Quick Breads Using Basic Ingredients

Name: __________________________ Your Age: ____
Club Name: ______________________ Years in 4-H: ___

Project Book

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Revised August 2006 by Vera Collins LAKE Cnty 4-H Secretary, this book is on the web site at: http://lake.ifas.ufl.edu/4-H/Projects.htm
When Hungry Hannah looked about to see what she could bake, the cupboard was so nearly bare she despaired of what to make. True, there was flour, salt, leavering and a bit of sugar, but whatever could be made with that was more than Hannah knew. A search inside the refrigerator brought out some added items, but even with eggs, milk, and shortening, she still was in confusion. Then out of nowhere popped Jeannie, a friendly little elf saying

“Hannah, let me tell you about those foods upon your shelf.”
**FLOUR** has added strength to batter throughout many years. **SALT** is a must for flavor in everything that is baked. Good old leavening agents lighten breads faithfully. **SHORTENING** gives most freely of its tenderness. **EGGS** have golden color, flavor and some leavening power too. **MILK** is the greatest of all for blending in liquid food value.

“These are important ingredients which all bakers use. Many treats can be made from them, and simple variations produce quite different results. You can make pancakes, waffles, and pop-overs too. Perhaps shortbreads or muffins will appeal to you. Even coffee cake is great to bake. Please give these basic ingredients a place of honor on your shelf and let the mystery of baking work its magic”, declared the elf.

Hungry Hannah sparkled brightly at these ideas so new. The good advice of Jeannie had given her plenty to do.

**Activities Required to Complete Quick Breads**

1. Study the booklet and answer the Quick Bread Quiz.
2. Make Quick Breads from basic ingredients a total of 10 times.
   - Pop-overs - twice
   - Griddlecakes or Waffles - once
   - Muffins - twice
   Make a Basic Mix and from this mix make biscuits - twice and 3 other variations of quick breads.
3. Give 1 Demonstration Experiment. Choose one suggested in this booklet or plan a demonstration of your own which meets the approval of your 4-H Leader for presentation at club meeting or County Events.
4. Write a short story about your activities in making quick breads from basic ingredients and tell what you learned form this unit.
5. Complete Project Summary

**Remember – Do First Things First**

- Read through the recipe
- Heat the oven
- Assemble all ingredients
- Collect cooking utensils
- Measure ingredients accurately

**Measuring Tips and Terms**

**How to sift dry ingredients:** Scoop flour into sifter. Sift on wax paper. Spoon lightly into a standard dry measuring cup, heaping it above the rim. Level off with straight-edged spatula. Sift with other dry ingredients to blend.

**Baking powder, salt soda spices:** Dip standard measure into sack to get heaping full. Level off with spatula.

**Brown sugar:** Pack firmly into standard dry measuring cup and level off. Sugar should hold its shape when emptied from cup.

**Shortening:** Keep at room temperature. Pack firmly in standard measuring cup, leaving no air spaces. Level off with spatula.
Milk or other liquid: Pour into liquid measuring cup, set on level surface, check at eye level for accuracy.

**ABBREVIATIONS**
tsp = teaspoon
tbsp = tablespoon
oz = ounce
lb = pound
pt = pint
qt = quart

**MEASURES**
3 teaspoons = 1 tablespoon
4 tablespoons = 1/4 cup
8 liquid ounces = 1 cup
2 cups = 1 pint
2 pints = 1 quart
4 cups = 1 quart

What is Quick Bread?
Quick breads are so named because they are made with a leavening that acts more quickly than yeast. The basic ingredients of quick breads include flour, fat, liquid and leavening. Salt is added for seasoning, and sugar for sweetness. Many quick breads also contain eggs. All quick breads may be mixed and baked at once so the baking time is short.

**Baking Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Contribution</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flour</strong></td>
<td>Strength - Structure</td>
<td>All Purpose - Self Rising - Instantized Flour -</td>
</tr>
<tr>
<td><strong>Leavening</strong></td>
<td>Make batter rise &amp; add lightness</td>
<td>Cake Flour</td>
</tr>
<tr>
<td><strong>Agents</strong></td>
<td></td>
<td>Steam &amp; air - Baking Powder - Soda &amp; Sour Milk -</td>
</tr>
<tr>
<td><strong>Liquid</strong></td>
<td>Binds ingredients together, helps</td>
<td>Molasses &amp; Soda - Egg Whites</td>
</tr>
<tr>
<td><strong>Shortening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>or Fat</strong></td>
<td>Tenderness - Richness -</td>
<td>Butter - Margarine - Vegetable Shortening -</td>
</tr>
<tr>
<td><strong>Eggs</strong></td>
<td></td>
<td>Lard</td>
</tr>
<tr>
<td><strong>Flavoring</strong></td>
<td>Enhances flavor - adds new flavor</td>
<td>Salt - Vanilla - Sugar - Spices</td>
</tr>
<tr>
<td><strong>Sugar</strong></td>
<td>Adds tenderness - aids browning</td>
<td>White Sugar - Brown Sugar - Karo Syrup -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Molasses</td>
</tr>
</tbody>
</table>

**Basic Ingredients**
The main ingredients of all quick breads is flour. There are many kinds of flour.

**All Purpose Flour** - most batters and doughs are made from all purpose flour. To make this flour the miller mixes hard and soft wheat flours into a blend which is suitable for a variety of baking purposes.

**Self Rising Flour** - Calcium phosphate, salt and soda and sometimes other chemical leavenings are added in small quantities to flour in order to make it self-rising. When liquid is added to self rising flour the acid of the calcium phosphate reacts with baking soda to produce a leavening gas which makes the mixture rise. For this reason recipes using self-rising flour need no leavening agent.
**Instantized Flour** - In the early 1960's a new kind of granular wheat flour came on the market. This instantized flour has some advantages. It is free pouring like salt. It does not need to be sifted. The flour instantly mixes in a cold liquid rather than balling or lumping. The new flour can be used in place of regular flour if necessary recipe adjustments are made. When you use instant flour instead of a regular flour, take out 2 level tablespoons per cup. The new flour is particularly good for gravies and sauces, and popovers.

**Leavening Agents** – A leavening agent is the substance that makes a batter rise. The leavening agent in quick bread may be steam, as in popovers; or it may be the carbon dioxide which is produced by baking powder, or baking soda and an acid such as sour milk. There are several types of baking powder, but in general they are composed of baking soda and some acid reacting material such as cream of tartar. Starch is added to keep ingredients dry. It is very important that baking powder be covered tightly so it will not lose its leavening power.

When soda and sour milk are used as leavening, add the soda to the dry ingredients. If soda is added to sour milk it reacts immediately to release gas. When this is done some of the gas needed for leavening may be lost.

The rule is ½ teaspoon soda for each cup of sour milk or molasses. To much soda gives a disagreeable flavor and odor as well as a yellow color. One-half teaspoon of soda plus 1 cup sour milk is equal in leavening power to 2 teaspoons of baking powder.

**Liquid** – Milk is the best liquid to use for flavor, texture and food value. It also improves the color of the crust. In any quick bread except popovers sour milk may be substituted for sweet if leavening agents are properly adjusted.

**Fats**– Fat is not soluble in the other ingredients of a batter. It holds apart particles of flour when liquid is added. For this reason fat tends to help make the baked product tender. Butter, margarine, hydrogenated fats or lard may be used satisfactorily in quick breads. Lard has greater shortening power than butter. When substituting lard for butter or margarine, subtract two tablespoons lard for each cup of fat called for. When substituting lard for hydrogenated fat, subtract 1 ½ tablespoons lard for each cup called for.

**Types of Quick Breads**

Quick breads are usually divided into two groups, batters and doughs. A batter is thinner than a dough. It may be poured from a pitcher or dropped in a soft moist mass from a spoon. Doughs are somewhat stiffer, varying from soft doughs that may be dropped from a spoon to stiff doughs which are usually rolled out and cut into shapes. The following table shows types of Quick Bread which may be made from very thin batters to thick doughs.
### Batters and Doughs

<table>
<thead>
<tr>
<th>Kind of batter</th>
<th>Type of bread</th>
<th>Proportion of liquid to flour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pour batter - Will pour easily from a spoon or a</td>
<td>Griddle cakes</td>
<td>1 cup liquid to 1 ½ to 2 cups flour</td>
</tr>
<tr>
<td>pitcher and can vary in degree of thinness.</td>
<td>waffles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>popovers</td>
<td></td>
</tr>
<tr>
<td>Drop batter – drops in soft moist mass from spoon</td>
<td>muffins</td>
<td>1 cup liquid to 1 ½ to 2 cups flour</td>
</tr>
<tr>
<td></td>
<td>nut bread</td>
<td></td>
</tr>
<tr>
<td></td>
<td>spoon bread</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dumplings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>drop biscuits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>coffee cake</td>
<td></td>
</tr>
<tr>
<td>Soft dough – can be handled more or less easily</td>
<td>biscuits</td>
<td>1 cup liquid to 2 or 2 ½ cups flour</td>
</tr>
<tr>
<td></td>
<td>short cakes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>scones</td>
<td></td>
</tr>
</tbody>
</table>

### Popovers - A pour batter

A top quality popover is high, light and puffy. It has a deep brown crust which is thick enough to prevent it from falling when removed from the baking cup. The inside is hollow and slightly moist. If desired the popovers may be dried out until crisp for use as a patty shell or to be filled with a favorite filling.

Have you ever watched popovers pop? If your oven has a glass door watch the thin batter crawl up the sides of the custard cup. Each popover looks like a little tire. Then suddenly steam from inside puffs the popover up leaving the middle hollow and moist.

Popovers always double when baked to fill the custard cup about half full. Steam is the leavening agent in popovers. No baking powder or soda is used. Always make a slit in each popover, just before removing from the oven, to allow the steam to escape. Popovers made with instantized flour need little mixing. The instantized flour blends quickly with the liquids.

### Quick Popovers with Instantized Flour

1 level cup minus 2 tablespoons instantized flour

| ½ teaspoon salt | 2 eggs | 1 cup milk | 1 tablespoon salad oil |

**Directions:**

5. Remove eggs from refrigerator, allow them to reach room temperature before using.
6. Preheat oven to 450°F
7. Measure 1 level cup minus 2 tablespoons instantized flour, add salt to flour
8. Mix together eggs, milk, and salad oil
9. Add liquid to dry ingredients and mix with fork until well blended, about 1 minute.
10. Fill hot, well greased custard cups ½ full and bake at 450°F for 25 minutes
11. Reduce heat to 350°F, bake 15 to 20 minutes, or until browned. Prick with fork to let steam escape just before removing from the oven. For added crispness “crack” the oven door and allow popovers to dry out after the heat has been turned off.

How to Freeze Popovers:
Leftover popovers may be frozen in plastic freezer bags or wrapped tightly in foil. Store at 0°F no longer than two months. To reheat, place in slow oven about 300°F and heat about 20 minutes.

Experiment: The Effect of Freezing on Popovers

Directions:
1. Prepare popovers for freezing and store at 0°F for several days before demonstration
2. Prepare one recipe of popovers, using the same recipe and method
3. At the end of the baking period reduce oven heat to 300°F and heat frozen popovers for 20 minutes
4. Reheat fresh popovers if necessary and serve both products to judges for testing.

Results:
1) Which sample was preferred and why?
2) Do you recommend frozen popovers?
3) How would you serve them?

How perfect were your Popovers? Mark ( for good ; for poor

Deep golden brown in color
Doubled in size, irregular and puffed
Hollow inside with few thin partitions
The crust was tender, crisp and crunchy
The flavor was mild and pleasing

Reason for Possible Popover Failures:
Poor Characteristics and Volume — *Too low baking temperatures * Over beating with rotary beater
*Too much shortening in batter * Too greasy pans * Too little egg
Soggy— *Too short cooking time * Crust not pricked to allow popover to dry out
Poor Color – * Low oven temperature

Waffles - A pour batter

A top quality waffle is light, tender and even grained. It is golden brown in color and pleasing in flavor. A finer texture is obtained if the egg whites are beaten separately and folded in last. Batter with sugar fails to remain crisp for any length of time. If you wish a crisp waffle, use a recipe without sugar. A thin waffle will be crispier. Thick waffles with soft bready centers never become crisp throughout. Be sure the waffle iron is hot and greased according to the directions which come with the appliance.
Basic Waffle Recipe

1 ½ cups flour ½ teaspoon salt
2 egg yolks well beaten 2 teaspoons sugar (optional)
2 egg whites beaten stiff 3 teaspoons baking powder
1 cup milk 3 tablespoons melted shortening

Directions:
1. Preheat waffle baker
2. Mix and sift dry ingredients, add milk, egg yolks, and melted shortening
3. Fold in egg whites, which have been whipped until stiff peaks form
4. Pour batter into waffle baker, bake until golden brown and crisp. Lift from iron with a fork
5. Serve with melted butter and warm syrup
6. Yield: 8 to 12 waffles

How good were your Waffles? Mark (  for good ; for poor
Deep golden brown evenly colored
Delicate crisp crust
Fine even light texture
Mild pleasing flavor

Basic Griddle Cake Recipe

1 1/4 cups flour 1 cup milk
½ teaspoon salt 1 egg
2 teaspoons sugar 2 tablespoons melted shortening

Directions:
1. Mix and sift dry ingredients
2. Combine beaten egg, milk and melted shortening
3. Add liquid to dry ingredients, stir just until batter is moistened
4. Bake on hot griddle
5. Yield: 10 medium pancakes - 3 inches

Muffins - A drop batter

The word muffin is derived from the old French word “moufflet” which means soft bread. This soft moist bread is baked in cup shaped pans. Top quality muffins are light and tender and have a moist even textured crumb, straight sides, and a slightly rounded top with rough, shiny, golden brown crust. The secret for making light tender muffins is to stir only a few strokes, just enough to moisten. The batter is still lumpy. If the batter is over beaten the muffins will have dull crusts which are peaked on top.
They are likely to be coarse, tough and full of tunnels. Choose shiny pans because shiny metal reflects heat to give muffins a delicate brown crust. Grease only the bottoms of the pan as muffins have a better shape when sides are not greased. Line with paper cups if you wish to save dishwashing.

There are two common methods of making muffins. The standard method calls for sifting the dry ingredients into a bowl and making a well in the center. The eggs, milk and liquid shortening are combined and added to the dry ingredients all at once. Mixture is stirred quickly until dry ingredients are moistened. The biscuit method is so called because shortening is cut into the sifted dry ingredients (as for biscuits) until pieces of shortening are the size of small peas. The liquids are blended and added to the dry ingredients.

Basic Muffin Recipe

2 cups flour           1 egg
1/4 cup melted shortening or salad oil
3 teaspoons baking powder     1/2 teaspoon salt

Directions:
1. Preheat oven to 425°F
2. Sift dry ingredients together in bowl
3. Mix beaten egg, milk, sugar and melted fat
4. Add the combined liquid to the dry ingredients all at once
5. Stir just enough to dampen all the flour, batter will still be lumpy
6. Fill greased muffin pans 2/3 full. Bake for about 20 minutes.

Variations:
* Date Muffins-add 2/3 cup chopped dates
* Raisin Muffins-add 2/3 cup chopped raisins
* Blueberry Muffins-add 1 cup uncooked blueberries, reduce milk to 3/4 cup, mix berries with dry ingredients.
* Jelly Muffins-top batter in each muffin pan with 1 teaspoon citrus marmalade or other favorite jelly.
* Cinnamon Sugar Muffins-while muffins are hot, dip tops in mixture of 1/2 cup sugar and 1 teaspoon cinnamon.

Experiment: The Effect of Beating on Muffins

Directions:
1) Prepare 1 recipe of muffins just barely combining ingredients. Take out enough batter for 3 muffins, filling the tin 2/2 full.
2) Stir batter just a little more until all ingredients are mixed but not beaten. Take out batter for 3 more muffins of the same size as the first three.
3) With the electric mixer beat remaining batter 4 minutes on high speed. Make remaining muffins the same size as the others.
4) Bake at 400-425°F for about 20 minutes.
Result:

1) Which muffins had the best volume, the best texture?
2) Which muffins were most tender?
3) How do you recommend that muffins be mixed?

How good were your Muffins?  Mark ( for good ; for poor

Did your muffins look uniform in size with slightly rounded tops?  ______
Were the crusts a uniform golden brown?  ______
Did your muffins have a moist even textured crumb?  ______
No large holes or tunnels?  ______
Were your muffins light and tender?  ______
Did they taste good and have a well blended flavor?  ______
Did you remember to serve them piping hot?  ______

Reasons for possible Muffin failures:

<table>
<thead>
<tr>
<th>Poor Characteristics</th>
<th>Here’s Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peaked smooth crust knobbed up</td>
<td>Over mixed</td>
</tr>
<tr>
<td>Pale color</td>
<td>Too cool oven, too little shortening</td>
</tr>
<tr>
<td>Burned</td>
<td>Oven too hot</td>
</tr>
<tr>
<td>Tough, elastic</td>
<td>Over mixed, too much flavor</td>
</tr>
<tr>
<td>Too dry</td>
<td>Over mixed</td>
</tr>
<tr>
<td>Tunnels very compact</td>
<td>Old or low quality ingredients</td>
</tr>
<tr>
<td>Unpleasant flavor</td>
<td>Baked too long, oven temperature too high, too much flour</td>
</tr>
</tbody>
</table>

Biscuits - A drop batter or soft dough

To make top quality biscuits every time follow a standard mixing procedure. Biscuits should be light, fluffy, flaky and creamy white. The cells are small and evenly distributed. A good biscuit is symmetrical in shape, has vertical sides, and a fairly smooth top. The crust is golden brown. Biscuits should be served as soon as they come out of the oven to be at their best. The shortening in biscuit dough is cut into the sifted dry ingredients using a pastry blender or fork until the mixture resembles coarse crumbs. Yellow or brown flakes which appear on baked biscuits are caused by uneven distribution of leavening. Flakiness and tenderness depend upon shortening being evenly distributed in very thin layers between the layers of flour. Be sure to use cold shortening.
Dough which receives 15 to 18 strokes of kneading produces tall, light flake biscuits. Too much kneading produces a tough product. Before each cutting flour the biscuit cutter by dipping it into a bowl of flour and tapping against the edge of the bowl. For best results cut straight down. Do not twist cutter.

Make a well in the dry ingredients and stir quickly. The quality of a baking powder biscuit is determined largely by the kneading of the dough. Biscuits may be dropped from a spoon with little handling. The same dough may be spread on a board, cut and baked to produce crispy flat biscuits with a tender crumb.

You will save time by baking with a biscuit mix. It may be used for biscuits, coffee cakes, waffles, cornbread and many other quick breads.

**Basic Mix** 12-13 cups mix

| 9 cups all purpose flour   | 2 cups shortening (which does not require refrigeration) |
| 1/3 cup double acting baking powder | 1/4 cup sugar |
| 1 tablespoon salt          | 2 teaspoons cream of tartar |

**Directions:**
1) Stir baking powder, cream of tartar, salt and sugar into flour
2) Sift together 3 times into large bowl
3) Using a pastry blender cut in shortening until mix is the size and consistency of cornmeal
4) Store in sealed containers at room temperature
5) To measure basic mix, pour it lightly into a standard measuring cup and level with spatula

**How to make Biscuits from a Basic Mix**
Dough may be used for shortcake or to top chicken or meat pie.

**Family size recipes**  Yield 18 2inch biscuits  
3 cups basic mix  
2/3 cup milk  
**Recipe for two**  Yield 6 2inch biscuits  
1 cup basic mix  
1/4 cup milk

**Directions:**
1) Set oven at 450°F
2) Add milk to mix all at once, stir until all ingredients are moist
3) Knead 15 strokes on lightly floured board, roll 1/2 inch thick
4) Cut with floured cutter and place in even rows on pan
5) Bake on baking sheet for 10 minutes

**Pecan Biscuit**  
18--2 inch biscuits  
1 cup pecan meal  
3/4 cup honey

1) Set oven to 400°F, grease muffin pan well
2) Place 1 teaspoon of honey in bottom of well greased muffin pan cups
3) Roll biscuit in pecan meal and place in muffin cup
4) Pour 1/2 teaspoon of honey over each biscuit
5) Bake in oven until tops are brown, about 12 minutes
Cheese Log
18-- 2 inch biscuits
1 cup melted butter
crated Parmesan cheese

1) Set oven to 400°F, grease muffin pan well
2) Cut each biscuit in half and roll to form log
3) Dip each in melted butter and roll in cheese
4) Place in well greased baking pan, bake for 10-12 minutes

How to freeze Biscuits:
Baked biscuits may be stored frozen. To store, cool and wrap in a rigid container, seal, label and date. The recommended storage time is up to 3 months. To serve frozen biscuits, heat in slow oven about 15 minutes at 300°F. Unbaked biscuit dough may be rolled out and cut into shares and frozen. Be sure to use double acting baking powder if you freeze unbaked dough. Recommended storage time is two weeks. Try this method and see if the results please you. If they do you might like to try making biscuits in fancy shapes using cooky cutters. Melted butter spread on top of biscuits before baking adds color and flavor.

Experiment: Effect of Freezing on Biscuits

Directions:
1) Prepare a recipe of biscuits and freeze ½ recipe after it is cut into shapes. Bake the other half of the recipe removing from the oven when very lightly brown. Cool and freeze both products several days
2) Remove unbaked biscuits from freezer and bake 20 to 25 minutes in 400°F oven
3) While frozen biscuits are baking, mix another recipe of biscuits using the same recipe and procedure as for the frozen biscuits.
4) When frozen biscuits are baked, turn oven to 450°F and bake freshly mixed biscuits
5) When freshly mixed biscuits are baked turn oven to 300°F, heat the baked frozen biscuits
6) Ask Judges to compare all three samples

Results:
Which biscuits were preferred? ________________________________ Why? ________________________________

Do you recommend freezing biscuits? ________________________________
How good were your Biscuits?  Mark— X for good  T for poor

Did your biscuits have straight sides and level tops?           
Were they all the same size?                                
Were your biscuits uniformly golden brown?                  
Was the inside of the biscuit creamy white in color & free from yellow or brown spots? 
Were your biscuits tender, flaky with an even texture?      
Was the flavor pleasing with no taste of bitterness?        

Reason for possible Biscuit failures:

<table>
<thead>
<tr>
<th>Poor Characteristics</th>
<th>Here’s Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small in volume</td>
<td>Too much leavening, not well mixed</td>
</tr>
<tr>
<td>Tough</td>
<td>Not enough baking powder, too much shortening. Very little handling or long mixing and excessive handling. Oven temperature too high</td>
</tr>
<tr>
<td>Too Dry - Crumbly</td>
<td>Dough too stiff, over-baking. Too much or not enough shortening. Too much or too little mixing of the shortening with the flour mixture.</td>
</tr>
<tr>
<td>Not flaky</td>
<td></td>
</tr>
<tr>
<td>Uneven Color</td>
<td>Wrong placement in the oven. Uneven oven heat</td>
</tr>
<tr>
<td>Poor Flavor</td>
<td>Wrong proportion or improper mixing ingredients. Poor quality ingredients</td>
</tr>
</tbody>
</table>

Uses for a Basic Mix

How to make Coffee Cake from a Basic Mix

Family Size yield- 8x8 cake
2 1/4 cups basic mix
1/3 cup sugar
1/3 cup milk
1 egg

Recipe for Two yield- 4x6 cake
1 cup basic mix
3 tablespoons sugar
3 tablespoons milk
½ egg

Topping for Family Size
½ cup brown sugar
3 tablespoons butter
½ teaspoon cinnamon

Topping for Two
1/4 cup brown sugar
1 tablespoon butter
1/4 teaspoon cinnamon

Directions:
1) Turn on oven at 400°F
2) Stir sugar into mix
3) Combine milk and beaten egg with dry ingredients, spread into shallow greased pan
4) Spread or dot topping over batter ---- bake at 400°F for about 25 minutes
Treatment of Coffee Cake Batter after Mixing

Experiment:

**Purpose:** To determine if a quick bread can be allowed to remain in the mixing bowl at room temperature for a period of time before baking.

**Directions:**

1. Preheat oven to 400°F
2. Prepare a small recipe of coffee cake. Allow it to stand at room temperature in the mixing bowl 1 hour before baking.
3. Prepare an identical recipe of coffee cake and bake immediately. Be sure to use identical pans and mixing procedure.
4. Observe the batter of the first recipe during the time it remains in the mixing bowl.
5. Bake first recipe, when the waiting time is up.
6. Remove both coffee cakes from pan and measure volume with ruler.
7. Compare the height and texture of both.

**Results:**

What did you notice about the batter that remained in mixing bowl? ________________________________
__________________________________________________________________________
What was the difference in volume and texture of both products? ________________________________

How good were your Coffee Cake? Mark—X for good T for poor

- Was your Coffee Cake evenly browned? _____
- Was it baked all the way through? _____
- Was it evenly covered with topping? _____
- Was it tender with small uniform holes? _____
- Was it light and good tasting? _____
- Was it slightly rounded in the center with the sides of uniform thickness? _____

How to make Cornbread from Basic Mix

**Family size yield—8x10 pan**

- 1 ½ cup basic mix
- 3/4 cup cornmeal
- ½ teaspoon salt
- 1 cup milk
- 1 egg

**Recipe for Two yield—6x6 pan**

- 3/4 cup basic mix
- 1/3 cup cornmeal
- 1/4 teaspoon salt
- 1/3 cup milk
- 1 egg
Cornbread batter may be used for muffins or topping for meat pies.

Directions:
1) Preheat oven to 400°F
2) Stir cornmeal and salt into the basic mix
3) Combine milk and beaten egg, add to the mix stirring until blended
4) Grease pan and fill about half full
5) Back about 20 minutes

How good was your Cornbread?  Mark— X for good  T for poor

Was your Cornbread evenly browned? ______
Was the crust slightly cracked and crisp in texture? ______
Was the inside pale yellow and free from large pieces of cornmeal? ______
Was the texture tender with even slightly opened cells? ______
Was the flavor pleasantly like corn with no rancid or off flavor? ______
Was your cornbread light and uniform in shape? ______

Reason for possible Cornbread failure:

<table>
<thead>
<tr>
<th>Poor Characteristics</th>
<th>Here’s Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too dark</td>
<td>Too much sugar, oven too hot</td>
</tr>
<tr>
<td>Too pale</td>
<td>Oven too low, under baking</td>
</tr>
<tr>
<td>To dry, crumbly</td>
<td>Too much cornmeal or too little liquid</td>
</tr>
<tr>
<td>Flat, sour, bitter</td>
<td>Poor quality ingredients. Wrong proportion ingredients</td>
</tr>
<tr>
<td>Spotted pasty</td>
<td>Eggs unbeaten, not well mixed</td>
</tr>
</tbody>
</table>

Quick Bread Demonstration Experiment

Which experiment did you do? ______________________________. How many attended? _____

After you have studied this booklet, see if you remember these important facts.

1– Why is it important to read the label on the bag of flour? ___________________________________
2– What is leavening agent? ___________________________________ How does it act? ______

3– Why is milk the best liquid to use I making quick breads? ______________________________
4– What is the difference between a batter & a dough? _______________________________________
5– What happens to muffins that are over beaten? ___________________________________________
6– To biscuits? ________________________________________________________________
# 4-H Quick Breads Record Sheet

10 bakings are required to complete this unit.

<table>
<thead>
<tr>
<th>Quick Bread</th>
<th>Date prepared</th>
<th>Which meal served</th>
<th>Number served</th>
<th>Family reaction</th>
</tr>
</thead>
</table>

**Popovers Twice**

1.  
2.  

**Griddle Cakes or Waffles Once**

1.  

**Muffins Twice**

1.  
2.  

**Biscuits Twice**

1.  
2.  

**Make 3 other variations of Quick Bread**

1.  
2.  
3.  

Total number of times I have made Quick Breads from Basic ingredients. ______________
**LEADERSHIP**

List your accomplishments both in this project and as a member of your club, county council, etc.

*Ex: participate in TLC as the delegate to District VIII meetings.*

<table>
<thead>
<tr>
<th>Date</th>
<th>Please Describe</th>
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</table>

**COMMUNITY SERVICE**

List in detail your individual or club community service accomplishments and the purpose for the service.

*Ex: Our 4-H Club saw a need for a food drive & collected 200 items that were delivered to the needy.*

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities and Events</th>
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</table>
**PRESENTATIONS**

List in *detail* the demonstrations, speeches, exhibits, workshops where you presented. Also list the topic of your presentation & the level at which you participated at.

*Ex: County Events Demonstration - “How to prepare your Rabbit for Show” Check County*

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Topic</th>
<th>Please check level</th>
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<tbody>
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<td>Individual</td>
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</table>

**CLUB ACTIVITIES**

What activities did you participate in with your 4-H Club.

*Ex: Workshops, fair, field trips, judging trips*

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
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</table>
NEWSPAPER Articles and/or Pictures of your 4-H Project

*NEWSPAPER Articles are extra and will not be deducted.* If you or your 4-H club was in the newspaper please attach the article here. For project pictures, be sure to include captions describing each photograph. If possible show (The Beginning of your project (work being done and your completed project. (Minimum of 3 pictures). You may insert pages as needed.
Your 4-H Story

In your story include as many of the following as possible.
1. What 4-H work has meant to you.
2. What you have learned.
3. What safety practices you used in your project.
4. How you managed your project.
5. What you can do to improve your project next year.
6. About your trip to Congress, camp, the fair, etc.
7. What you did to "Make the Best Better".
8. About any other 4-H experiences.

____________________________________________________________________________________
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