



## Cake Decorating Units 1-3

### 4-H MANUAL



## Acknowledgements

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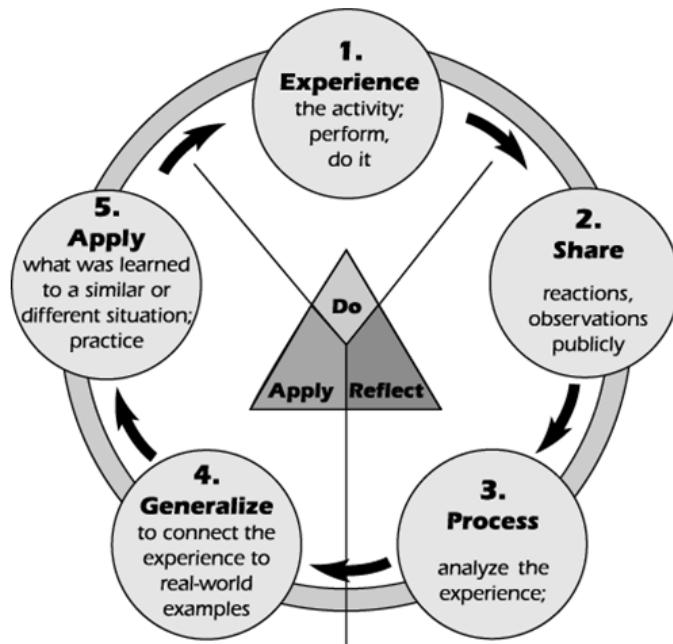
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The 4-H program encourages a process that allows youth to first learn by doing before being told or shown how, and then to examine the experience. The experiential learning model developed by Pfeiffer and Jones (1985), modified by 4-H, includes five specific steps:



The Experiential Learning Process guides youth through a process of discovery with very little guidance from others. A situation, project or activity is presented that allows for individual thought and problem solving. Outside assistance is provided only at a minimum and supports learning by questioning at each stage. Youth in activities reflect on what they did, how they learned and what could be applied to a life situation.

1) Experience Questions: How is it working? What else might you try? What might make it easier?

2) Share Questions: What happened? How did you feel? What was the most difficult?

3) Process Questions: What problems seemed to reoccur? What similar experiences have you had?

4) Generalize Questions: What did you learn about yourself? What did you learn about the activity? How does this relate to something else in life? How did you decide what to do?

5) Apply Questions: Where else can this skill be used? How will you use this in the future? What will you do differently after this experience?

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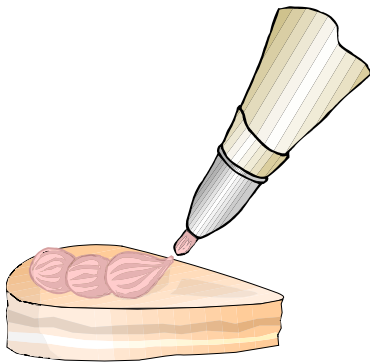
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# Cake Decorating Basics

## Basic Supplies

1. Straight-sided cake pan, preferably 8, 9, or 10 inches round or square, or a 9 x13 inch cake pan, 2 inches tall.
2. Metal cake spatula with a rounded end, 8 – 11 inches long and at least 1 inch wide.
3. There are three basic types of food coloring: gel paste color, liquid coloring, and powdered coloring that can be used for decorating.
4. Box for storing all supplies together. Mark all supplies with your initials for easy identification.
5. Use a sturdy notebook or binder to hold your manual, cake records, and other paperwork to take to meetings.
6. Cake boards (foam core, cardboard, wood, etc.) for displaying decorated cake.
7. Revolving cake stand or turntable (optional but highly recommended).



Cake decorating for your family and friends starts and ends with a good cake. Everyone likes to see colorful and fun decorations. But when it comes to really enjoying the cake, it must also taste good. The cake should be moist, tender and have a pleasing flavor. So, you must also learn how to bake a cake worthy of putting your time and supplies into decorating.

## Baking the Cake

Good cakes may be made from scratch using a recipe from a cookbook or one handed down from a relative or friend; or using a boxed cake mix. Cake mixes are easy and fast. In recent years, many people have experimented with adding ingredients to a cake mix

to make it more moist and easier to decorate. Here is one such recipe from Helen Sembra, a well-known cake baker and decorator from Colorado.

### **Helen Sembra's Boxed Cake Recipe**

1 cake mix (Brand name, not generic)

¼ cup all-purpose flour

⅓ cup Wesson or Crisco Oil

1½ cup lukewarm water

2 tablespoons meringue powder

1 heaping tablespoon sour cream (optional for extra moisture)

Beat the above ingredients until satiny smooth and thick with no lumps. Next, add 3 slightly beaten eggs to the mixture and stir into the batter. Do not beat, as the more you beat a batter with eggs, the drier the cake will be. Pour the batter into the prepared pan and bake according to the directions for your altitude (325°F).

\*Ask grandma for her favorite cake recipe, use your favorite cookbook or go online to find cake recipes to experiment with. Be sure to check for high altitude adjustments.

### **Tips for Baking the Cake**

1. Bake the cake at least one day before you plan to decorate.
2. Be sure to check for high altitude adjustments for baking the cake.
3. Use a proven scratch cake recipe or brand name cake mixes such as Duncan Hines or Betty Crocker for best results.
4. Do not use generic cake mixes.
5. The correct pan is important. Use a straight sided pan. Be sure you have the proper size and shape cake pan. Cakes baked in too large a pan will be flat and dry. Too small a pan will result in a peaked cake or batter running over. To prevent this, fill the cake pan no more than ⅔ full of cake batter.

There are many good baking pan finishes to choose from, including non-stick, anodized aluminum, and insulated. Select a durable pan that won't warp, rust, or

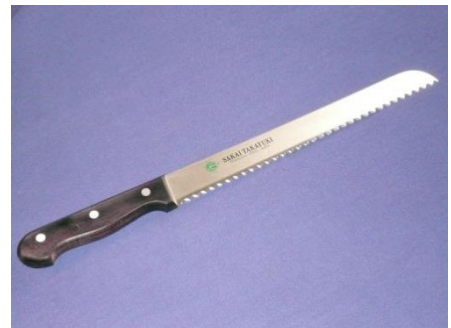


chip during repeated use. Shiny pans distribute heat more evenly and give cakes a golden color. When using glass or dark pans, reduce the oven temperature by 25°F.

6. Prepare pans for cake batter by greasing the bottom of the pan and the bottom seam line but not the sides with solid vegetable shortening, butter or aerosol vegetable spray. Then shake flour over this area and dump out the extra. (Optional: line the pan with parchment paper or waxed paper. 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. For best results do not use margarine or liquid vegetable oil.

7. Fill the cake pan  $\frac{2}{3}$  full with batter and tip it so the batter comes up to the rim of the pan, but not over the rim. Drop the cake pan on the table several times to force air bubbles to the surface. This will prevent large pores in the baked cake.
8. Bake the cake in the center of the oven at 325°F. Slow baking makes a finer texture and a more level cake.
9. Test “doneness” of the cake by sticking a toothpick in the cake center and several places around the sides. The toothpick will come out clean when the cake is baked.
10. Remove the cake from the oven and place on a cooling rack. Level the cake with the top of the pan by trimming with a sharp **serrated** knife. This method of trimming is easiest while the cake is still in the pan.



serrated knife

Gently loosen cake around edges by running a spatula or knife around the side of the pan. Cover cut edge on top of the cake with parchment or wax paper. Place a rack on top of the cake pan, turn cake over and lift the pan from the baked cake. (Remove parchment or waxed paper, if used.) Using a rack wrapped in waxed paper, turn the cake right side up for cooling. Larger cakes may break if not turned right side up to cool. The cake will steam if it is cooled on a plate or board. This will make the bottom surface soggy.

*For your fair exhibit, let your cake air dry – do not freeze or refrigerate.*

11. Place the cake in the freezer until frozen to keep cake moist and firm and easier to decorate. If not decorating the cake the next day, wrap cake in wax or plastic wrap to keep until ready to decorate.
12. Remove the cake from the freezer and unwrap. The cake will be fresh and easy to ice because it will be firm. (In high humidity areas it is better to thaw the cake before icing).
13. Immediately brush any loose crumbs from the sides of the cake.

## **Preparing the Frosting**

### **Ingredients**

Each ingredient plays an important role in creating perfect icing. Always choose the best ingredient for the job.

1. Confectioners' sugar is a sweetener. Sifting the sugar helps make the icing smoother. When available, confectioners' sugar made from pure cane sugar should be used. There is a difference between powdered sugar made from sugar beets or from sugar cane. Cane sugar has smaller crystals and makes a smoother icing.
2. Binders, such as solid white vegetable shortening, butter, margarine, or cream cheese, are used in buttercream icings to bind the icing together and give it texture for frosting and decorating the cake. Shortening will give the stiffest consistency while cream cheese and margarine create a softer but more flavorful icing. A combination of shortening and butter or margarine will make an icing that is easier to work with.
3. Meringue powder is used instead of egg whites in various icings. It can be used to help stabilize buttercream icing. (See recipe for snow white buttercream icing.)
4. Liquid, such as water, fruit juice, milk, cream, or light corn syrup, is used to achieve proper consistency. Different amounts will be needed depending on the liquid used.
5. Flavors or extracts are used to give icings personal tastes. Special clear decorator flavorings (clear vanilla, butter, almond, and lemon) will not change icing colors.

6. Salt adds flavor to buttercream icing and also cuts the sweetness.
7. Cover unused frosting at all times.

### Helpful Hints

1. A 2-pound bag of confectioners' (powdered) sugar is equal to approximately 7 cups.
2. Buttercream icing may be stored in the refrigerator in a covered container. Bring to room temperature before using.
3. To make clean up easier and quicker when you are decorating with buttercream icing, use a degreaser liquid soap to dissolve the icing from the tools.
4. Using a high ratio shortening, such as Sweetex, will give the frosting a less greasy mouth feel than an all-purpose vegetable shortening.
5. If recipe calls for softened butter, test the butter by gently pressing on the stick. You should get a slight indentation where you pressed which indicates the butter is soft and ready to use.

## Icing or Frosting

Smooth icing makes a cake look good. Icing also adds flavor to the cake and keeps the cake moist and fresh.

Proper consistency is the key to making decorating icing that will shape the petals of a flower, show the details of a border, or cover the surface of the cake. It is important that you use the recommended icing consistency for each job. If the icing is too stiff, add a few drops of liquid. If it is too thin, add more powdered sugar.



Thin Consistency



Medium Consistency



Stiff Consistency

Frosting Consistency

Picture taken from Wilton  
Website: [www.wilton.com](http://www.wilton.com)

## Icing Recipes

### Buttercream Icing

Buttercream icing tastes good and is creamy. It can be made to any consistency—stiff, medium, or thin. Buttercream is ideal for icing a cake and for making borders and most flowers such as the rose, drop flower, or sweet pea.

#### **Buttercream Recipe 1**

1¼ cup Crisco or Sweetex

1½ sticks butter, softened but not melted\*

2 pounds confectioners' sugar

2 tablespoons milk or water

1 teaspoon flavoring

Pinch of salt (only if using unsalted butter)

Cream Crisco or Sweetex, butter, flavoring, water & salt. Add sugar and blend slowly. Then beat on medium speed until color becomes a little whiter, about 3 to 5 minutes.

**Note:** If beaten on high speed, too much air will be incorporated into the frosting and it will be more difficult to smooth.

\*Softened butter will hold its shape but will show a dent if pressed on with your finger.

#### **Chocolate Buttercream Recipe 1**

Add to Buttercream Recipe 1:

¾ cup cocoa or three 1-ounce unsweetened chocolate squares, melted.

1 to 2 additional tablespoons milk. Mix until well blended.

If the icing is too thin add more powdered sugar. If the icing is too thick, add small amounts (½ teaspoon at a time) of milk or water until proper consistency is reached.

Snow white buttercream icing has an ideal consistency for frosting cakes to exhibit at shows and fairs.

### **Snow White Buttercream Recipe**

$\frac{2}{3}$  cup water

4 tablespoons meringue powder

12 cups sifted confectioners' sugar (approximately 3 pounds)

1 $\frac{1}{4}$  cup Crisco or Sweetex

$\frac{3}{4}$  teaspoon salt

$\frac{1}{2}$  teaspoon almond flavoring

$\frac{1}{2}$  teaspoon clear vanilla flavoring

$\frac{1}{4}$  teaspoon butter flavoring

Combine the water and meringue powder. Whip at high speed until peaks form. Add 4 cups of sugar, 1 cup at a time, beating at low speed after each addition. Add the shortening and the remainder of the sugar alternately. Add the salt and flavorings. Beat at low speed until smooth. **Note:** Experiment with each of these recipes until you decide which recipe works best for you.

### **Helen Sembra's Buttercream For Fondant Look Cakes Recipe (Stiff Consistency)**

2 pounds powdered sugar

4 tablespoon meringue powder

1 teaspoon salt (popcorn salt preferred—finer in texture so will dissolve quickly)

1 cup Crisco

$\frac{1}{3}$  to  $\frac{1}{2}$  cup water (lukewarm)

2 teaspoons vanilla or flavoring of your choice

Combine powdered sugar, meringue powder and salt together. Add remaining ingredients and mix at low to medium speed until smooth.

## Can/Frosting Mixes

You can use a package frosting mix as a decorator icing. Do not refrigerate the icing before decorating. The cake may be refrigerated after decorating.

You may want to experiment with the canned frosting, but it won't hold up at fair.



Pinterest

## Coloring Techniques

Color is vital to your decorating because it adds realism to flowers and personalizes special events and holiday cakes. Choosing appropriate colors for your cake will help you capture the mood you want for the occasion. When planning your cake, think about color. Gather inspiration from the theme of your celebration. Look around, notice everyday objects—from a garden in bloom to the clothes people wear. Which colors appeal to you? Use your favorite colors in your decorating and don't be afraid to try something different.

### Kinds of Food or Cake Coloring

There are three basic types of color used to tint icing: gel paste, liquid, and powder.

1. Gel paste is preferred because it does not change the consistency of the icing as liquid colors do. Gel paste colors are concentrated, so a little goes a long way. Use paste food colors when you want the deepest, darkest colors. For colors like black and red use gel paste, color to a shade slightly lighter than what you want and let sit for at least two hours. Color will darken as it sits. Be aware that icing with a large amount of color will tend to bleed if exposed to high humidity or high heat. **Hint:** Add meringue powder to the icing to stabilize it.

2. Liquid food coloring is usually less expensive and can be obtained in local grocery stores. It does change the consistency of the icing, so you may need to adjust the amount of liquid. It can be used to achieve soft pastel shades.

3. Powdered food coloring does not alter the liquid in recipes and does not seem to bleed as much as other types of coloring.

A starter kit of eight basic colors offers a good selection of colors for most projects. If you don't have exactly the right color, you can achieve almost any color by using the right combination of icing colors in the right amounts. With proper blending, you can duplicate team colors, party decorations, and more. Use the guidelines in the table on page 15, but don't be afraid to experiment.

### How to Tint Icing

1. Add the color a little at a time until you get the shade you want (remember - once you put it in you can't take it out). Use a toothpick to add and blend the paste color, also use a clean toothpick into the color. Add liquid color one drop at a time. **Hint:** Tint a small amount of the icing first and then mix it in with the remainder of the white icing. Colors intensify or darken one to two hours after they are mixed.
2. Always mix enough of one shade for its total use on the cake. It is almost impossible to get exactly the same shade when mixing a second time.
3. Lemon juice in frosting will cause colors to change shades, so experiment with each frosting recipe you use.
4. When making brown icing, use cocoa powder.

### Color Chart

Blending colors is fun. Here are some color combinations you will find useful. You may come up with many others.

In the center are the primary colors - red, yellow, and blue. From these, all others are made.

In the inner ring are secondary colors - orange, green, violet, made by mixing equal amounts of primary colors. Mix red and yellow for orange, mix red and blue for violet, and mix blue and yellow for green.

In the outer ring are the tertiary colors - achieved by mixing varying amounts of one primary color with the adjacent primary.

Mix a large amount of red with a small amount of blue and you will get a red-violet color. Do the opposite for blue-violet.

Increase or decrease amounts to form many hues in between.



Taken from Sugarcraft website  
<http://www.sugarcraft.com/catalog/coloring/colormixingchart.htm>

## Color Combinations

Rose Gold	2 parts Red-Red, ½ part Kelly Green, ½ part Pink
Coral	2 parts Creamy Peach, 1 part Pink or Orange, 1 part Pink
Raspberry	1 part Pink, 1 part Red-Red
Pink	4 parts Rose, 1 part Violet
Peach	Mix equal parts of Lemon Yellow and Pink
Flesh	Add an extremely small touch of copper to white icing
Burgundy	3 parts Rose, 2 parts Red-Red, 2 parts Black
Maroon	1 part Burgundy, 1 part Red-Red
Rust Orange	1 part Orange, 1 part Red-Red, 1 part Brown
Marigold	1 part Lemon Yellow, 1 part Orange
Antique Gold	2 parts Golden Yellow, 1 part Leaf Green
Warm Gold	2 parts Golden Yellow, 1 part Brown
Chartreuse	9 parts Lemon Yellow, 1 part Leaf Green
Jade Green	2 parts Leaf Green, 2 parts, Royal Blue, 1 part Black
Misty Green	1 part Leaf Green, 1 part Royal Blue, ½ part Black
Teal	1 part Teal color OR 1 part Lemon Yellow & 1 part Sky Blue
Avocado Green	1 part Moss Green color
Moss Green	1 part Moss Green color OR 1 part Violet & 1 part Lemon Yellow
Dark Green	2 parts Kelly Green, 1 part Black
Light Blue	1 part Sky Blue, 1 part Violet
Periwinkle	1 part Royal Blue, 1 part Violet
Turquoise	9 ½ part Sky Blue, 1 part Lemon Yellow
Aqua	5 parts Sky Blue, 1 part Leaf Green
Aqua Blue	1 part Sky Blue, 1 part Leaf Green
Royal Blue	1 part Royal Blue, 1 part Violet
Navy Blue	1 part Royal Blue, 1 part Black
Lavender	1 part Pink, 1 part Violet
Mauve	2 parts Burgundy, 1 part Black
Mulberry	2 parts Rose, 1 part Royal Blue
Dark Purple	2 parts Violet, 1 part Christmas Red
Silver	1 part Royal Blue, 1 part Violet, 4 parts Black
Gray	1 part Black to white frosting
Black	1 part Black color OR 1 part Royal Blue, 1 part Christmas Red, 1 part Orange, 1 part Lemon Yellow
Brown	Add Cocoa to icing OR 3 parts Brown, 1 part Red-Red

Taken from [www.wilton.com](http://www.wilton.com)

NOTE: To gray-tone or dull any color, add a tiny amount of the color opposite on the color wheel.



## **Preparing Cake Board**

Cake boards can come from different materials such as clean corrugated cardboard, foam core, plywood, particle board or any other sturdy material that will hold and transport the cake.

### **Board Selection**

Select smooth, clean corrugated cardboard, foam core, plywood, particle board, etc.

### **Cardboard**

Measure and cut two cardboard pieces to the desired size. The board must be 1½ inches on each side from the base of the border (not the cake). This means that for an 8-inch square cake with a ½ inch border you would cut two square boards 12 x 12 inches. Cake board size depends on base border size. (Use a steak knife in cutting cardboard for a smooth-edged board.)

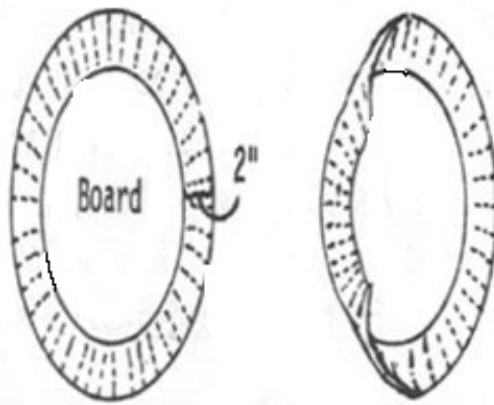
Turn the corrugation in opposite directions. Having the pieces go in opposite directions will make the finished board stronger and prevent warping. It is easier to work with the boards if they are glued together before covering.

### **Foam Core, Plywood, Particle or Wood Board**

Measure the foam core, plywood, particle or wood board to the desired size. The board must be 1½ inches on each side from the base of the border (not the cake). This means that for an 8-inch square cake with a ½ inch border you would cut one square board 12 x 12 inches. Cake board size depends on base border size. (Use a utility knife for the foam core and a hand saw to cut the wood boards. You may need an adult to help you.)

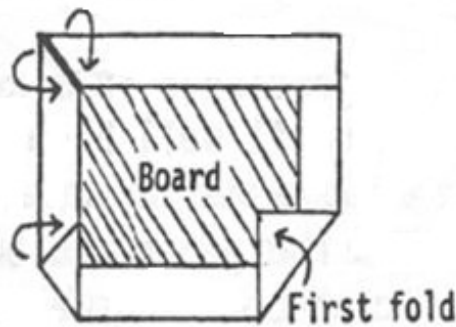
### **Covering the Board**

1. Cut material for covering the board 2 inches larger (all the way around) than the board you are covering. (When using aluminum foil put the dull side up for the best appearance.)
2. Put a circle of non-toxic glue (such as school or Elmer's) on the board (place a sealant of glue in the center of the board) and then attach the covering to the top. Be sure the cardboard is centered on the covering.
3. Turn the 2-inch overlap back of the board. Circular coverings will need to be slashed to within ¼ inch of the board about every ½ to ¾ inch around the edge to turn neatly



Corners on squares or rectangles should be mitered and then the edges folded and glued or taped on the back.

Finished corner



4. Put glue around the back side of the board and glue all pieces to the back. You can also attach using masking tape or duct tape. Scotch tape is less reliable and may not stick.

### **Attaching Cake to Cake Board**

Spread frosting in the center of the covered board to attach cake to prevent sliding. If using a cake form, glue the form to the covered board using hot glue or Elmers glue.

## Transporting the Cake

### **Before Moving Cakes:** (taken from [www.wilton.com](http://www.wilton.com))

- Be certain the cake is constructed on a sturdy base made of three or more thicknesses of corrugated cardboard. Base tiers of very heavy cakes should be placed on a fiberboard or plywood base, about ½ inch thick.
- Cakes on pillars must be transported unassembled. Topper, candies and ornaments should be removed from cakes when they are being moved.
- For stacked cakes with 3 or less tiers, move the entire assembled cake. For a larger quantity of tiers, transport unassembled and assemble at the destination.
- Be sure to have with you the equipment and icings you will need to finish any decorating needed after assembly at the final destination.
- For a cake that combines stacked and 2-plate construction take tiers apart keeping stacked tiers as units.
- Boxing the cake makes transportation easier. Not only does it protect the tiers from damage, but it keeps the tiers clean and free from dirt, dust and bugs. Place the boxes on carpet foam or a non-skid mat on a level surface in the vehicle to prevent shifting. Keep the boxes flat, never place on a slanted car seat. Boxed cakes can also be transported in the trunk of the car in cool weather (air conditioning will not reach the trunk area).
- It's also important to find out about the destination location before the event. Knowing what to expect when you arrive can make your delivery and setup so much easier. Call the place a few days before the event to get an idea of the conditions you will encounter there. Ask whether the room is located upstairs or downstairs. Find out what is the best location for bringing the cake into the building. That way you can park in the right place the first time and minimize the distance your cake has to travel from your car. Also ask how far in advance the cake can be set up so that you can plan your day and reduce the stress.

## Transport Options

### **In Pan**

Take tiers apart if constructed by Center Column or Push-In Leg method. Position the plates on crumpled foil or in shallow pans if they do not sit level. Remove pillars from tier plates, plates stay in position.



### **In Box**

Place the cakes in clean, covered, sturdy boxes that are sized to the base board of each cake. This will prevent the cake from shifting within the box and possibly crushing the sides of the cake. If the box is too big, roll pieces of masking tape sticky side out, and attach to the inside bottom of the box. Position the cake base on top of the tape. The tape will hold the base in place within the box. For boxes which must hold taller decorations, prop up top and side and secure with masking tape.



### **On Foam**

If tiers cannot be boxed, they can be transported on large pieces of non-skid foam. Place the foam on the floor of the vehicle, then carefully place the tiers centered on each piece of foam.



### **At Your Destination** (taken from [www.wilton.com](http://www.wilton.com))

- Before you bring in the cake from your car, walk the path you will have to travel to the set-up site. Be alert for any bumps along the way and note any tight spaces you will have to maneuver around.
- Make sure the cake table is level – it's a good idea to bring a level to check this on setup day.
- Request a cart on wheels to move the cake into the area. This is easier and safer than carrying by hand.
- Remove the cakes from the boxes on the table by cutting the sides of the boxes and sliding the cakes out.
- Bring along a repair kit, including extra icing, prepared decorating bags and tips, flowers and spatulas just in case it is necessary to make any repairs.
- Once the cake is assembled, take a picture to establish that the cake was in perfect condition when you left it.

### **Frosting the Cake**

1. Put about 2 tablespoons of frosting on the center of the cake board, place the cut side of the cake down and center cake on the board, gently twist to suction it down. This prevents the cake from slipping. The bottom of the cake will be more level and easier to frost. For a single layer cake, place the cut side of the cake down on the cake board and frost the cake.
2. Crumb Coating: to avoid crumbs from the cake surface getting into your frosting, it is recommended you apply a crumb coating. Remove 1/2 cup of frosting and add 1/4 teaspoon of liquid to make crumb coat.
3. Frost sides by generously applying frosting with a spatula. Work quickly using free, easy strokes. Sometimes it is easiest to heap frosting on top of the cake and pull it over the edges and down onto the sides (especially when frosting just one layer). Always keep the spatula on the frosted surface. If the spatula touches the bare cake, it will pick up crumbs which mix with frosting.

**Note:** Some instructions say to work from the top down, forcing loose crumbs to the base of the cake; others say to use an upward stroke leaving a ridge of frosting around the top of the cake. Try each way and see which is most satisfactory for you.

Turn cake as you frost. Keep sides straight. A lazy Susan or turntable would be helpful.



Always be sure to use enough frosting so the cake does not show through the frosting.

4. Spread frosting on the top, making it smooth as possible.

5. Methods to achieve a smooth finish.

a. **Hot Knife Method**

- Dip spatula in hot water and shake or remove excess moisture. Glide spatula around the side of the cake.
- Use a lazy Susan or turntable, if possible.
- To smooth top, dip the spatula in hot water. Shake or remove excess moisture and place flat on cake extending from center to outer edge. Apply even pressure and turn cake board around in a full circle with your free hand.



Use exactly the same procedure for a sheet, square or round cake. Smooth sides and top.

**Note:** Do not use too much water as it can break down the icing and cause cake colors to run. Be sure the spatula is clean and free of icing with each movement. Always be sure to use enough frosting so the cake does not show through the frosting.

b. **Paper Towels Method**

- Viva brand paper towels are food safe and smooth (untextured) and can be used to smooth the cake after the frosting has dried and can be touched without attaching to the towel (at least 10 minutes).
- Using Viva toweling, place smooth soft side to the cake. With your hand or a fondant smoother, gently smooth the cake. If the frosting sticks to the towel, wait a few more moments and then smooth. (Once the towel has frosting on it, you will need to get a clean towel. Icing on the towel will stick and pull icing off the cake.)

c. **Parchment Paper Method**

- Allow the cake to crust over for at least 10 minutes. With your hand or a fondant smoother, gently smooth the cake. The sides can be smoothed in the same manner.
- If the frosting sticks to the parchment, wait a few more moments and then smooth. (Once the parchment has frosting on it you will need to get a clean piece of parchment. Icing on the parchment will stick and pull icing off the cake.)

d. **Pastry Roller Method**

- Allow the cake to crust over for at least 10 minutes. Using a pastry roller, gently roll across the icing to smooth.

## Icing Consistency



**Stiff Consistency**—is used for decorations such as flowers with upright petals, like roses, and sweet peas. If icing is not stiff enough flower petals will droop. If icing cracks when piped out, icing is probably too stiff.



**Medium Consistency**—is used for figure piping, borders and flowers with petals that lie flat. ***Add one teaspoon of water for each cup of stiff consistency icing.***



**Thin Consistency**— is used for writing, making stems, leaves and frosting a cake. ***Add two teaspoons of water for each cup of stiff consistency icing.***

All three pictures taken from Wilton  
Website: [www.wilton.com](http://www.wilton.com)

The amount of water needed in the icing to frost your cake will be determined by you. Only add enough water to make icing the cake easy.



# Cake Decorating Manual Units 1-3 Overview

## Learning Experiences Emphasized

(Refer to manuals and state fair 4-H requirements for exhibit requirements.)

### Cake Decorating Units Covered in This Manual

**Unit 1** – Bake and frost an 8, 9, or 10-inch round or square single-layer real cake or 9 x 13-inch rectangle cake. Decorate with only edible items (for example: candies, pretzels, and coconut should be used to create a design). **Do not use decorator tips.** No fondant, gum paste, or marzipan can be used for decorations or base icing on the cake. No royal icing can be used for icing or decorations on the cake. **One fourth of the smooth base frosting on top of the cake must be visible.** Bottom border is required. No cake forms can be used.

**Unit 2** – Bake and frost an 8, 9, or 10-inch round or square or 9 x 13-inch rectangle cake single-layer real cake, using a leaf tip, star tip, and round tip to decorate. **One fourth of the top of the cake should be visible to show the smooth base.** No fondant, gum paste, marzipan, or royal icing may be used as icing or decorations on the cake. Do not use flowers made on a flower nail or materials other than frosting in decorations. **Only required tip work can be used in Unit 2 (no candy, etc., for decoration).** Bottom border is required. No cake forms can be used.

**Unit 3** – Bake and decorate an 8, 9, or 10-inch round or square two-layer real cake using three to five different types of tips in decorating. You must use the round, leaf, and star tips but may also use other tips, if you choose. Spatula and brush striping and figure piping are optional. **One fourth of the top of the cake should be visible to show the smooth base.** No fondant, gum paste, marzipan, or royal icing may be used as icing or decorations on the cake. Do not use flowers made on a flower nail or materials other than frosting in the decorations. **Side trim is required on the exhibit cake and on at least two practice cakes. Side trim is uniformly placed icing decoration.** Bottom border is required. No cake forms can be used.

**Note:** It is recommended that members learn the basic cake decorating skills included in Units 1 through 3 before taking any of the more advanced units. Youth may then select the unit which includes the skills they wish to learn. Units 4–9 do not have to be taken in order as numbered. Units 7–9 are for intermediates and seniors. Units 10–12 are for seniors only.

# **Cake Decorating Unit 1 (Edible Only)**

## **Goals for Unit 1**

1. Learn to bake and frost a single-layer cake (one layer only, not stacked) that will be a good base for your decorations.
2. Begin to develop skills in combining color and design in a pleasing way using edible food items.
3. Bake and decorate a minimum of four cakes plus your exhibit cake (total of 5).

## **Exhibit for Unit 1**

1. One decorated single layer real cake (8", 9" or 10" round or square or 9" x 13" rectangle cake) using only edible materials (for example: candies, pretzels, and coconut should be used to create a design). A real cake (no cake forms) should be used for exhibit in Unit 1. No decorator tips are allowed in this unit. No fondant, gum paste, or marzipan may be used for decorations or base icing on the cake. One fourth of the top of cake should be visible to show smooth base. No royal icing can be used as icing or decorations on the cake. No non-edible material can be used in Units 1-6. Bottom base border required.
2. Your completed Cake Decorating e-record in a sturdy binder/notebook should accompany the cake. Records are important, too. Keep a record of each cake you make. Either take a picture or make a simple drawing. Then write a short explanation of what you did and what you learned with each cake you decorated. Include the following information in the Cake Decorating e-Record on the four required cakes plus the exhibit cake: 1. occasion for use 2. real cakes 3. size or shape 4. techniques used 5. edible materials used 6. cost to buy similar cake 7. any problems you had. Be sure to put the cost of your four cakes and exhibit cake on the expense page in the eRecord. Include photos or drawings of the four required cakes in addition to photos of you working on your project in the record photo page.
3. Fair Secret — Let the cake air dry; DO NOT FREEZE or refrigerate.

## **Decorated Cake**

1. The cake must be baked by the exhibitor. This should be noted in the e-record. It also may be discussed at interview judging.

2. The cake for exhibit should be an 8, 9, or 10-inch round or square cake or a 9 x 13-inch rectangle cake. **No *character pans* or *cut-up cakes* should be used in this unit.**
3. The cake should be placed on a very firm disposable surface (foam core, cardboard, particle board, etc.) which will not sag with the weight of the cake. Cut the base board parallel to the shape of the cake. It must be 1½ inches on each side from the base of the border (not the cake). Example: an 8-inch cake on a 12-inch board. This means that for an 8-inch-square cake with a ½ inch border, you would cut two square boards 12 x 12 inches. The cake board size depends on the base border size. Note: this is required so the member and/or the judge do not accidentally put their finger into the border.
4. The cake board must be covered with a food safe material – examples are aluminum foil, *fanci-foil wrap-Wilton*, and freezer paper. If you use a decorative or gift wrap paper or fabric, it must be covered in food quality plastic wrap. Be sure covering is firmly secured on the back of the cake board.

## **Frosting**

1. One fourth of the smooth base frosting on top of the cake must be visible. Plan your design so there is a place where the base frosting can be seen for judging.
2. Base frosting should be smooth and uniform. Planned swirls or heavier spots may be used as appropriate for the design selected (clouds, etc.).
3. The frosting should be attractive, provide a good base for decorations, and use colors that enhance the design.
4. Royal Icing, Rolled Fondant, gum paste, or marzipan cannot be used as the base frosting or for decorations.

## **Design**

1. Color and design should be balanced and pleasing to the eye.
2. Design should incorporate a variety of edible materials appropriate to the design.
3. The design may be applied with any edible item (colored sugar, coconut, candies, pretzels, pasta, etc.).

4. Non-edible items (plastic, paper, toothpicks, lollipop sticks) may not be used on the cake.

### **Tips for Record Book**

1. Cake Decorating e-Records should be neat and complete. Follow instructions carefully.
2. Cake Decorating e-Records should show that a minimum of four cakes plus the fair exhibit have been made.
3. Cake Decorating e-Record books will count for 25 percent of the placing score.

### **Planning a Design**

Before you plan the design for your cake, look in magazines and cake decorating books, visit your local bakery and collect ideas which you think would be interesting as they are or with variations.

Design Check List:

1. It is suitable for the shape of the cake.
  - A round or curved design is usually best on a round cake.
  - A straight or triangular design is usually best on a square or rectangular cake.
2. The size of the design is 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. The cake can be seen well from the viewing area.
  - Some cakes are planned to be viewed from one side only; others are the same on all sides. Either is acceptable.
4. Is the design using appropriate colors that go well together?

- 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.
- Be open and flexible when thinking about color. Color styles change and are often influenced by customs and ethnic heritage, as well as by the design.
- Brightness is a personal matter as long as it does not detract from the overall design.

5. Is the combination of edible material appropriate for design?

- Consider how well the edibles will last according to when the cake will be served or exhibited.

## **Balancing Designs**

You must mark the cake when you select a design that is repeated or placed at equally spaced intervals. Decide whether you want to divide the cake into four, six, eight, or more sections. Place a small dot with a toothpick at each point to serve as a guide. Be sure dots are covered with candy, etc. so they do not show on the finished cake.

## **Decorating Ideas**

1. Apply a Stencil Design

- a. Use a cookie cutter for a pattern.
- b. Colored sugar: To prepare your own-colored sugar, measure  $\frac{1}{2}$  cup sugar into small bowl or plastic bag. Blend in liquid food coloring with a fork or mix with your hands by massaging on the outside of the bag; 6 drops for light color; 12 drops for medium color; 24 drops for dark color. Allow sugar to dry on waxed paper at room temperature before using.
- c. Colored coconut: shake coconut with a few drops of color in a jar or plastic bag.
- d. Crushed candy: place candy on waxed or parchment paper and crush with a rolling pin.

2. Make a flower arrangement from any edible item.
3. Make a design using a variety of edible items.

## **Borders on the Cake**

**\*\* All cakes must have a bottom border.**

- Small candies placed uniformly around the cake or any item used in the design on top may be spaced uniformly around the base to form a border.
- Be creative in using items that you have used to create your design.



## **Cake Decorating Unit 2**

In this unit, you will use cake decorating tips and decorate a one-layer real cake (8, 9, or 10-inch round or square cake pan or 9 x 13-inch cake pan). You will make cakes for special occasions.

### **Goals for Unit 2**

1. Use professional cake decorating equipment.
2. Begin to develop skills in using a round tip, leaf tip and star tip.
3. Develop skills in combining icing colors and designs.
4. Decorate a minimum of four cakes, plus your exhibit cake (total of 5).

### **Exhibit for Unit 2**

1. One decorated single layered real cake (8", 9" or 10" round or square or 9" x 13" rectangle cake pan) using a leaf, star and round tips. One fourth of the top of cake should be visible to show smooth base. No fondant, gum paste, marzipan or royal icing may be used as icing or decorations on the cake. Only required tip work can be used in Unit 2 (no candy, etc., for decoration). No non-edible decorations can be used in units 1-6. Do not use flowers made on a flower nail or materials other than frosting in decorations. No cake forms can be used. Bottom base border required.
4. Your completed Cake Decorating e-record in a sturdy binder/notebook should accompany the cake. Records are important, too. Keep a record of each cake you do. Either take a picture or make a simple drawing. Then write a short explanation of what you did and what you learned with each cake you decorated. Include the following information in the Cake Decorating e-Record on the four required cakes plus the exhibit cake: 1. occasion for use 2. real cakes 3. size or shape 4. techniques used 5. edible materials used 6. cost to buy similar cake 7. any problems you had. Be sure to put the cost of your four cakes and exhibit cake on the expense page in the eRecord. Include photos or drawings of the four required cakes in addition to photos of you working on your project in the record photo page.
2. Fair Secret — Let the cake air dry; DO NOT FREEZE or refrigerate.

## **Decorated Cake**

1. The cake must be baked by the exhibitor. This should be noted in the e-record. It also may be discussed at interview judging.
2. The cake for exhibit should be an 8, 9, or 10-inch round or square cake or a 9 x 13-inch rectangle cake, decorated using a leaf tip, star tip, and round tip.
3. The cake should be placed on a very firm disposable surface, which will not sag with the weight of the cake. Cut the board parallel to the shape of the cake. It must be 1½ inches on each side from the base of the border (not the cake). This means that for an 8-inch square cake with a ½ inch border you would cut two square boards 12 x 12 inches. Cake board size depends on base border size. Example: an 8-inch cake on a 12-inch board.
4. The cake board must be covered with food-safe material such as aluminum foil or freezer paper. If you use a decorative or gift wrap paper or fabric, it must be covered in food quality plastic wrap. Be sure covering is firmly secured on the back.

## **Frosting**

1. Base frosting should be smooth and uniform. Planned swirls or heavier spots may be used as appropriate for the design selected (clouds, etc.).
2. The frosting should be attractive, provide a good base for decorations and use colors that enhance the design.
3. Decorator icing should be the proper consistency for the work being done.

## **Design**

1. The cake should be attractively designed in color and also well-planned in the use of tips.
2. The use of these three tips is required: round tip, leaf tip, and star tip.
3. Only icing should be used in decorating the cake. (No fondant or royal icing may be used.) No non-edible material may be used.



## Tips for Record Book

1. Cake Decorating e-Records should be neat and complete. Follow the instructions carefully.
2. Cake Decorating e-Records should contain evidence of the skills learned in the unit.
3. Cake Decorating e-Records should show a total of five cakes.
4. Cake Decorating e-Record book will count for 25 percent of the placing score.

**Note:** *Information on baking a cake, preparing the cake board, transporting the cake and frosting a one-layer cake can be found beginning on page 6. Review this information before starting your cake.*

## Basic Decorating Supplies:

1. Decorating bag. The decorating bag holds your icing and tips so you can squeeze out all kinds of designs. Many types are available. Some are:
  - a. Parchment or waxed paper cone with or without coupler. (Try this at least once so you will learn how to construct and use a cone.)
  - b. Plastic disposable decorating bag with or without coupler. A coupler allows you to change tips on the same bag.
  - c. Nylon bags (featherweight) with coupler or without coupler.
2. Decorating tips. You must use leaf tip, round tip, and star tip to decorate your cake. You will need to experiment to see what effect you get with these different tips.
3. Food Coloring
  - a. Liquid
  - b. Gel Paste
  - c. Powder
4. Box for storing all supplies together. Tips can accidentally be dented or bent easily, so keep them separated from other supplies.

Mark all your supplies with your initials for easy identification. Keep close track of your tips as they can be lost or ground up in the garbage disposal.

## Using Decorating Bags

### Decorating Bags

1. Plastic and nylon bags are pliable, ready-made and ready-to-use. They may be used with or without a coupler to hold your decorating tip.

The coupler is a two-part device that allows you to change decorating tips on the same bag. This saves time when you want to use several different tips with the same icing color and consistency.

The two parts of the coupler are the base and the ring. The base fits inside the bag, and then you put the decorating tip of your choice over the portion of the coupler that sticks out of the bag. When you screw the ring on, you have locked the decorating tip onto the coupler and bag.



#### **Step 1: Marking the Bag**

Remove ring from coupler base. Drop the coupler base, narrow end first, into the bag and push it down as far as you can.

For Featherweight Bags: Using a pen or pencil, mark the spot on the outside where the bottom screw thread (closest to tip) is outlined against the bag material.

For Disposable Bags: Mark a spot on the outside that is ¼ inch BELOW the bottom screw thread.



#### **Step 2: Cutting the Bag**

Push the coupler base up into the bag so that you can cut an opening at the mark.



#### **Step 3: Position Coupler Base and Tip**

Push the coupler base down through the opening. One thread should be showing. Place a decorating tip over the part of the base extending from the bag.



#### **Step 4: Lock Tip in Place**

Put the ring over the tip and twist it on, locking the tip in place.

Pictures taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

2. Parchment paper bags are made from parchment paper triangles. Generally, you'll use parchment bags for royal icing or when small amounts of icing are needed. A decorating bag can also be made from readily available freezer paper. These bags are messy to refill. You may want to discard a bag when it's empty and start with a new parchment or freezer paper bag after each use. Make the bags from any size parchment paper, depending on the amount of icing to be used. Decorating parchment is already cut in triangles. Parchment paper will need to be cut in triangle shapes. Start with a piece of paper approximately 17 inches square. Fold it in half to make a triangle and cut on the fold.

### **Instructions for Making Parchment Bags**



#### **Step 1**

Note that the points of the triangle have been labeled A, B, and C in the photo. Place the triangle on a flat surface with point B facing you.



#### **Step 2**

Curl point A up and under, bringing it toward you until points A and B meet. The curled edge from point A should lie on top of the edge between C and B as shown.



#### **Step 3**

Hold points A and B together with your right hand, picking up point C with your left. Wrap point C around to meet points A and B in back. All 3 points align to form 1 sharp point, which forms the bag's cone.



#### **Step 4**

Hold the bag with both hands, thumbs outside, and slide points A and C in opposite directions to make the upside down “W” as shown.



#### **Step 5**

Fold the points of the bag down into the bag. Tear 2 notches along folded edge and fold notch down.

Images taken from [www.juliausher.com](http://www.juliausher.com)

#### **Step 6**

To use a decorating top without a coupler, cut  $\frac{3}{4}$  in. off the end of the bag, then drop the tip in, narrow end first. Don't be concerned if the tip doesn't fit snugly. The icing will hold it in place.

#### **Step 7**

To use a tip coupler, drop the coupler base, narrow end first, into the bag and push it down as far as you can. Holding the coupler and bag together in place with one hand, twist on the ring. When secure, tear away the tip of the parchment bag.

#### **Step 8**

Unscrew ring, position the decorating tip on the coupler and replace the ring, locking the tip into place.

## **Filling the Decorating Bag**

This method can be used for both featherweight and disposable bags.

### **Step 1**



While holding the bag with one hand, fold down the top with the other hand to form a generous cuff over your hand as shown.

### **Step 2**



With an angled spatula, fill the bag with approximately  $\frac{1}{2}$  cup of icing.

**Note:** It is important not to overfill the bag; otherwise, excess icing may squeeze out the wrong end.

### **Step 3**



Remove icing from the spatula by squeezing the bag with your thumb and fingers against the spatula and pulling spatula out.

### **Step 4**



Close the bag by unfolding the cuff and twisting the bag closed. This forces the icing down into the bag.

Pictures and information taken from Wilton website at:  
[www.wilton.com](http://www.wilton.com)

"Burping" the bag: make sure you release any air trapped in the bag by squeezing some of the icing out of the tip into the bowl. When refilling the bag, it is very important to burp the bag before you start decorating your cake.

## **Holding the Bag Correctly**

- a. Hold the bag near the top with the twisted or folded end locked between your thumb and fingers. Use the first two fingers of the opposite hand to guide or steady it.
- b. There are times when a 45° angle is recommended. Borders and writing usually use a 45° angle.



45° Angle, Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

- c. Hold the bag straight up, with the tip perpendicular to the surface. This is referred to as a 90° angle. This is used for stars, drop flowers, and rosettes.



90° Angle, Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

- d. Left-hand decorators should hold the decorating bag in their left hand and guide the decorating tip with the fingers of their right hands. A right-handed person will always decorate from left to right, and a left-handed person from right to left, except when writing or printing.



Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

## **Pressure**

The amount of pressure (how hard you squeeze the bag) and the steadiness with which it is applied to the decorating bag will determine the size and uniformity of any icing design. Some decorations require an even pressure, others a varying application of light, medium or heavy pressure. The more you control the pressure, the more exact your decoration will be.

## **Care for Decorator Bags**

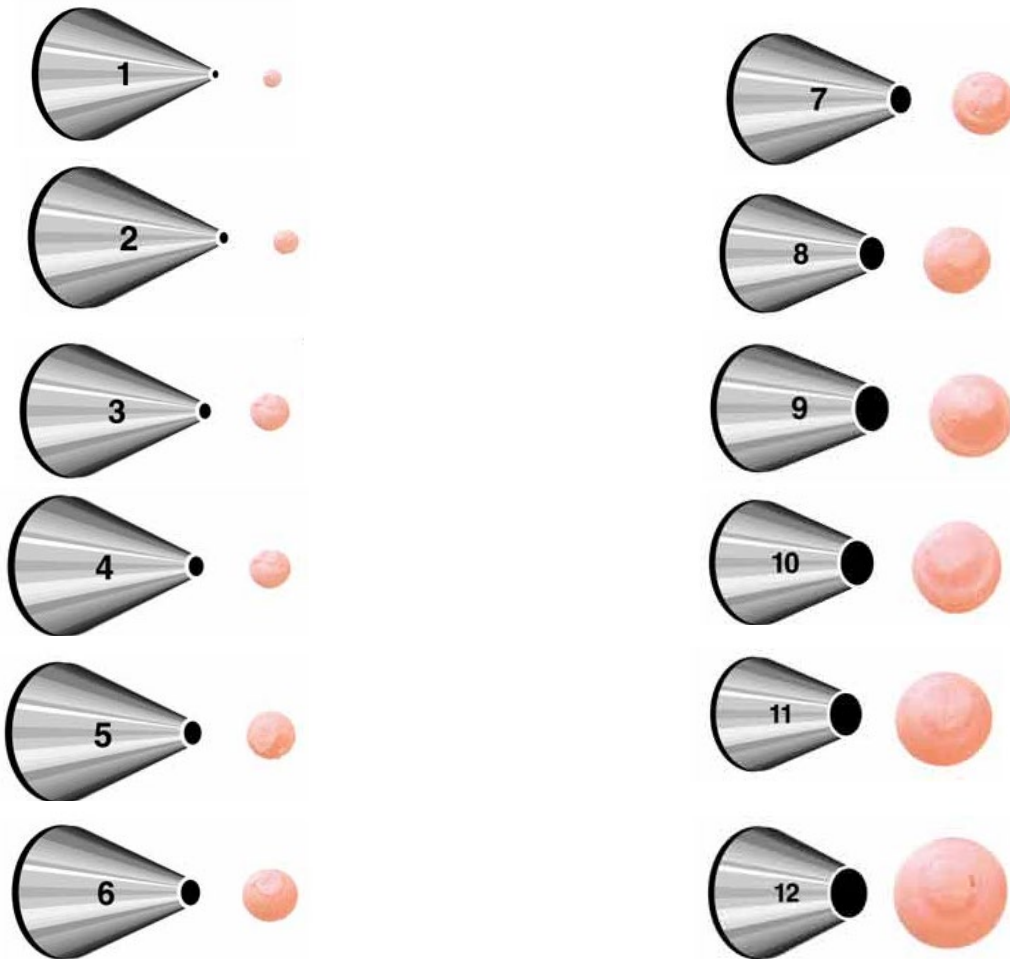
Wash decorator bags thoroughly (removing coupler and nut) in hot soapy water. Rinse well and air dry completely inside and out before replacing coupler in bag.

## Decorating with Tips

No one is born with natural skill in using a decorating tip – only practice makes perfect. Practice on a smooth, firm surface such as a plastic place mat, a smooth cutting board, a practice board made from cardboard covered with contact paper, Plexiglas, a commercial practice board, etc. Frosting does not adhere to metal, so metal pans are difficult to use for practicing and should be avoided.

### 1. Plain or round tips (#1 - #12)

Used for outlining details, filling and piping in areas, writing and printing messages, figure piping, dots, balls, beads, string work, lattice and lacework, vines, flower centers and floral work. These tips are smooth and round.

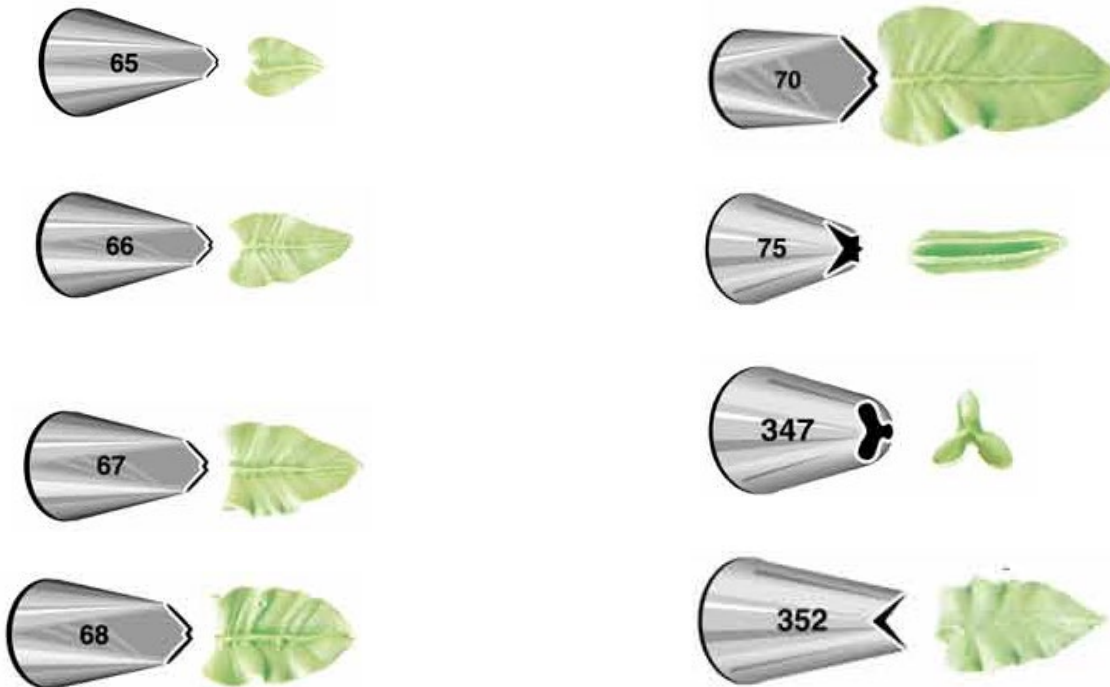


Pictures taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

*Birthday*

Round tips are used for writing and lettering. You will want to practice printing as well as script writing.

2. **Leaf Tips** (#65 - #68, #70, #75, #347 and #352). Create perfect floral enhancements. The V-shaped openings of these tips give leaves pointed ends. With any leaf tip you can make plain, ruffled or stand-up leaves. If using leaf tips #65 to #70, adding a ½ teaspoon of piping gel will produce better points on your leaves.



: Pictures taken from Wilton website at:  
[www.wilton.com](http://www.wilton.com)

Leaf tips may be used to make:



Leaves

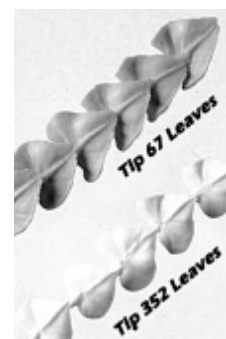
Pictures taken from Wilton Website:  
[www.wilton.com](http://www.wilton.com)



Holly

Picture taken from the Wilton Website:  
[www.wilton.com](http://www.wilton.com)

Borders

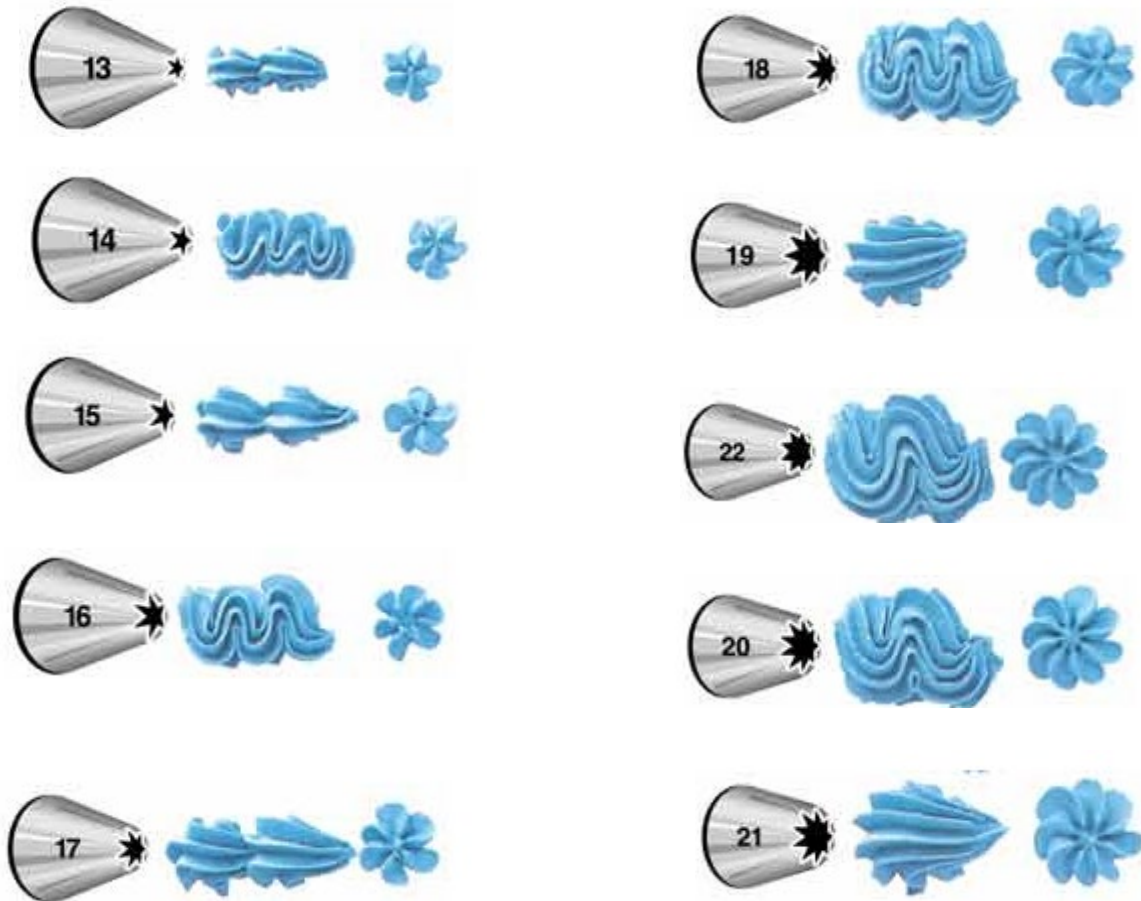


Holly can be made with the leaf tip. Make a full leaf. Take a dampened brush and pull out the points. Add red dots for berries (always in groups of three) with the round tip. (A dampened straight pin or toothpick may also be used to pull the icing out to give a pointed effect.)



### 3. **Open Star Tips (#13 - #22)**

Star tips produce the most popular decorations—deeply grooved shells, stars, Fleur-de-lis, rosettes and flowers. The most popular star tips used are numbered 13 through 22.



Pictures taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

**Try these ideas for borders:**

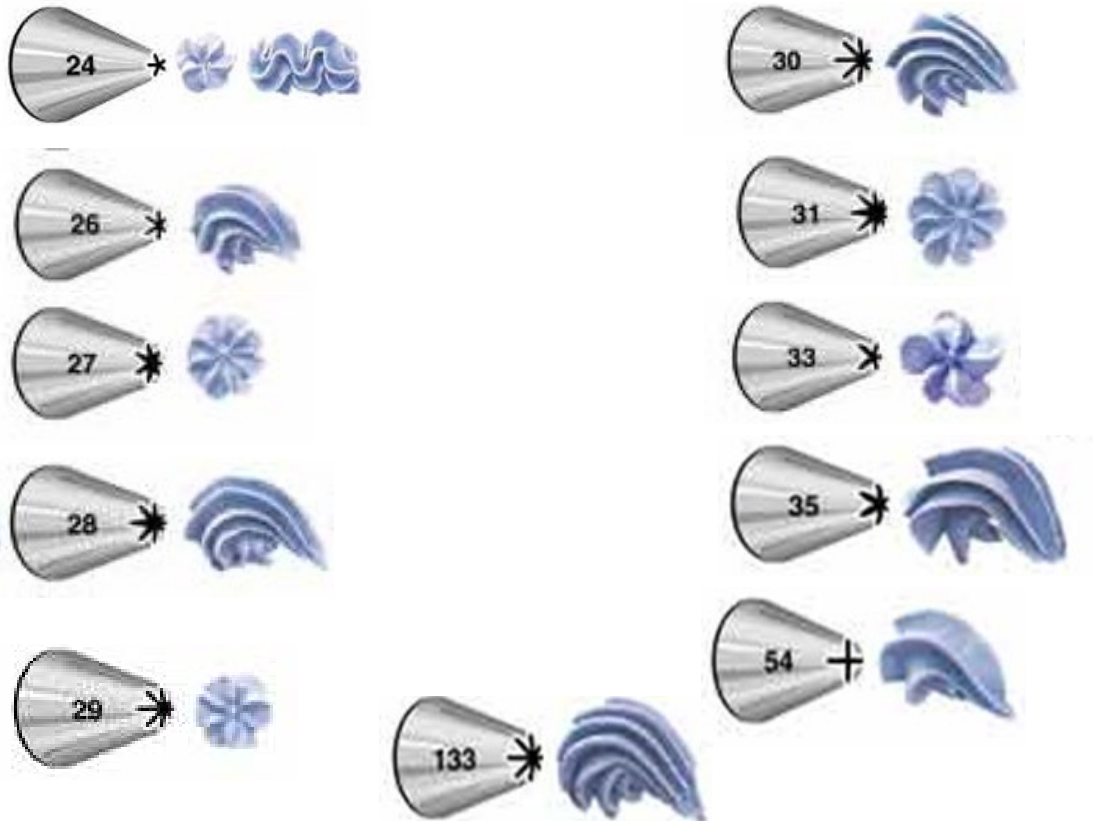
- a. Make individual stars close together all around the edge of the cake.
- b. Use the star tip in a zigzag motion around the edge of the cake.
- c. A shell border may be made by holding the tip at a 45-degree angle. Use heavy pressure until icing builds and fans out, then lift tip slightly and lighten pressure as you pull tip toward you to make a "tail." Start each new shell slightly overlapping the tail. The shell may be varied by holding the tip at different angles to the cake.



Picture taken from Wilton Website:  
[www.wilton.com](http://www.wilton.com)

**4. Closed Star Tips (#24, #26-#31, #33, #35, #54, #133)**

The closed star or drop flower tip can be used to make drop flowers. The closed star may also be used for borders.



Pictures taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

## Basic Shell Border



Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

## Planning a Design

### Elements of Good Cake Design

- **Writing:** If you are putting writing on the cake, it usually goes on first to ensure there is enough space for your message.
- **Form:** Think about the shape of your cake and how your decorations will work together to create a pleasing presentation.
- **Balance:** Refers to the way your decorations are arranged. Decorations can be symmetrical (the same number of decorations on each half of the cake), or asymmetrical (intentionally making the number of decorations uneven to create patterns or movement) in your design.
- **Color:** Make sure that the colors you choose work well together. Consider the following options:
  - Complementary – two colors on opposites of the color wheel
  - Monochromatic – three or more shades of the same color
  - Analogous – three colors side by side on the color wheel
  - Triadic – three colors evenly spaced on the color wheel
  - Tetradic – four colors evenly spaced on the color wheel
- **Texture:** Varying the textures on your cake can create interest. Elements of symmetry/asymmetry apply to textures as well as decorations.

## References

[www.wilton.com](http://www.wilton.com)

[www.bettycrocker.com](http://www.bettycrocker.com)

Key words: decorating tips, leaf tip, round tip, star tip

## **Cake Decorating Unit 3**

This unit will emphasize baking a two-layer cake (8, 9, or 10-inch round or square real cake) while using the round, leaf and star tips in decorating. You will also learn how to use a side border. Figure piping, spatula, and brush striping are optional.

### **Goals for Unit 3**

1. Use professional cake decorating equipment.
2. Develop skills in using a round tip, leaf tip and star tip.
3. Develop skill in combining icing colors and designs.
4. Decorate a minimum of four cakes, plus your exhibit cake (total of 5).

### **Exhibit for Unit 3**

1. One decorated two-layered real cake (8", 9" or 10" round or square) using three to five different types of tips in decorating. You must use the round, star, and leaf tips, but may also use other tips, if you choose. Spatula and brush striping and figure piping are optional. One fourth of the top of cake should be visible to show smooth base. Do not use flowers made on a flower nail or materials other than frosting. No fondant, gum paste, marzipan, or royal icing may be used as icing or decorations on the cake. Only required tip work can be used in Unit 3. No non-edible decorations can be used in units 1-6. Bottom border is required.
5. Your completed Cake Decorating e-record in a sturdy binder/notebook should accompany the cake. Records are important, too. Keep a record of each cake you do. Either take a picture or make a simple drawing. Then write a short explanation of what you did and what you learned with each cake you decorated. . Include the following information in the Cake Decorating e-Record on the four required cakes plus the exhibit cake: 1. occasion for use 2. real cakes 3. size or shape 4. techniques used 5. edible materials used 6. cost to buy similar cake 7. any problems you had. Be sure to put the cost of your four cakes and exhibit cake on the expense page in the eRecord. Include photos or drawings of the four required cakes in addition to photos of you working on your project in the record photo page.
2. Fair Secret — Let the cake air dry; DO NOT FREEZE or refrigerate.

## **Decorated Cake**

1. The cake must be baked by the exhibitor. This should be noted in the e-record. It also may be discussed at interview judging.
2. Bake and frost a two-layered 8, 9, or 10-inch round or square real cake, decorated using a leaf tip, star tip, and round tip. Other tips may be used if you choose.
3. The cake should be placed on a very firm disposable cardboard surface, which will not sag with the weight of the cake. Cut the cardboard parallel to the shape of the cake with no more than 1½ inches on each side from the base of the border (not the cake). Example: an 8-inch cake on an 11-inch board.
4. The cake board must be covered with food safe material such as aluminum foil or freezer paper. If you use a decorative or gift wrap paper or fabric, it must be covered in food quality plastic wrap.
5. Design should be suitable for the size and shape of the cake. It should show good use of color and a pleasing combination of decorations.

## **Frosting**

1. Base frosting should be smooth and uniform.
2. The frosting should be attractive, provide a good base for decorations and use colors that enhance the design.
3. Decorator icing should be the proper consistency for the work being done.

## **Design**

1. The cake should be attractively designed in color and also well-planned in the use of tips.
2. The use of these three tips is required (round, leaf and star). A side (see page 47) and bottom border are required. Figure piping, spatula and brushing are optional.
3. Only icing should be used in decorating the cake. (No fondant, gum paste, marzipan, or royal icing can be used on the cake.)

## Tips for Record Book

1. Cake Decorating e-Records should be neat and complete. Follow the instructions carefully.
2. The Cake Decorating e-Record book should contain evidence of the skills learned in this unit.
3. Cake Decorating e-Records should show that a minimum of four cakes, plus the fair exhibit cake, have been made (total of 5).
4. Cake Decorating e-Records will count as 25 percent of the placing score.

**Note:** Information on baking a cake, preparing the cake board and frosting a one-layer cake are included in Unit 1 (starting on page 6). You also will need to review *Decorating with Tips* on page 38 of the manual. Review this information before starting your cake.

## Drop Flowers



### Star Flowers

Put the top of the tip directly above the cake. The tip must be held at a 90-degree angle. Force icing through until you have the size of flower desired. Stop pressure and lift the tip away.

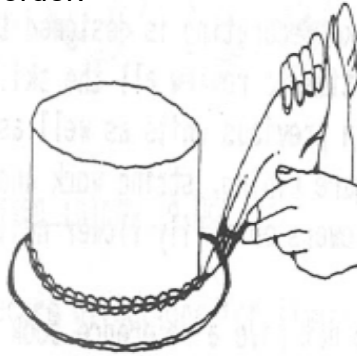


### Swirled Flowers

The swirl flower is done in exactly the same fashion as the star flower, except you twist your wrist as you make it, giving the petals a natural looking curve. Turn your wrist as far to the left as possible (to the right if left-handed) before squeezing, as if you were going to open a jar. As you squeeze out the icing, slowly return the wrist to a normal position. Stop squeezing and lift the tip away. Swirled flowers are usually made on waxed paper and left to air dry, or frozen and then transferred to the cake. They can also be piped directly onto the cake.

## Borders and Side Trims

Borders and side trims are basic decorations for most cakes. A border is a continuous line around the top or bottom of the cake. A side border is evenly spaced around the cake on the side and generally centered from top to bottom. An exception is drop strings which are attached to the top border.



Learn how to make and practice some of the borders and trims listed below. (Names may vary depending on the instruction book you are using.) Most side borders and side trims are done with medium consistency icing.

### Types of Borders or Side Trims

Rope

ZigZag

ZigZag Garlands

Horizontal “C”

Reverse Shell

Fleur-de-lis



Picture taken from Wilton Website:  
[www.wilton.com](http://www.wilton.com)

#### **Rope**

Use medium consistency icing. Hold the bag at a 45-degree angle to the surface. As you squeeze the bag with a steady, even pressure, move the tip in a gentle sideways “S” curve. Stop the pressure and pull the tip away. Now tuck the tip under the bottom curve of the “S” shape. Squeeze the bag with steady pressure as you pull down, and then lift the tip, moving up and over the tail of the “S” as you continue to squeeze and form a hook. Keep the spacing as even as possible and the “S” curves uniform in thickness, length, and overall size. Be sure to tuck the tip into the bottom curve of the previous “S” before you begin squeezing to insure the clean, continuous look of a rope.





Picture taken from Wilton Website:  
[www.wilton.com](http://www.wilton.com)

### **ZigZag**

Use medium consistency icing. Hold the bag at a 45-degree angle to the surface so the tip points to the left and the bag's end points to the right and your fingertips face your body. Touch the tip to the surface and begin to pipe with a light pressure. Use heavier pressure toward the center of the puff and then return gradually to a light pressure to form the tapered end. To end each puff, stop the pressure and pull the tip away. Repeat as you move in a straight line to form a row of puffs.

### **ZigZag Garlands**

Use medium consistency icing. These are usually used on the side of a cake. Mark the cake with the desired width and depth of the garlands. Hold the bag at a 45° angle in the same manner as used in the basic zigzag design. Touch the tip to the first mark and squeeze with light, then heavy, pressure in a tight up and down motion to form the curves of the garland as you pipe toward the center. When you reach the center, reverse the process using heavy, then light, pressure toward the end. To end, stop the pressure and pull the tip away. Practice for rhythmic pressure control—light, heavy, light— so the garlands are uniform.



Picture taken from Wilton Website:  
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### **Horizontal "C"**

Use medium consistency icing. Hold the bag at a 90-degree angle to the surface and make a horizontal C-motion shell, relaxing the pressure to taper the tail. Make a reverse C-motion shell, but before piping the tail, relax the pressure and taper the tail to overlap the first C-motion shell tail.

### **Reverse Shell**

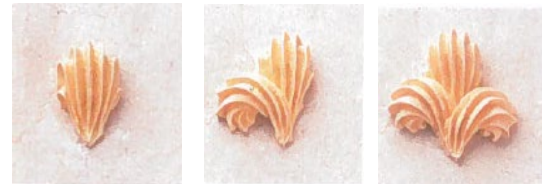
Use medium consistency icing. Hold the bag at a 45-degree angle with the tip lightly touching the surface. Squeeze the bag to let the icing build up and fan out as if you were making a regular shell, then swing the tip around to the left in a curve while relaxing the pressure to form the shell's tail. Stop the pressure and pull the tip away. Repeat the procedure, only this time swing the tip around to the right while forming the shell's tail. Continue this procedure in alternating directions for a series of reverse shells. If you are making the border on a round cake, turn the cake as you go so that you are always working toward yourself.



Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

### **Fleur-de-lis**

Use medium consistency icing. Hold the bag at a 45° angle with the tip slightly above surface. Pipe a basic shell and elongate the tail. Keeping the bag at a 45° angle, pipe a reverse shell to the left of the center shell and join the tails. Repeat procedure to the right side of the center shell.



Pictures taken from Wilton Website: [www.wilton.com](http://www.wilton.com)



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## Spatula and Brush Color Striping

### Spatula Striping

Spatula striping is the most common color blending method. After placing a coupler in a bag, use a small spatula and put a one-inch stripe of colored icing up about  $\frac{2}{3}$  of the side of the bag. After striping the bag, fill the remainder of the bag with different color icing. This gives the border a beautiful two-toned effect.

### Brush Striping

Brush striping is a way of striping your bag with one or many different colors and still use different color icing. With a clean small artist's (food safe) brush, dip brush into color and stripe  $\frac{2}{3}$  of the inside of the bag. For a fall leaf effect, stripe the bag in 3 places; first with brown coloring on each side, and then with green in the middle. These stripes should be about  $\frac{1}{8}$  of an inch wide and extend from bottom up  $\frac{2}{3}$  of the bag. Fill the bag with pastel green icing. The leaves will have a beautiful three tone effect.

This is a good method to use when figure piping. This method is frequently used in making flowers to just "tip" the edges of the flower in another color as a white flower with pink edges.



Spatula Striping

Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)



Brush Striping

Picture taken from Wilton Website: [www.wilton.com](http://www.wilton.com)

## Figure Piping

Figure piping requires the proper consistency of the icing. The two distinct types of figure piping are: the fill-in method and the pressure formation method. The pressure formation method is emphasized in this unit.

Make at least two figures using the figure piping technique. (Tip #3 works well for the outline of the figure; and tip #10 for piping the figure.)



Pictures taken from Wilton Website:  
[www.wilton.com](http://www.wilton.com)

### Suggested Things To Do

1. Secure directions for figure piping.
2. Experiment with different sized tips for piping.
3. Experiment with different consistencies of icing for piping figures.
4. Plan and use a piped figure on cake(s).
5. Spaghetti may be used as a support in upright figures. Must not be visible.

### Pressure Formation Method

The pressure formation method is a technique of pressure control. By squeezing and relaxing as the decorating bag is moved along, this method is used to create figures, animals, and objects to give a 3-D effect. They can be piped out on a flat surface or created to stand up alone as a bird, bootie, or clown.

## References

[www.wilton.com](http://www.wilton.com)

[www.bettycrocker.com](http://www.bettycrocker.com)

Key words: borders, side trims