



4-H

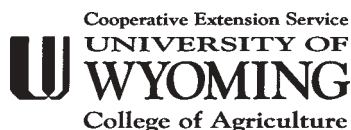
# CAKE DECORATING

Prepared by:

Ronda Whitman, Albany County 4-H Leader

Acknowledgements:

Appreciation is extended to Wilton Enterprises, Inc., whose publications have served as reference in the preparation of this 4-H manual, and for samples of techniques illustrated.



Graphic Designer: Tana Stith, College of Agriculture, Office of Communications and Technology

*Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Glen Whipple, Director, Cooperative Extension Service, University of Wyoming, Laramie, Wyoming 82071.*

*Persons seeking admission, employment, or access to programs of the University of Wyoming shall be considered without regard to race, color, religion, sex, national origin, disability, age, political belief, veteran status, sexual orientation, and marital or familial status. Persons with disabilities who require alternative means for communication or program information (Braille, large print, audiotape, etc.) should contact their local UW CES Office. To file a complaint, write the UW Employment Practices/Affirmative Action Office, University of Wyoming, P.O. Box 3434, Laramie, Wyoming 82071-3434.*

# PROJECT INFORMATION

## Introduction

When you bake and decorate a cake for a special occasion, the smiling faces around the table will be your greatest reward.

After a few lessons and a lot of practice you will be able to decorate beautiful cakes for birthday parties, anniversaries, and other special days. You can practice on practice boards, waxed paper, or freezer paper (waxed side up) taped to cardboard—or even a cake pan turned upside down. Once you decorate the practice surface, scrape the icing off and use it over again.

## Cake decorating records

Keeping records or descriptions of your decorated cakes is important. Either take a picture or draw a simple diagram of each cake you decorate, then give a short explanation of what you did and what you learned, even if you had problems. Also, keep a record of expenses and compare the amount to what it would have cost to buy a decorated cake.

## Cake decorating levels

The 4-H Cake Decorating Project offers four levels. These levels are:

**Level 1:** Beginning cake decorating—let's begin.

**Level 2:** Intermediate cake decorating—flat surface flowers, roses, and layer cakes.

**Level 3:** Advanced cake decorating—stacked cakes, side decorations, lily nail flowers, and more flowers.

**Level 4:** Master cake decorating—design your own.

This cake decorating manual contains goals, skills, and techniques for the project's four levels. Study these goals and establish your own goals

each year. Refer to the table of contents to find information for each project level.

Place this manual in a loose-leaf binder. You may want to keep your cake decorating records in the same binder and add other information as you progress.

## Basic supplies

1. Straight-sided cake pan or pans, preferably 8 inches round, 3 inches tall.
2. Metal spatula with a rounded end (8 inches or 11 inches, depending on your hand size).
3. Decorating bags, three types are available.
  - Featherweight® or plastic bag with or without coupler. (The coupler allows the decorator to change tips on the same bag.) Beginners should start with three 10-inch Featherweight® bags.
  - Clear plastic disposable bags, usually available in packages of 12 or 24.
  - Parchment or plastic-coated freezer paper.
4. Decorating tips (see your particular level for specific tips needed).
5. Three types of food colorings
  - Paste color
  - Liquid coloring
  - Powdered coloring



6. Box for storing all supplies together. Mark all supplies with your initials for easy identification, and store tips separately as they can be easily dented or bent. Tips can be marked with an engraver or fingernail polish.
7. Folder to hold your manual, cake records, and other paperwork.
8. Flat plate or cake board for displaying decorated cake.
9. Revolving cake stand or turntable (optional).

## 4-H cake decorating

The Wyoming 4-H Cake Decorating project is divided into four skill levels:

### **LEVEL 1: The Beginning Decorator**

Members will learn to bake and frost single-layer cakes and learn simple decorating procedures.

### **LEVEL 2: The Intermediate Decorator**

Members will learn how to bake two-layer cakes and make flat surface flowers, simple flower nail flowers, roses, a variety of borders, and special effects like Cornelli lace, lattice work, basket-weave, and others.

### **LEVEL 3: The Advanced Decorator**

Members will learn to bake stacked and tiered cakes, master all flat surface flowers, and learn to make flowers using the lily nail.

### **LEVEL 4: The Master Decorator**

Members will design their own projects using the skills learned from previous levels.

## Skills, techniques, and goals

The skills and techniques learned in this project are listed in the chart found on pages 3 to 8. They are divided by subject with the skill level listed down the left side of the chart. Your 4-H leader and parents can help you identify the skills you want to learn according to the level in which you are enrolled. Then, as the year progresses, you can check to see what you have learned and what you still have to do. Refer to pages 3 through 8 in this manual to see what will be learned in each level.

You might like to try a technique above your skill level, and you may have to repeat some methods. However, you should master the minimum number of required items in each decorating level before moving on to the next level. Stay in a level for more than one year if you have not mastered the required skills.



# Decorating skills and techniques

L E V E L	<b>SKILLS AND TECHNIQUES</b> Write year accomplished in small box.	Want to learn	Tried	Needs improvement	Average skill developed	Above average skill developed	MASTERED	Notes or comments
<b>THE CAKE</b>								
Master all the items in your level before advancing to the next level.								
1, 2	Bake and prepare level cake							
1	Prepare single-layer cake (minimum 5)							
1, 2	Prepare cut-up cake							
1, 2	Prepare a cake in a shaped specialty pan							
2	Prepare one- and two-layer cakes (minimum of 5)							
2,3	Cut cakes for serving using different methods							
3	Prepare a level, stacked cake							
3	Prepare a level, tiered cake							
<b>FROSTING THE CAKE</b>								
Master all the items in your level before advancing to the next level.								
1, 2	Achieve proper consistency of icing for frosting the cake							
1, 2	Frost a smooth cake for decorating							
2	Prepare a "filled" cake							
<b>ICINGS</b>								
Master all the items in your level before advancing to the next level. Achieve the proper consistency for making the following:								
<b>BUTTERCREAM ICING</b>								
1	Decorations of stars, flowers, leaves							
1, 2	Borders							
1, 2	Writing							
2	Flowers							
2	Combination borders							
2	Figure piping							
2, 3	Side decorations							
3	Drop string work							
<b>ROYAL ICING</b>								
2, 3	Flowers							
2, 3	Figure piping							

# Level 1: Beginning cake decorating

## LET'S BEGIN Supplies

1. Basic supplies listed for all units (Project information, page 1).
  - One plain round or writing tip - 3 or 4
  - One leaf tip - 67 or 352
  - Three star tips - 16, 18, 22, or 25, 27, and 31 or 35
2. Decorating tips—Four types are suggested; however, you may select any that give the desired results.
  - Two drop flower tips (one large and one small) - 224 or 107 and 131 or 193
3. Practice surface
4. Optional:
  - Special molds—sugar, candy, and gelatin
  - Shaped cake pans

## Goals

1. Develop basic skills in cake decorating.
2. Combine color, design, and flavors in a pleasing way.

Objectives	Activities
1. Bake and frost a single-layer cake that will be good for decorating.	<ul style="list-style-type: none"> <li>♦ Read Section B, The Cake, pages 21 through 28.</li> <li>♦ Practice baking and frosting single layer cakes until you master a level cake with smooth icing. Try different frosting recipes and methods until you get a smooth icing. Decorate cakes for special occasions, take photos of your cakes.</li> </ul>
2. Prepare icing that is the proper consistency for borders, drop flowers, and lettering.	<ul style="list-style-type: none"> <li>♦ Read Section C, Frosting the Cake, pages 29 through 36.</li> <li>♦ Prepare stiff, medium, and thin consistency icing. Try different designs on your practice surface.</li> <li>♦ Experiment with different buttercream frosting recipes for different cakes.</li> </ul>
3. Develop a skill in using professional cake decorating equipment.	<ul style="list-style-type: none"> <li>♦ Practice making cones from parchment paper. Experiment by filling the bags to different levels, and see what works best for you.</li> <li>♦ Compare parchment cones with cloth, plastic, and disposable decorating bags to see which you prefer.</li> <li>♦ Experiment with bags using just a tip and then a coupler and a tip.</li> <li>♦ Experiment with different tips to see how many designs you can make, including star, leaf, writing, and drop flower tips.</li> <li>♦ Make and decorate different solid sugar molds.</li> <li>♦ Make a salad or dessert using a gelatin mold and decorate it.</li> <li>♦ Bake and decorate a cake using a shaped cake pan.</li> </ul>



Objectives	Activities
<p>4. Develop basic skills in cake decorating:</p> <ul style="list-style-type: none"> <li>a. Three Level 1 borders</li> <li>b. All Level 1 lettering skills</li> <li>c. Three Level 1 flowers</li> <li>d. One Level 1 leaf</li> <li>e. Two Level 1 special effects</li> </ul>	<p>Use a practice surface to:</p> <ul style="list-style-type: none"> <li>♦ Try making all Level 1 borders.</li> <li>♦ Practice all Level 1 lettering skills.</li> <li>♦ Try making all Level 1 flowers.</li> <li>♦ Try making all Level 1 leaves.</li> <li>♦ Design a stencil and use it to decorate a cake.</li> <li>♦ Design a paper pattern, transfer it to the cake, and decorate.</li> </ul>
<p>5. Bake and decorate a minimum of five cakes for special occasions.</p>	<ul style="list-style-type: none"> <li>♦ Plan and make decorated cakes for special occasions using various colors, designs, and flavors. Take pictures of all cakes to show improvements.</li> <li>♦ Plan, bake, frost, and decorate a single-layer cake for a special occasion.</li> <li>♦ Plan, bake, frost, and decorate a cut-up cake.</li> <li>♦ Plan, bake, frost, and decorate a cake using a special shaped pan.</li> <li>♦ Compare the cost of home-decorated cakes with bakery cakes.</li> </ul>

## Exhibit

Decorated cake using a minimum of four different skills and techniques learned in this unit: cake frosted smoothly, proper icing consistency for decorations, borders, drop flowers, writing, and leaves.

4. Cake baked in shaped cake pan (one technique) and three additional skills or techniques (for a total of four skills and techniques) learned in this unit.
5. Educational display showing techniques learned (posters, record books, etc.)

## Additional exhibits

1. Decorated cake using either the stencil or outline technique (one technique) with three additional skills or techniques (for a total of four skills and techniques) learned in this unit.
2. Cut-up cake (one technique) using a minimum of three additional skills or techniques (for a total of four skills and techniques) learned in this unit.
3. Cake or exhibit using solid sugar molds (one technique) and three additional skills or techniques learned in this unit (for a total of four skills and techniques).

## Judging standards

1. Each exhibit should show a minimum of four different skills or techniques learned in this level.
2. Cakes should have uniform shape and thickness and be level (except cut-up cakes and cakes baked in special shaped pans).
3. Cake forms (Styrofoam™) are better for exhibits than actual cakes.  
*(Note: State Fair exhibits are required to be cake forms.)*
4. Cakes should be placed on disposable cake boards which may be covered with plastic or paper doilies.

# T H E

# C A K E

## Baking the cake

---

Start with a good recipe or a good quality cake mix. Be sure to adjust the recipe for Wyoming's high altitude unless you are already using a high altitude recipe.

1. Use the correct pan size. Cakes baked in a pan that is too large will become flat and dry. Baking a cake in a pan that is too small results in a peaked cake or the batter runs over the pan. (The peak can be cut off, but you may end up with an uneven top.) Use a straight-sided pan. There are many good baking finishes to choose from, including non-stick, anodized aluminum, and insulated. Just be sure to select a durable pan that won't warp, rust, or chip during repeated use. Shiny pans distribute heat more evenly and give cakes a golden color. If you use a glass pan, reduce the oven temperature by 25 degrees.
2. Generously grease the inside of the cake pan or pans with solid vegetable shortening. Use a pastry brush or paper towel to spread the shortening evenly on the bottom and sides, making sure all inside surfaces are covered. Then, shake flour in the pan to coat the sides and bottom. (The flour helps the cake batter climb the pan side and raise properly.) If you prefer, grease the bottom of the pan and line it with cut parchment paper. There is no need to flour the parchment. Be sure to remove the paper before the cake completely cools, so it won't stick to the cake.

Another simple and effective method to prepare the pan is to use an aerosol spray that has the grease and flour in the same preparation. Follow label directions.

3. To help your cake remain level, fold a strip of terry cloth so it is the same height as the pan

sides. Wet the terry cloth then wrap it around the outside of the pan and pin it together with straight or safety pins. Pour equal amounts of batter into the pans and bake. The terry cloth adds humidity to the oven, which helps keep the cake level. It also keeps the outer portion of the batter from baking more rapidly than the center.

*Note: You can purchase specifically designed oven-safe bands to wrap around pans before baking.*

4. Bake the cake in the center of the oven according to temperature and time directions on the recipe or mix. To see if the cake is done, lightly touch a finger to the cake's center. If it is done, it will spring back. Or, stick a toothpick in the center, and if it comes out clean the cake is done. If the cake is not done, bake it for a few more minutes. The cake should pull away from the edges of the pan.

## Cooling the cake

---

1. Take the cake from the oven and place it on the cooling rack. If the cake is not level, saturate a light-weight cotton tea towel (not terry cloth) with water, wring it dry, and press the cake's top gently to form an even top. Remove the towel immediately.

Cool the cake for 10 to 15 minutes on a cooling rack. (Larger cakes, 14 inches in diameter, may need to cool 15 to 20 minutes.)

2. Gently loosen the sides of the cake by running a metal spatula or table knife around the edges. Place the cooling rack on the cake's top and, while holding the rack and the pan, turn both over. If the cake does not release from the pan, return it to a warm oven (250°)



for approximately 5 minutes and repeat the procedure. Cool completely at least one hour on a cooling rack. (If cooled on a plate or board, it will steam and make the bottom surface soggy.) Larger cakes will break if not turned right side up to cool.

## Leveling the cake

---

1. If you did not level your cake with the damp towel, you can level it by trimming off the raised portions using a serrated knife or cake leveler. Let the cake cool for at least 1 hour (or chill in the refrigerator). Use a serrated knife or cake leveling tool to trim off excess cake. You may need to ask for help from an adult.
2. Brush off loose crumbs. Freezing the cake will make it easier to handle.

Now you are ready to ice the cake. The bottom of the cake will be more level and easier to frost.

- For a single layer cake, place the top of the cake down on the cake board and frost the bottom.
- For a two-layer cake, place one layer right side up on the cake board. Put frosting on the first layer. Place the second layer upside down on the first so you are frosting the bottom of the top layer.
- When layering large cakes or tortes, use a cake board as a large spatula and shimmy the top layer off the board onto the top of the bottom cake layer.



*Leveling*

## Planning the design

---

Before planning the cake's design, look in magazines and cake decorating books. A visit to your local bakery might provide you with several interesting ideas.

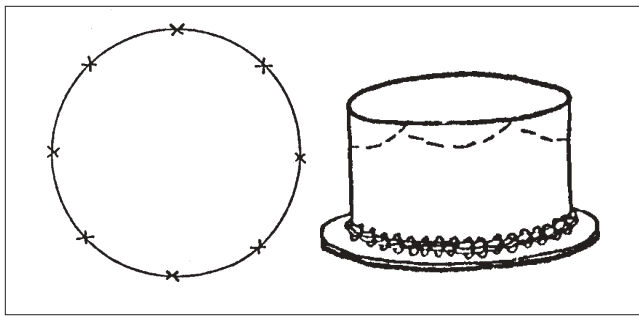
Designs should be:

1. Suitable for the cake's shape:
  - Round or wedge-shaped design on a round cake.
  - Straight or triangular design on a square or rectangular cake.
2. In proportion to the size of the cake:
  - Large designs or groups of small designs are best on a large cake.
  - Small designs are best on a small cake.
3. Seen well from the viewing area:
  - Some cakes are planned to be viewed from one side only; others are the same on all sides.
  - Bring out design details by using colors that go well together:
    - ◆ In general, lighter colors are best for backgrounds and deeper, brighter, colors are best for decorations.
    - ◆ If colors are too dark or too pale, the details of the design may be lost.

## Balancing the design

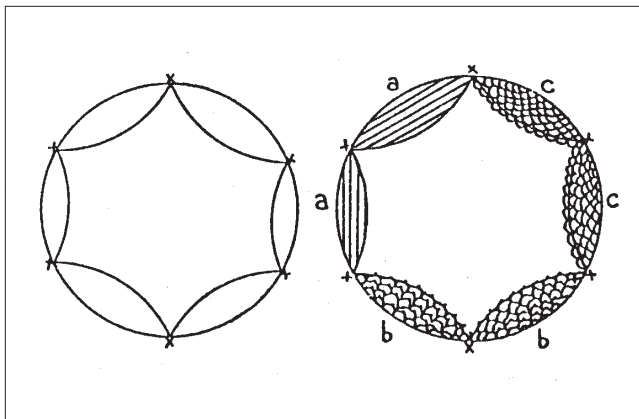
---

1. You must mark the cake when you select a design that is repeated or placed at equally spaced intervals (such as scallop or lattice). Decide whether you want to divide the cake into four, six, eight, or more sections. Place a small dot of the background icing at each "x" to serve as a guide. Draw a design line with a toothpick and check for accuracy before going over it with icing.



2. Try this quick and easy way to divide a cake into equally spaced sections:
  - Take a 2-inch wide length of paper (calculator tape works well) and place it around the outside of your cake pan. Cut it to the exact length.
  - Remove and fold the tape in half and continue folding it in half until you have as many sections as you need. Unfold and place the tape around the top edge of the cake and attach it with a toothpick or large pin. Mark the cake at each fold. Your cake is now marked for your design.

3. When doing latticework on the cake top, use various sized pans or bowls as a guide. (Round pans, margarine tubs, and plastic storage containers work well for this.) Press the desired size of container lightly on the top of the cake. Then, place or pipe straight or decorative lines in a contrasting color of frosting.



## Assembling a tiered cake

1. Check to make sure the assembled cake will fit through any door.
2. The base for your cake must be sturdy enough to support the weight of the assembled cake. How heavy is your cake? The following cakes were made with Betty Crocker Super Moist® yellow cake mix. They were filled, frosted, and decorated with buttercream icing. The weights and heights are for two-layer round cakes.

Round size	Height with icing	Weight
16"	4"	16 lbs. 3 oz.
14"	4"	13 lbs. 2 oz.
12"	4"	11 lbs.
10"	3"	6 lbs. 12 oz.
8"	3"	5 lbs. 4 oz.
6"	3"	2 lbs. 12 oz.

3. Level and ice all tiers first. Each tier of your cake must be on a cake circle or board cut to fit. Smear a few strokes of icing on the boards to secure the cake. Fill and ice the layers before assembly.
4. Place the bottom tier on a sturdy base plate or cake board cut 4 inches larger than the tier's diameter. Imprint an outline in the center of this tier using a cake pan or cake board circle 2 inches smaller in diameter than the tier to be placed above it. Press the cake board gently in the center of the lower tier; remove the circle. Push a ¼-inch dowel rod into the cake within the circular outline at the cake's lowest point. Push the rod all the way into the cake so it touches the base. Mark the dowel rod at the frosting line. Gently pull the dowel out of the cake. Use pruning shears to cut the dowel rod. Mark and cut six more dowels the same length as