knead their own bread for several minutes. Rest for 10 minutes. Grease or spray bread pans and have students write their names on their pans with marking pen.
5. Have students form loaves by flattening their dough, then folding it until they get a small rectangle. Fold ends in and put in pan.
6. Cover with paper or cloth and let rise for 35-45 minutes until double in size. Bake at 400 degrees for 10 minutes, lower to 350 degrees and bake 30 minutes more. Bread is done when it sounds hollow when thumped lightly with fingers. Turn out to cool.

Butter in a Jar

Ingredients:

Heavy cream

A jar with a lid (baby food jars work great)

Procedure:

1. Fill a jar halfway with heavy cream (baby food jars work great for small batches), and screw the lid on tight.
2. Shake the jar up and down until the cream thickens and begins to stick together.
3. Then, open the jar, and pour any remaining liquid into another container; this is the buttermilk. Everything else is butter.
4. Knead the butter under cold running water for several minutes to work out any remaining buttermilk (otherwise the butter will spoil quickly).
5. Knead in salt, if desired.
6. Refrigerate.

TEACHER'S NOTES:

There are three waiting periods for Bread in a Bag: 15 minutes during the first step, 10 minutes while the dough is resting, and 75-85 minutes while the bread rises and bakes.

Have a volunteer take charge of baking so you can do other things. During these waiting periods, here are a few suggestions: you can make butter, read [Celebrate Wheat](#), read the *Wheat Fun Fact Sheet*, hand out a copy of *What's Growing in Kansas*.

If you prepare the "kit" bags ahead of time, be sure to show and tell what is in each bag.

Unique Facts

Farmers receive approximately 5 cents (or less) from each loaf of bread sold.

It takes nine seconds for a combine to harvest enough wheat to make about 70 loaves of bread.

Each American consumes 53 pounds of bread per year on average.

Facts from agday.org

