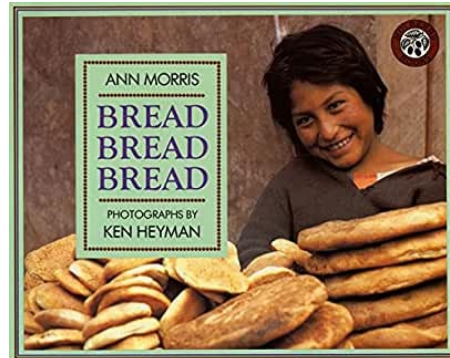


CLOVERBUD READING ADVENTURES

Bread, Bread, Bread

By Ann Morris, Photographs by Ken Heyman

Bread is a food enjoyed by people in all parts of the world. This book uses photographs from around the world to show the many shapes, sizes, textures, and colors of bread and the variety of the people who eat it.



ACTIVITIES AND CRAFTS

How Yeast Works



Materials: Active dry yeast, 16 ounce or smaller clear, clean plastic bottle with small opening (water bottle, soda bottle), small balloon, sugar, warm water, funnel

What to do:

1. Carefully pour about 1 inch of very warm water in bottle. You can use the funnel to make pouring easier.
2. Pour one packet of active dry yeast into bottle. Swirl around gently for a few seconds. Add 1 teaspoon sugar. Using a dry funnel will help make this easier.
3. Blow up the balloon a couple times to stretch it. Stretch the neck of the balloon over the opening of the bottle.
4. Observe what is happening in the bottle. Predict what will happen to the balloon.
5. Continue to observe the bottle and balloon. Listen to the bottle to see if you can hear anything. Feel the bottle.
6. If desired, try it again with a different size bottle (i.e., a smaller water bottle)

The Science:

Yeast is a living microorganism. As the yeast eats the sugar, it releases a gas called carbon dioxide. The gas fills the bottle and, as more and more gas is produced, it fills the balloon.

In bread, the yeast becomes spread out in the flour. Each bit of yeast makes tiny gas bubbles before it is baked. When the bread is baked, the yeast dies and leaves the holes in the bread.



Homemade Butter

This simple science experiment will go well with the bread in a bag you make for a snack, later in this adventure.



Materials: A glass jar with a tight-fitting lid (i.e., canning jar, baby food jar etc.), heavy whipping cream

What to do:

1. Fill your glass jar about halfway with cream. Leave enough room to shake the contents.
2. Be sure the jar lid is tight and shake. This process takes a little while so you may need to take turns with someone.
3. Observe the changes in the jar as you shake: How long does it take before it looks like whipped cream? When does the sound of the liquid sloshing around lessen?
4. Your butter is ready when you have a solid clump and liquid then the butter is ready.

The Science:

Heavy cream has quite a bit of fat in it. When you shake the cream, the fat molecules begin to separate from the liquid. The more the cream is shaken, the more the fat molecules clump together to form a solid. That is the butter. The leftover liquid is buttermilk.



GAME

Where in the World?

Supplies: Map or Globe

How to play: In the book, *Bread, Bread, Bread* there are pictures of people and bread from around the world. An index in the back of the book identifies the places pictured. Using a map or globe, point out where these different places are located, in relation to where you live.

Extend the activity: Engage your child in a discussion about where your family originates. Your child can interview a grandparent or other family member. Ask questions like:

1. Where were my parents born? Grandparents?
2. Where was I born?
3. What country are our ancestors from?

Compare the answers to the question with the places depicted in the book. Are there any pictures that match where your family is from?



SNACKS

Milk Toast



Ingredients: Bread (plain white bread works best), paint brush (never used), milk, food coloring

What to do: Mix milk and food coloring in small bowls. Using a clean paint brush or pastry brush and paint the bread. Kids can make any design. Toast the bread and eat.

Bread in a Bag

Ingredients: 2 cups all-purpose flour, 1 pkg. yeast quick-rising, 3 tbsp sugar, 1 tbsp nonfat dry milk, 1 tsp salt, 1 cup water HOT, 3 tbsp vegetable oil, 1 cup whole wheat flour

What to do:

1. Combine all-purpose flour, yeast, sugar, dry milk, and salt into a freezer bag, squeeze air out and zip closed.
2. Shake to blend ingredients, then add the hot water and oil into this mixture.
3. Reseal the bag and work together using your fingers until well combined.
4. Add whole wheat flour, reseal bag and mix again thoroughly.
5. Add a bit of the remaining one cup all-purpose flour a little at a time, kneading in the bag in-between, until the dough stiffens and begins to pull away from the bag.
6. Once this is achieved, remove dough from bag and put on a floured cutting board to knead with your hands.
7. Knead for 2-4 min. until smooth and elastic, cover dough in a bowl and let it rest for 10 minutes.
8. Use a rolling pin to roll dough into a 12x7" rectangle, place in a loaf pan that has been sprayed with non-stick spray.
9. Cover with plastic wrap and a kitchen towel. Put in a warm location for 20 min or until dough doubles in size.
10. Bake in preheated oven at 375 degrees for 25 min. or until top is golden brown and knife inserted into the middle comes out clean.



OTHER BOOKS TO READ ALOUD

Everybody Bakes Bread, by Norah Dooley

Bread Lab, by **Kim Binczewski** and **Bethany Econopouly** Illustrated by **Hayelin Choi**

From Wheat to Bread (From Farm to Table), by Kristin Thoennes Keller

Bread Comes to Life, by George Levenson

The Little Red Hen Bakes Some Bread, by Janie Smith

Bread and Jam for Frances, by Russell Hoban and Lillian Hoban

Resources:

<https://sciencebob.com/blow-up-a-balloon-with-yeast/>

National 4-H Council: **<https://4-h.org/about/blog/inspire-kids-to-do-bread-in-a-bag/>**

North Dakota Wheat Commission

<https://www.ndwheat.com/consumers/educationalactivities/>

EVALUATION

We value your input! After completing a Reading Adventure with your Cloverbuds, please tell us what you think. Your feedback will be used to improve the Reading Adventure program. Type the link in your browser and navigate to the evaluation site:

<https://go.osu.edu/evaladventures>

4-H CLOVERBUD READING ADVENTURES

Reading Adventures are part of the Ohio 4-H Cloverbud Program. This adventure was developed by Chirsty Millhouse, Extension Educator, 4-H Youth Development, Ohio State University Extension. It contains well-known activities, games, and snacks. Sources are indicated where appropriate. Find more reading adventures online at **ohio4h.org/cloverbudresources**.

TIP:

This 4-H Cloverbud Reading Adventure works well with Chapter 16, 'Food Fun' in *The Big Book of 4-H Cloverbud Activities* available through OSU Extension offices or online at **extensionpubs.osu.edu**. Ohio residents get the best price when they order and pick up their purchases through local Extension offices.

