4-H Baking

Name: ___________________________ Age: ______

Club Name: ______________________ Years in 4H: ______

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Retyped September 2007 by Vera Collins Deaver Lake County 4-H Secretary  Available on line at http://lake.ifas.ufl.edu/4-H/index.htm
Activities Required to Complete this Project:

Make Colossal Chocolate Chunk Cookies
Make Mystery Muffins
Make Chocolate Cake
Give 1 demonstration for your 4-H Club

My goals for this project: ______________________________________
__________________________________________________________
___________________________________________
__________________________________________
Basic Rules for Fun

- Have fun baking! Don’t hurry! Take your time.
- Try some different recipes and new ways to do things. Don’t worry about a flop or two. The more you practice, the more you can figure out what might go wrong and prevent it.
- Keep yourself and your things clean and organized. It’s only fair to do the clean up if you do the cooking. Cleaner is safer.
- Remember to keep track of what you’re doing. Time does fly when you’re having fun. If you’re the one baking, you’re the one who has to remember when it’s time to take the cookies out of the oven. A timer helps, try to get one if you don’t have one.

How to Measure

Measure liquids with glass cups that have headspace. Measure dry ingredients with cups that come in a set of 1 cup ---- ½ cup --- 1/3 cup ---- ¼ cup. Metal or glass measuring cups and spoons are better than plastic, which may crack or bend out of shape.

- FLOUR: Lightly stir, then spoon into a measuring cup. Pile it higher than the edge of the cup, do not shake or tap the cup. Use the straight edge of a knife or a metal spatula to level off the top.

- SHORTENING: Pack firmly into a dry measuring cup with a rubber spatula. Level with the straight edge of a knife or metal spatula, remove with rubber spatula.

- BROWN SUGAR: Break up any lumps by squeezing or rolling, spoon into a dry measuring cup. Pack down firmly with the back of a spoon so that it keeps the shape of the cup when turned over. Level with the straight edge of a metal spatula or knife.

- LIQUIDS: Place the liquid measuring cup on a flat counter or table, fill to the mark for the amount of liquid needed. Bend down to check that the bottom of the liquid line is at the mark for the amount needed. Remove sticky liquids like molasses, corn syrup, and oil with a rubber spatula. Never measure over the mixing bowl or pan, hold it over a small cup.
Kitchen Safety

Have fun while you bake! After all, that’s what it’s all about. But accidents can happen when you are:

- In a hurry
- Messy and don’t clean up spills
- Not paying attention to what you’re doing
- Using equipment you are not familiar with.
- Working in the kitchen without permission

What kind of accidents happen most often? Burns Cuts Falls

Before You Start to Bake

- Have all ingredients, equipment and utensils ready
- Wash hands
- Wear an apron, tie long hair back, roll up sleeves
- Work on a clean counter or table top
- Prepare for unexpected spills by having a clean sponge or dish towel handy
Colossal Chocolate Chunk Cookies

YOU NEED:

- 2 cups flour
- ¼ tsp baking soda
- ¾ tsp salt
- 1 tsp vanilla
- 1 cup sugar
- ½ cup brown sugar, packed
- ¼ cup milk
- 5 Tbsp unsweetened cocoa powder
- 1 cup (2 sticks) butter or margarine, softened
- 1 ½ cups semi sweet chunks
- 1 cup coarsely chopped nuts – optional

1. Pre-heat oven to 325 degrees F. Line a baking sheet with foil, use the same foil for all 3 batches you bake.

2. In a medium bowl, mix flour, baking soda, and salt together with a spoon.

3. In a large bowl, cream the butter, sugars, and vanilla using an electric mixer.

4. Blend the cocoa and milk, beating at low speed into the butter mixture.

5. Add flour mixture slowly, beat at low speed.

6. Fold in chocolate chunks and chopped nuts.

7. Drop a ¼ cup portion of batter onto the foil lined baking sheet, only 4 cookies will fit on sheet.

8. Bake for 20 minutes, or until the tops look dry.

9. Cool cookies on sheet for 5 minutes.

10. Remove cookies from the foil. Place on a wire rack to finish cooling.
Cookie Shapes and Sizes

Cookies come in all shapes and sizes. They are divided into four main categories by how they are made.

**Shaped or Molded:** Stiff batter is shaped by hand into logs, balls, or other shapes. Each cookie is rolled smoothly between palms of your hand and then placed on a baking sheet. It can be flattened with a fork, the bottom of a glass cup, or a thumb for a thumb print appearance. Batter may be chilled for easier handing.

**Icebox or Refrigerator:** Stiff batter is shaped into a roll, placed in plastic, foil, or waxed paper and thoroughly chilled before slicing with a sharp knife.

**Bar:** Soft batter is poured into a shallow pan, baked, and then cut into squares or rectangular shapes when completely cooled.

**Drop:** Soft batter is dropped from a spoon onto a baking sheet.

Baking Tips for Cookies

- Space unbaked batter carefully to avoid unattractive run together.
- Use shiny baking sheets for evenly browned cookies.
- Cool pans of bar cookies on a wire cooling rack.
- Cool cookies on brown paper, waxed paper, or paper towels.
- Cool baking sheets between baking times to prevent cookie batter from spreading before baking them.

My Cookie Discoveries

Which cookie category do Colossal Chocolate Chunk Cookies belong to? ______________________

What was the most difficult part about make these cookies? ________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

What will you do differently the next time you make these cookies? ____________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
Colossal Chocolate Chunk Cookie Expense Record

List every ingredient needed to complete the cookies. If an ingredient was purchased, list it as a cost. If you had an ingredient on hand, give it a value. List date for ingredients purchased. For ingredients on hand, record date you baked the cookies.

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YOU NEED

☐ 1 egg  ☐ ½ cup milk  ☐ ½ cup vegetable oil  ☐ 1 ½ cups flour
☐ ½ cup sugar  ☐ 2 tsp baking powder  ☐ ½ tsp salt  ☐ Your favorite jam or jelly

1. Heat oven to 400 degrees F. Grease the bottoms of all muffin cups in a 12-cup pan.
2. In a large bowl, mix together the “dry” ingredients: flour, sugar, baking powder, & salt. Form a well by pushing the ingredients up the sides of the bowl.
3. In a large bowl, mix together the “wet” ingredients: egg, milk, & vegetable oil, set aside.
4. Pour the “wet” ingredients into the “dry” well all at once. Stir just until the dry ingredients are wet, about 24 strokes. Don’t over mix. The batter is supposed to be lumpy.
5. Fill the prepared muffin cups ½ full. Drop 1 tsp of jam or jelly into the center of each muffin. Add more batter to fill muffin cups 2/3 full.
6. Bake 20-25 minutes or until golden brown. Carefully remove muffins from the pan as soon as you take them out of the oven, so they won’t get soggy. Cool muffins on a wire rack.

My Muffins Discoveries

How many strokes did it take to mix your muffins? ________________________________

What was the most difficult part about making these muffins? ________________________________

_________________________________________________________________________________

_________________________________________________________________________________

Describe the final appearance of your muffin. ____________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

Muffin Baking Tips

- If the recipe calls for the entire cup to be greased to prevent sticking, use a paper baking cup.
- Use butter or stick margarine in your recipe. Don’t use low fat.
- Bake in the center of the center rack of the oven.
- Check for doneness at the minimum baking time, then every 1 or 2 minutes thereafter.
- Remove from pans in the time specified by the recipe and cool on wire rack.
- Stir dry ingredients only until moistened. The batter will be lumpy but over mixing will cause uneven texture and a pointed top.
- If using chopped nuts or fruits, grated carrots or zucchini in the recipe, make sure they are prepared before starting the batter.
- A perfect muffin will be golden brown; have a slightly rounded and bumpy top; have a tender and light texture with medium round holes and be moist inside.

Tips for Muffins

- Don’t bake your muffins on the day of judging. Bread is best if baked the day before.
- Follow mixing times and methods of ingredient addition to the letter. Most failures come from using shortcuts.
- Keep the batter as cool as possible. Keeping the batter cool will let the baking powder begin action in the oven, where it’s supposed to.
- Fill the muffin cups and bake as soon as possible after mixing. It is very important that the batter is kept cool.
  - When preparing muffins for judging, don’t use paper cups, seeing the crust is part of the judging.
  - To make more even muffins, use a small measuring cup and measure batter.
- Test for done-ness by touching the center of the muffin. The center should feel firm to the touch and spring back to a soft push.
  - If muffins have been frozen, allow time for them to thaw.
Mystery Muffins Expense Record

List every ingredient needed to complete these muffins. If an ingredient was purchased, list it as a cost. If you had an ingredient on hand, give it a value. List date for ingredients purchased. For ingredients on hand, record date you baked the muffins.

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YOU NEED:

- 1 ½ cups flour
- 1 ¼ cups sugar
- 1 ¼ tsp baking soda
- 1 tsp salt
- 1 cup buttermilk*
- 2/3 cup oil
- 1 tsp vanilla
- 2 eggs
- ½ cup unsweetened cocoa

* To substitute for buttermilk, use 1 Tbsp vinegar or lemon juice plus milk to make 1 cup.

1. Preheat oven to 350 degrees F. Grease and lightly flour bottoms only of two 8-inch round cake pans or one 13 x 9 inch pan.

2. In a large bowl, blend all ingredients with an electric mixer at low speed until moistened; beat 3 minutes at medium speed.

3. Pour batter into prepared pans.

4. Bake at 350 degrees F for 25 to 30 minutes for round cake pans or 30 to 35 minutes for 13 x 9-inch pan, or until toothpick inserted in center comes out clean.

5.Cool 5 minutes on wire racks. Using a sharp knife, loosen cake from sides of pan very carefully. Remove from pan.

6. Cool completely. Frost as desired or dust lightly with powered sugar. Makes 12 servings.
These Tips Make Baking a “Piece of Cake”

- Preheat the oven as the recipe indicates.

- The texture, volume, and moistness of a cake are affected by the mixing methods. Over beating and under beating causes problems in texture and structure.

- Use pan sizes suggested and prepare the baking pans carefully as the recipe states. If you are greasing the pans, solid vegetable shortening is the best choice.

- Some recipes call for dusting the pans with flour, this helps the cake develop a thin, crisp crust and prevents the cake from absorbing the fat used to grease the pan. Use about 1 tablespoon all purpose flour for dusting each pan, shaking and tilting until the bottom and sides have a fine coating, hold the pan upside down over the sink and tap it gently so excess flour falls away.

- Place oven racks in the middle of the oven and the pans in the center of the rack. Be sure the pans are not touching sides. Leave room for air to circulate around the pans, at least one inch of space between the pans and the oven sides.

- It is important to have your oven preheated so you can immediately put the pans into the hot oven. Cake batter should not sit before baking, because chemical leaveners begin working as soon as they are mixed with liquids.

  - Do not open the oven during the first half of the baking time. Cold air will interfere with the cake’s rising.

  - To test a cake with a toothpick, insert pick into the center of the cake. If it comes out clean, the cake is done.

- Remove cake from the pan when the directions indicate to do so. Cakes can stick if left in the pan too long after baking.

- To remove a layer cake from its pan, place a clean towel over another wire rack. The towel prevents damage to the top of the cake. Invert and place on top of the cake layer. Invert covered rack, cake pan, and cooling rack together; remove pan. To get the cake layer right side up again, turn over both racks as a unit. Cool the layer completely on the rack.

  - Always be sure that the cake is completely cool before frosting.
My Cake Discoveries

What size cake did you choose to make? ________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

Why? _____________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

Did you choose to frost your cake? _______________ If so, record your frosting recipe here.
_________________________________________________________________________________
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What was the most difficult part about making your cake? ________________________________
_________________________________________________________________________________
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_________________________________________________________________________________

Describe the flavor, appearance and texture of your cake. ________________________________
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Chocolate Cake Expense Record

List every ingredient needed to complete this cake. If an ingredient was purchased, list it as a cost. If you had an ingredient on hand, give it a value. List date for ingredients purchased. For ingredients on hand, record date you baked the cake.

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Inventory of Equipment ---
List all equipment used in making the recipes in this Project book.

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Total: ______________________

Special Note: In many 4-H projects we show a 10% depreciation for equipment used during a project. However, in the case of this baking project book, each project was completed in one day and no depreciation need be taken.
Why did you decide to do this project? ______________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
What did you learn?________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
What was different about this project compared to other 4-H work you have done?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
What did you like, dislike and why would someone else want to do this project.
__________________________________________________________________________
__________________________________________________________________________
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__________________________________________________________________________
Quick and Easy Recipes

Apple Cupcakes:

- Small apples
- Peanut butter
- Cupcake holders
- Ranch spread

Cut apples in half cross-wise and remove core. Put in cupcake liner and decorate with peanut butter, ranch spread, or low fat cream cheese with fruit or small amount of honey to make the cream cheese spreadible. Decorate with fruit, cereal, nuts, etc. Just use your imagination. NOTE: if you want to make an apple something special for a snack, remove the core and fill it with peanut butter. Keep the peanut butter inside by using small marshmallows for stoppers.

Low-Fat Oatmeal Cookies:

- 1 butter flavor cake mix
- 1 tbs cinnamon
- 2 cups dry quick oatmeal
- 1 15 oz can pumpkin
- ½ cup water
- 2 cups raisins

Mix cake mix, can of pumpkin, cinnamon and water well. Fold in oatmeal and raisins. Bake at 350 degrees F, for 20 minutes. Because there is no oil in these cookies, a small ice cream scoop makes it easy to put cookies on pan. If not, use a tablespoon.
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Things I’ve learned about nutrition: _____________________________________________________
_________________________________________________________________________________
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Fitness activities I’ve tried: ___________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
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**Project Summary**

**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, opening prayer at club level.....*

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**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.*

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## 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*

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## CLUB ACTIVITIES

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

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

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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 (1) The Beginning of your project, (2) work being done and (3) 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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