The Discover 4-H Clubs series guides new 4-H volunteer leaders through the process of starting a 4-H club or provides a guideline for seasoned volunteer leaders to try a new project area. Each guide outlines everything needed to organize a club and hold the first six club meetings related to a specific project area.

The purpose is to create an environment for families to come together and participate in learning activities that can engage the whole family, while spending time together as a multi-family club. Members will experiment with new 4-H project areas.

What is 4-H?
4-H is one of the largest youth development organizations in the United States. 4-H is found in almost every county across the nation and enjoys a partnership between the U. S. Department of Agriculture (USDA), the state land-grant universities (e.g., Utah State University), and local county governments.

4-H is about youth and adults working together as partners in designing and implementing club and individual plans for activities and events. Positive youth development is the primary goal of 4-H. The project area serves as the vehicle for members to learn and master project-specific skills while developing basic life skills. All projects support the ultimate goal for the 4-H member to develop positive personal assets needed to live successfully in a diverse and changing world.

Participation in 4-H has shown many positive outcomes for youth. Specifically, 4-H participants have higher participation in civic contribution, higher grades, increased healthy habits, and higher participation in science than other youth (Learner et al., 2005).
4-H is the youth development program of Utah State University Extension and has more than 90,000 youth participants and 8,600 adult volunteers. Each county (Daggett is covered by Uintah County) has a Utah State University Extension office that administers the 4-H program.

The 4-H Motto
“To Make the Best Better!”

The 4-H Pledge
I pledge: My HEAD to clearer thinking, My HEART to greater loyalty, My HANDS to larger service and My HEALTH to better living, For my Club, my Community, my Country, and my world.

4-H Clubs
What is a 4-H Club? The club is the basic unit and foundation of 4-H. An organized club meets regularly (once a month, twice a month, weekly, etc.) under the guidance of one or more volunteer leaders, elects its own officers, plans its own program, and participates in a variety of activities. Clubs may choose to meet during the school year, only for the summer, or both.

Club Enrollment
Enroll your club with your local Extension office. Each member will need to complete a Club/member Enrollment form, Medical History form, and a Code of Conduct/Photo Release form (print these from the www.utah4h.org website or get them from the county Extension office).

Elect Club Officers
Elect club officers during one of your first club meetings. Depending on how many youth you have in your club, you can decide how many officers you would like. Typical officers will include a president, vice president, pledge leader, and secretary. Other possible officers or committees are: song leader, activity facilitator, clean-up supervisor, recreation chair, scrapbook coordinator, contact committee (email, phone, etc.), field trip committee, club photographer, etc. Pairing older members with younger members as Sr. and Jr. officers may be an effective strategy to involve a greater number of youth in leadership roles and reinforce the leadership experience for both ages. Your club may decide the duration of officers—six months, one year, etc.
A Typical Club Meeting

Follow this outline for each club meeting:

- Call to order—President
- Pledge of Allegiance and 4-H Pledge—Pledge Leader (arranges for club members to give pledges)
- Song—Song Leader (leads or arranges for club member to lead)
- Roll call—Secretary (may use an icebreaker or get acquainted type of roll call to get the meeting started)
- Minutes of the last meeting—Secretary
- Business/Announcements—Vice President
- Club Activity—arranged by Activity Facilitator and includes project, lesson, service, etc. These are outlined by project area in the following pages.
- Refreshments—arranged by Refreshment Coordinator
- Clean Up—led by Clean-up Supervisor

Essential Elements of 4-H Youth Development

The essential elements are about healthy environments. Regardless of the project area, youth need to be in environments where the following elements are present in order to foster youth development.

1. **Belonging**: a positive relationship with a caring adult; an inclusive and safe environment.
2. **Mastery**: engagement in learning; opportunity for mastery.
3. **Independence**: opportunity to see oneself as an active participant in the future; opportunity to make choices.
4. **Generosity**: opportunity to value and practice service to others.

(Information retrieved from: http://www.4-h.org/resource-library/professional-development-learning/4-h-youth-development/youth-development/essential-elements/)
4-H “Learning by Doing” Learning Approach

The Do, Reflect, Apply learning approach allows youth to experience the learning process with minimal guidance from adults. This allows for discovery by youth that may not take place with exact instructions.

1. **Experience**: the activity, perform, do it
2. **Process**: by discussing, looking at the experience, analyze, reflect
3. **Share**: the results, reactions, and observations publicly
4. **Generalize**: to connect the experience to real-world examples
5. **Apply**: what was learned to a similar or different situation practice

Youth do before being told or shown how.

Youth relate the experience to the learning objectives (life skills and/or subject matter).

Youth describe results of the experience and their reaction.

Youth use the skills learned in other parts of their lives.

Youth connect the discussion to the larger world.

4-H Mission Mandates

The mission of 4-H is to provide meaningful opportunities for youth and adults to work together to create sustainable community change. This is accomplished within three primary content areas, or mission mandates, - citizenship, healthy living, and science. These mandates reiterate the founding purposes of Extension (e.g., community leadership, quality of life, and technology transfer) in the context of 21st century challenges and opportunities. (Information retrieved from: http://www.csrees.usda.gov/nea/family/res/pdfs/Mission_Mandates.pdf)

1. **Citizenship**: connecting youth to their community, community leaders, and their role in civic affairs. This may include: civic engagement, service, civic education, and leadership.
2. **Healthy Living**: promoting healthy living to youth and their families. This includes: nutrition, fitness, social-emotional health, injury prevention, and prevention of tobacco, alcohol, and other drug use.
3. **Science**: preparing youth for science, engineering, and technology education. The core areas include: animal science and agriculture, applied mathematics, consumer science, engineering, environmental science and natural resources, life science, and technology.
Getting Started

1. Recruit one to three other families to form a club with you.
   a. Send 4-H registration form and medical/photo release form to each family (available at utah4h.org)
   b. Distribute the Discover 4-H Clubs curriculum to each family
   c. Decide on a club name
   d. Choose how often your club will meet (e.g., monthly, bi-monthly, etc.)

2. Enroll as a 4-H volunteer at the local county Extension office (invite other parents to do the same)

3. Enroll your club at the local county Extension office
   a. Sign up to receive the county 4-H newsletter from your county Extension office to stay informed about 4-H-related opportunities.

4. Identify which family/adult leader will be in charge of the first club meeting.
   a. Set a date for your first club meeting and invite the other participants.

5. Hold the first club meeting (if this is a newly formed club).
   a. See A Typical Club Meeting section above for a general outline.
      i. Your activity for this first club meeting will be to elect club officers and to schedule the six project area club meetings outlined in the remainder of this guide. You may also complete a-d under #1 above.
   b. At the end of the first club meeting, make a calendar outlining the adult leader in charge (in partnership with the club president) of each club meeting along with the dates, locations, and times of the remaining club meetings.

6. Hold the six project-specific club meetings outlined in this guide.

7. Continue with the same project area with the 4-H curriculum of your choice (can be obtained from the County Extension Office) OR try another Discover 4-H Club project area.

Other Resources

Utah 4-H website: www.Utah4-h.org
National 4-H website: www.4-h.org
4-H volunteer training:
   To set up login: http://utah4h.org/htm/volunteers/get-involved/new-volunteer-training
   To start modules: http://4h.wsu.edu/volunteertraining/course.html (password = volunteer)

References

Information was taken from the Utah 4-H website (utah4h.org), the National 4-H Website (4h.org), the Utah Volunteer Handbook, or as otherwise noted.


We would love feedback or suggestions on this guide: please go to the following link to take a short survey:
http://tinyurl.com/lb9tnad
4-H CAKE DECORATING CLUB

Meetings

Club Meeting 1
Get Ready! Get Familiar with Supplies and Make Icing

Club Meeting 2
Get Set! How to Use Pastry Bags and Tips

Club Meeting 3
Practice! Mastering the Basic Decorating Tips

Club Meeting 4
The Art of Baking a Cake

Club Meeting 5
Saving Money By Creating Your Own Cakes

Club Meeting 6
Sharing New Skills: Displaying and Transporting Cakes

Icing Practice Sheets

Naomi Brower | Stacey MacArthur
Utah State University Extension
Get Ready! Get Familiar with Supplies and Make Icing*

The purpose of this club meeting activity is to introduce youth to the types of supplies needed for cake decorating and how to clean and care for them. This activity will also help youth develop the skills necessary to make icing in the right consistency to use for decorating.

Like most activities, cake decorating has its own tools and special equipment. For basic decorating, you don’t need to spend a lot of money. However, there are a few items that are absolutely necessary: a reusable pastry bag, a coupler, and basic pastry tips (basic round, a star tip, and leaf tip).

Cake Decorating Equipment

Introduce cake decorating equipment. If you choose, you can have decorated cupcakes, cookies, etc., on display to show the participants examples of finished products. You can also show pictures of decorated items. Ask the youth if they know the process and skills of cake decorating.

Then explain the different decorating supplies (Wilton Enterprises, 2004).

*Information from this section is taken from and used with permission from Wilton Enterprises, 2003a, 2004. Wilton Industries 2013.
Pastry Bags

REUSABLE PASTRY BAGS

Sometimes called featherweight bags, reusable pastry bags are made of washable polyester that’s specially coated to prevent leaks. They are also available in nylon, plastic-lined cotton, canvas, or plastic. These bags can be cleaned and used over and over and still stay flexible. They can be used with a coupler so you can change the tubes without changing the bags (Wilton Industries, 2013).

It is helpful to have several on hand if you are using different colors of icing. Pastry bags come in different sizes. The tote includes the 8” to 10-inch size, but some people choose bigger bags (12” or 14-inches long) once they have learned the techniques because they hold more icing and reduce the number of times a bag needs to be refilled while decorating the same project.

DISPOSABLE PASTRY BAGS

These are made of clear plastic and are good for one-time use and are thrown away when the decorating is done. They can be purchased at craft stores or wherever cake decorating supplies are sold. They are not as easy to use because they are not as flexible as reusable pastry bags.

Couplers

A coupler is a two-part plastic device, a base and a ring, that fits in the pastry bag and allows you to interchange decorating tips. The base fits inside, the bag is cut at the end and then the decorating tip of your choice is put over the portion of the coupler that sticks out of the bag. When you screw the ring on, you’ve locked the decorating tip onto the coupler and bag. The nice part about having a coupler is that you can change tips without having to change icing into a whole new bag.
Decorating Tips

Tips are metal cones through which icing or a medium is squeezed to form different shapes and designs. The size and shape of the opening on a decorating tip determines the type of decoration the tip will produce. There are seven basic decorating tip groups: round, star, leaf (used in this curriculum), drop flower, rose, basket weave, and specialized. As you become more proficient in decorating, you may want to try other kinds of tips. Tips come in a range of sizes and the greater the number on the tip, the larger the space for frosting to pass through and the larger the design created.

ROUND TIPS
These versatile tubes are smooth and round. Use for outlining details, filling and piping in areas, printing and writing words/messages, figure piping, string work, beads, dots, balls, stems, vines, and flower centers.

STAR TIP
Star-shaped tips create the most popular decorations, such as stars, zigzags, shells, ropes, puffs, rosettes, fleur-de-lis and scrolls. Star tips range in size from small to extra large. The small tips with narrow teeth are perfect for making a shell border or rosettes. A small star tube with wide teeth makes a wider shell border and rosettes.

LEAF TIP
The V-shaped openings of these tubes make leaves with center veins.
Other **Supplies**

- Icing spatula—to move the icing from the bowl to the cake and to smooth the icing on the cake. This will also be used to help clear the icing from the practice boards. (You could also use a butter knife or icing spatula.)
- Rubber spatula—to help in mixing the icing.
- Icing
- Food coloring paste—it is better to use the paste colorings; otherwise, liquid food color may thin the icing.

**Making Icing**

Make decorating icing. Encourage youth to take turns measuring, adding and mixing ingredients.

**DECORATING BUTTERCREAM ICING RECIPE (MEDIUM CONSISTENCY)** (Wilton Enterprises, 2003)

- 1 teaspoon vanilla extract
- 3 Tablespoons water
- 1 cup vegetable shortening
- 1 lb. sifted powdered sugar (about 4 cups)

Sift powdered sugar into a large mixing bowl (sifting helps to eliminate any lumps that may clog the small decorating tips so it is strongly recommended). Set aside. Cream shortening, vanilla, and water. Gradually add sifted sugar and mix with an electric mixer on medium speed until all ingredients have been thoroughly mixed. Blend an additional minute or so until creamy.

To make thinner icing, add 2 teaspoons of water for each cup of icing.

If desired, have youth color the icing that will be used during class. Paste colors will not add additional liquid that may change the consistency of the icing. They also tend to be more vibrant. You may also choose to discuss how to make different colors by combining colors.

**TIPS**

- If using more than one consistency of icing, color each consistency differently in order keep them separate.
- Icing can be left outside the refrigerator because no milk is used—or it can be stored in refrigerator if desired. Just take it out a few minutes before using so it can warm to room temperature. Be sure to keep icing covered with a damp kitchen cloth or plastic wrap to avoid drying out. Stir it before using.
- When making recipe for actual eating purposes, you may want to substitute milk for the water, and possibly add butter flavoring instead of vanilla to improve the flavor.
Testing the frosting is important because different shapes and types of decorations require different consistencies of icing—stiff, medium, and thin. If the consistency of your decorating icing isn’t right, your decorations will not be either. Taking icing in or out of the refrigerator will impact how hard or soft the icing will be. If needed, adding a little powdered sugar or water can help stiffen or soften the consistency. Keep in mind that the heat of your hand while working with the icing also thins its consistency.

How to test the icing:

Place a small dollop on a work surface with a small spoon or icing spatula to help youth see the difference between the consistencies. Lightly place the metal spatula on top of the icing and lift it to form a small peak. You can tell the icing consistency from the size of the peak formed. Add a very small amount of liquid to make a thinner consistency (see recipe above).

- Stiff icing is for roses or flowers (not used in beginner class).
- Medium icing is used most often and with almost all of the tips.
- Thin icing is the best for making leaves and small lettering.

After testing the icing with the “dollop” approach, youth can use the three consistencies to decorate graham crackers, sugar cookies, or cupcakes. (The next club meeting will teach participants to use the pastry bags and decorating tips—so don’t use them for this activity.) Have youth use butter knives, different colors and consistencies of icing, and any decorating items (sprinkles, etc.) you have to see what they can create.

Enjoy eating the decorated items!
Reflect
• What are some of the tools that are used specifically in cake decorating?
• Why is it important to test the constancy of icing?
• What could happen if we didn’t learn about the tools before we started to decorate?

Apply
• What other projects or hobbies have you learned that required special tools?
• How can cake decoration skills be utilized?
• How can cake decoration skills help others?

Belonging
Set the tone for an inclusive environment. This type of environment is one that creates a sense of belonging and encourages and supports its members with positive and specific feedback. Give words of encouragement and praise to the youth as they assist with making the icing recipe.

Mastery
You can help the youth master their skills by showing and sharing your knowledge. Demonstrate proper measuring and mixing techniques as you are making icing. This will help the youth see and experience firsthand the correct principles and techniques necessary for a quality outcome.

Independence
Provide opportunities for the youth to participate and facilitate in the meeting such as helping to measure and mix icing ingredients. This will help to develop a sense of influence over their lives, exercising their potential to become self-directing, autonomous adults.

Science
Encourage youth to use math skills to calculate the amount of ingredients.

References
Get Set! How to Use Pastry Bags and Tips*

**Prepare Pastry Bag**

*Demonstrate How to Prepare the Pastry Bag for Icing*  (Phillips, 2000)

The end of your bag needs to be measured and cut to fit the coupler. It will hold the decorating tip.

The coupler comes in two parts—the base and the ring. Separate the coupler (ring and base) and drop the cone-shaped base, narrow end first, into the pastry bag, forcing it as far as it will go.

Use a pencil to mark a line on the outside of the bag halfway between the narrow end coupler and the first thread of the coupler. Remove the coupler from the bag and then cut at the mark. Be careful not to cut too much off or the coupler will slip through when trying to squeeze out the icing! Better to cut too little at first, and you can cut off more if needed.

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*Information from this section is taken from and used with permission from Wilton Enterprises, 2003a, 2004; Wilton Industries 2013.*

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**Supplies**

- Reusable pastry bags
- Icing tips
- Couplers
- Cleaning brushes for tips
- Spatula or butter knives
- Icing (at least one batch, see Club Meeting 1)
- Wax paper
- Tape
- Table coverings, if desired
- Aprons, if desired
- Graham crackers, sugar cookies, and/or cupcakes to decorate

Teach youth how to properly hold and use a pastry bag and how to use each of the decorating tips.

Set out all supplies needed for the project you plan to complete. You may want to practice the techniques in advance in order to feel comfortable demonstrating for youth.
Push the cone-shaped base, narrow end first, back into the open end of the bag and down toward the pointed end as far as it will go. Push it until its tip and one or two threads are showing through the cut hole. You will see the rest of the threads through the pastry bag. You may need to trim it again if it is too narrow.

Screw on the coupler ring so the tip is straight and secure and the bag is airtight at the end.

If the bags have not been prepared beforehand, help youth to prepare their own pastry bag for icing.

**DEMONSTRATE HOW TO FILL THE BAG**  (Wilton Enterprises, 2003a; Wilton Industries, 2013)

1. Fold the open end of the bag back halfway making a cuff, and hold it like an ice cream cone underneath the cuff. Using a spatula, take a small amount of icing and insert it down the middle of the bag.

2. Use your hand to hold the bag and pinch the spatula before pulling it out so the icing will stay in the bag. The spatula will come out clean. Repeat until bag is 1/3 full or until there is enough icing to fit in the palm of your hand. Be careful not to overfill the bag because it will become difficult to work with while piping. Also, if you fill it too full, the heat from your hand (as you are using the bag) may make the icing too soft and it won’t flow properly. Any icing not in use should be covered with a damp kitchen cloth or plastic wrap so it won’t dry out.

3. Once icing is in the bag, pinch the top between your thumb and forefinger, pushing icing down as you squeeze. Twist the bag to keep it closed. You are ready to decorate.

4. Assist youth in attaching a round icing tip to a pastry bag and then add icing to the bag.
Demonstrate how to properly squeeze the icing from the bag

Every decoration you make is the result of three things working together: icing consistency, correct bag position and pressure control.

Icing Consistency

If the consistency of your icing is not right, your decorations will not be right either. See Club Meeting 1 for more information on the right consistency.

Correct Bag Position

Bag positions are described in terms of both angle and clock position. Angle refers to the position of the bag relative to the work surface. The basic two bag positions are:

**ANGLE POSITION**

90° angle, or straight up, perpendicular to the surface. Used when making stars.

45° angle, or halfway between vertical and horizontal. Used for writing and borders.

**CLOCK POSITION**

The hours on the clock face correspond to the direction you should point the end of the bag.

With the tip in the center of the clock, the back of the bag will point to the hour. (Look for clock icons on the practice sheets. They will show you at a glance which direction to point the back of the bag.)

*Note to left-handed decorators: When bag positions differ from the right-handed decorator, the position will be listed in parentheses.
Pressure Control

The size and uniformity of your icing designs are affected by the amount of pressure you apply to the bag and the steadiness of the pressure. Learn to apply pressure consistently so that just the right amount of icing flows through the tip (Wilton Enterprises, 2003).

The goal is to learn to apply pressure so consistently that you can move the bag in a free and easy glide while just the right amount of icing flows through the tip. This control will come with practice.

To pipe with the right pressure, do so at whatever angle the design requires, over the top or sides of the cake, with the tip a little above the surface. Press firmly and evenly on the pastry bag (squeezing the top of the bag rather than the middle) and move the tip at a uniform speed and pressure.

When you get to the end, release the pressure on the bag, stop moving the tube, and terminate the design in different ways, depending upon the design. For example, when piping a border, end with a quick flick of the tip of the pastry tube, up and slightly backward.

Practice Makes Perfect

ASSIST YOUTH AS THEY PRACTICE HOLDING THE BAG CORRECTLY AND LEARN TO CONTROL PRESSURE

Tape a piece of waxed paper on the table for a practice area. Encourage youth to practice holding the bag and using consistent pressure by making squiggles and lines. The goal is to have an even width of lines. When the waxed paper gets full, use a spatula or butter knife to scrape the frosting back into the pastry bag or bowl.
LEARN HOW TO PROPERLY CLEAN AND CARE FOR CAKE DECORATING TOOLS

1. Remove tip and coupler from the bag.
2. Squeeze and scrape out any extra icing.
3. Turn the bag inside out and immediately wash the bag, the tip, and coupler in hot, soapy water. Use a light cleaning brush, if necessary.
4. Use small brushes to get the icing out of the small ends of the tips, if necessary. Dry the tips, using a soft towel or place them on a clean towel on the counter to air dry.
5. Throw away used wax paper and wipe off the work area.

Now have youth practice writing their name on a graham cracker, sugar cookie, or cupcake using a round tip. Then they can practice using star and leaf tips to add embellishments to their name.

If you have sugar cookies, you can have the youth decorate some to take home to their families. They may also want to use their new skills to decorate cookies and take them to a nursing home or other care facility. Who else would appreciate some decorated cookies?
Reflect

- What happens to the icing or design when the bag is not held in the right position? Without consistent pressure?
- What would happen if we did not learn about special instructions and directions before we decorated with icing?

Apply

- What other things have you done that require directions and instructions?

Belonging

Give words of encouragement and praise to the youth as they practice learning to hold and control the pastry bags.

Mastery

By modeling how to properly prepare, fill, and use the pastry bags, youth will be able to better learn and master these essential cake decorating skills.

Independence

Provide opportunities for the youth to participate in the meeting by preparing their own pastry bags and work area. This will help them develop a sense of control over their lives, exercising their potential to become self-directing, autonomous adults.

Generosity

Clean up. Help others with skills. Make decorated treats and take to those who would appreciate them, such as nursing home or care facility residents.

Science

Icing consistency and proper hand pressure are two science principles essential to cake decorating. Discuss how these principles may have an impact on the process of cake decorating and on the finished product.

References


Practicing! Mastering the Basic Decorating Tips*

**Supplies**
- Reusable pastry bags
- Icing tips
- Couplers
- Cleaning brushes for tips
- Spatula or butter knives
- Icing (at least one batch, see Club Meeting 1)
- Practice sheets (laminated, if desired)
- Wax paper
- Tape
- Table coverings, if desired
- Aprons, if desired
- Graham crackers, sugar cookies, and/or cupcakes to decorate

**Demonstrate How to Use Different Tips**

1. Prepare and fill a pastry bag.
2. Pick a practice sheet and use a small piece of tape to secure it to the table. Tape a piece of waxed paper over the practice sheet.
3. Demonstrate how to properly create designs.
4. Once practice sheet is completed, scrape up icing using a spatula or butter knife and put it back into holding container. Continue until all icing is gone from pastry bag and then refill pastry bag as desired.
5. After completing the practice sheet, tape a different practice sheet under the wax paper and repeat steps.

**Round Decorating Tip #3**

**Printing**

Hold bag at 45° angle at 6:00 for vertical and curving lines, 3:00 (9:00) for horizontal lines (Wilton Enterprises, 2003a, 2004).

1. With tip lightly touching the surface, start to squeeze bag with a steady, even pressure.
2. Lift the tip off of the surface to allow icing string to drop.
3. Stop pressure and touch tip to surface to attach.
4. Pull away.

*Information from this section is taken from and used with permission from Wilton Enterprises, 2003a, 2004; Wilton Industries 2013.
WRITING

Squeeze steadily and move the tip along the surface in a smooth continuous motion. Move your entire arm without flexing your wrist as you write.

Star Decorating **Tip #18**

**STARS**
Hold bag straight up about ¼ inch above surface. Squeeze the bag to form a star. Stop pressure and pull tip straight up and away.

**STAR BORDER**
Pipe a row of stars all the same height and width.

**STAR FILL-IN (FOR LARGER AREAS)**
Start with a row of stars piped evenly and close together, adjusting the tip position slightly each time so the points of the stars interlock and cover the entire area without any gaps.

**CURVING LINE**
Hold bag at a 45° angle at 3:00 (9:00) with the tip lightly touching the surface. Using a wavelike motion, draw tip steadily along surface, and at the same time squeeze it evenly. Stop squeezing; lift tip away.
Steadily squeeze and draw the tip along the surface in an up and down motion. Using the same motion as you did for the curving line, shorten the distance from the peak of one wave to the peak of the next so there is no gap between them.

**THE SHELL**
Hold the bag at a 45° angle to the surface and in the 6:00 position so you can pull the bag toward you. The tip should be slightly above the surface. Squeeze hard, letting the icing fan out. Gradually relax the pressure as you lower the tip to the surface. Stop pressure and pull tip away without lifting it from the surface.

**SHELL BORDER**
Make several shells of the same size in a row. Start the second shell so the fanned end covers the tail of the previous shell. It is easiest to work toward you as you make the line.

**REVERSE SHELLS**
Use the same technique as the shell (above) but move the tip slightly to one side or the other while squeezing.

**ROSETTE**
Hold tip slightly above surface at a 90° angle. Squeeze and, without releasing pressure, move the tip in a tight circle. Lift tip away.
Leaf Decorating Tip #352

FLAT RUFFLE

Hold tip at a 45° angle at 3:00 (9:00) with the wide opening of tip horizontal and lightly touching the surface. Steadily squeeze and draw the tip along the surface in a back and forth motion.

STAND-UP RUFFLE/LEAVES

Holding bag at a 45° angle at 6:00, steadily squeeze and draw the tip along the surface in a back and forth motion. Stop motion and release pressure to end the ruffle. For variation, use more back and forth motions to make more layers to the ruffle or lift the tip in an upward motion after releasing pressure to give the ruffle height.

Practice Makes Perfect

ALLOW YOUTH TO PRACTICE USING DIFFERENT DECORATING TIPS

1. Help youth prepare and fill a pastry bag.
2. Help youth secure their practice sheet to the table with a small piece of tape and tape a piece of waxed paper over the practice sheet.
3. Assist youth as they practice using the tips.
4. Once practice sheet is completed, assist youth in scraping up icing using a spatula or butter knife and putting it back into holding container. Continue until all icing is gone from pastry bag and then refill pastry bag as desired.
5. Once the youth have mastered the practice sheet, assist them in changing to a new practice sheet. Encourage them to assist others in mastering the skills as well.
6. If desired, obtain other icing tips such as the grass tip (233), basket weave tip (47), drop flower tip (2D), etc., and experiment with the designs you can create with these tips.
7. Assist youth as they practice their new skills on a graham cracker, sugar cookie, or cupcake.
ASSIST YOUTH IN CLEANING UP
1. Remove tip and coupler from the bag.
2. Squeeze and scrape out any extra icing.
3. Turn the bag inside out and immediately wash the bag, the tip, and coupler in hot soapy water. Use a light cleaning brush, if necessary.
4. Use small brushes to get the icing out of the small ends of the tips, if necessary. Dry the tips, using a soft towel or place tips on a clean towel on the counter to air dry.
5. Throw away used wax paper and wipe off any icing that may be on the practice sheets or table.

Reflect
- What was the easiest/most challenging part of working with the tip and practice sheets today?
- What was the easiest/hardest tip you used? Why?
- What do you think would have happened (or did happen) if you had icing that was not the correct consistency (too thick, thin, dry, runny, etc.)?
- How could you fix the icing if it was too runny/thick?

Apply
- What other recipes can you think of that would not work right if they had too little or too much of an ingredient? How could it be fixed?
Belonging
Give words of encouragement and praise to the youth as they practice and begin to master their new cake decorating skills.

Mastery
By modeling how to properly create designs with their pastry bags, youth will be able to better learn and master cake decorating skills.

Independence
Providing opportunities for the youth to practice and create their own designs will help them gain confidence.

Generosity
Finding yourself begins with losing yourself in the service of others. Once youth master how to use a decorating tip or a particular technique, encourage them to help others in the group who may be struggling.

Citizenship
Having the youth assist each other by demonstrating to others once they master skills helps youth to build self-confidence and encourages group unity.

References
1. Gather all cake ingredients.

2. Preheat oven to the temperature specified in your recipe 10-15 minutes before putting the cake in the oven.

3. Prepare the pan. Generously grease inside of pan with solid vegetable shortening. Sprinkle about 2 tablespoons of flour inside the pan and shake so that flour covers all greased surfaces. Turn the pan upside down and tap lightly to remove excess flour. If any shiny spots remain, touch them up.

**TIP:** Never use butter, margarine or liquid vegetable oil—they may make your cake stick and possibly burn the surface.

4. Make cake batter. Follow the package instructions carefully, especially for beating times. Over beating breaks down cake structure and can cause the cake to shrink when cooling. Under beating produces a lumpy batter because the ingredients are not properly mixed.

5. Bake the cake. Pour cake batter in pan immediately after mixing, spread evenly with a spatula, and tap the pan gently several times on the countertop to remove air bubbles. Bake on the middle rack of a preheated oven for the time specified in the recipe. To test whether cake is done, insert a toothpick or cake tester near center and remove. If tip is clean, cake is done. If batter is visible, bake a little longer until toothpick or tester comes out clean. When done, remove cake from the oven and cool in the pan on a rack for 10 minutes. Run a thin knife between the cake and side of the pan.

**TIP:** Do NOT open the oven while the cake is cooking or it may fall in the middle!

*Information from this section is taken from and used with permission from Wilton Enterprises, 2003a.
1. Unmold the cake. Place a cooling rack against the cake and turn both cooling rack and pan over. Lift pan carefully; cool at least 1 hour. Brush off any loose crumbs before icing.

One of the hardest parts of baking cakes is getting them out of the pan. This is the moment when things can go terribly wrong, or the moment of relief as the cake easily slides out of the pan. Here are some tips to make your situation more like the latter. Tap the pan lightly on the countertop after you have removed it from the oven. This is done in order to release air pockets that form during the baking process. Run a thin knife around the edges of the pan. This can help release the cake from its pan. Removing the cake from its pan too early can result in breakage, and waiting too long to remove it can result in the cake sticking to the pan. Clearly, it is a delicate balance and it takes experience to determine how long you should wait.

In addition, cakes actually improve with a short stay in the freezer to tighten their crumbs and to help retain moisture once decorated. (Professional bakers do this.) A freshly baked and decorated cake, when cut, can sometimes turn into a large pile of crumbs from slices that don’t keep their shape or break in half. Freezing helps prevent this.

2. Level the surface for easier decorating. One of the easiest ways to make sure you have a cake you can work with is to level and trim your baked cake. As always, wait until the cake has cooled completely before you cut. Take a serrated knife and trim off the crust and dry edges. You can also try using a cake leveler (available at craft stores), if desired. If you like, you can also torte the cake. Torting simply involves slicing varying layers into your cake and adding icing or a filling inside before stacking the cake together.

TIP: Chilling the cake in the freezer or refrigerator before leveling may help to reduce the amount of crumbs often created from this step, which will make it easier to ice.

DECORATE THE CAKE. HAVE YOUTH ASSIST WHERE POSSIBLE.

1. Apply the first layer of icing. Icing the cake to a smooth finish is one of the most important parts of cake decorating. For many it can be the hardest part of cake decorating. The decorations will not look their best against an unevenly iced cake. Place a large dollop in the center of the top layer and start smoothing it toward the edges. Be sure to use enough to cover the entire top and extra to push down over the edges onto the sides. Slowly spread the icing down the side using an icing spatula. Do this along the edges until the sides are completely covered making sure to use ample icing so you don’t scrape the sides and pick up little crumbs. After the sides are covered and smooth, smooth the top of the cake.
**TIP:** You may want to thinly ice the cake to catch all the crumbs, let it set and then frost a second time to get a very smooth finish.

2. Decorate the cake, as desired.
3. Sample the cake.

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**Storing Leftover Cake**

**DISCUSS IMPORTANCE OF PROPERLY STORING LEFTOVER CAKE**

Leftovers need to be stored carefully so that bacteria do not grow and cause illness. Generally, for storage, baked goods should be tightly wrapped with plastic wrap and/or aluminum foil. If any part of it is exposed, it will become stale very quickly from the loss of moisture. Some iced cakes can be stored in a cool place in the kitchen but some are better stored in the refrigerator (those with a filling). When in doubt, refrigerate.

When serving perishable food, bacteria that cause food-borne illness can contaminate it if left out at room temperature. Scientists have found that after 2 hours at room temperature, bacteria can multiply on foods to high enough levels to cause illness. Avoid perishable foods that are not kept either cold or hot.

**TIP:** Uniced cakes can be frozen for up to 3 months wrapped in heavy foil, but be sure to thaw completely before decorating.

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**Clean Up**

**ASSIST YOUTH IN CLEANING UP**

1. Remove tip and coupler from the bag.
2. Squeeze and scrape out any extra icing.
3. Turn the bag inside out and immediately wash the bag, the tip, and coupler in hot soapy water. Use a light cleaning brush, if necessary.
4. Use small brushes to get the icing out of the small ends of the tips, if necessary. Dry the tips, using a soft towel or place tips on a clean towel on the counter to air dry.
5. Throw away used wax paper and wipe off any icing that may be on the table.
Reflect
- What did you learn about preparing and baking a cake that was new to you?
- What would happen if you did not prepare the cake according to the instructions on the box? Have you ever experienced this?

Apply
- What other products have instructions that need to be followed in order for the product to turn out right? How are instructions for products created?
- What kinds of cakes would definitely need to be refrigerated for safety?
- What other kinds of foods need to be refrigerated? Why?

Belonging
Give words of encouragement and praise to the youth as they help in making and preparing the cake.

Mastery
By modeling how to properly bake and prepare a cake for decorating, youth will be able to better learn baking skills.

Independence
Providing opportunities for the youth to practice their new skills will help them gain confidence.

Science
Science of making a cake
Food safety—bacteria

References
EXPLORE COST OF MAKING A CAKE AT HOME VS. BUYING ONE AT THE STORE

1. Obtain and display pictures of cakes (and the retail cost) from a store or from magazines, etc., that could be made with the skills learned in class.

2. Price the cost of cake mixes and ingredients for icing that would be needed to make a similar cake at home.

3. Calculate cost per serving of cake, if desired.

4. Discuss pros and cons of making your own cakes. Include factors such as:
   - Cost per serving (allow youth to calculate, if desired)
   - Ingredient information (could substitute ingredients to make lower in fat, avoid trans fat, or find alternate recipes for those with food allergies)
   - Freshness/quality of ingredients
   - Individuality/creativity
   - Adapting cakes for individual preferences (cannot find what they want in the store)
   - Time involved
   - More meaningful for cake recipient

Supplies

- Pictures/cost of cakes and supplies
- Cardstock paper or Styrofoam cut to the size of common cake pans
- Crayons or markers
- Scratch paper
- Pens/pencils
- Reusable pastry bags
- Icing tips
- Couplers
- Icing (at least one batch, see Club Meeting 1)
- Practice sheets (laminated, if desired)
- Wax paper
- Tape
- Table coverings, optional
- Aprons, optional
- Cleaning brushes for tips
- Spatulas or butter knives

Costs of a Cake
DESIGN AND PLAN FOR CREATING A CAKE DESIGN

1. Provide cardstock or Styrofoam pieces for youth in the sizes of common cake pans or cupcake pans (9 x 13, 8-inch rounds, cupcake circles, etc.) Have youth work alone or in groups to design their own creative cakes using items that are common cake sizes.

TIP: Encourage youth to find ways to arrange cakes with minimal cutting, as real cakes will crumble and will be difficult to decorate when cut too many times.

2. Provide crayons or markers and scratch paper for youth to design the type of decorations that will be on the cake and what tips they will use.

3. Calculate how much icing will be needed to ice their cake design (including top and bottom border) using the chart below. Please note, icing amounts are approximate and will vary depending on consistency of icing and desired thickness of icing (Wilton, 2013):

<table>
<thead>
<tr>
<th>Cake Size (2-layer)</th>
<th>Top and Sides</th>
<th>Number of Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>8” round</td>
<td>4 cups</td>
<td>24</td>
</tr>
<tr>
<td>9” round</td>
<td>4 1/2 cups</td>
<td>32</td>
</tr>
<tr>
<td>8” square</td>
<td>4 1/2 cups</td>
<td>32</td>
</tr>
<tr>
<td>13” x 9” rectangle</td>
<td>6 cups</td>
<td>50</td>
</tr>
</tbody>
</table>

MAKE THE PLAN A REALITY

Have youth practice their design on waxed paper (over the piece of cardstock cut to the size of the cake), on a Styrofoam form cut to the shape of their cake, or on a cupcake, cookie or other appropriate item.

ASSIST YOUTH IN CLEANING UP

1. Remove tip and coupler from the bag.
2. Squeeze and scrape out any extra icing.
3. Turn the bag inside out and immediately wash the bag, the tip, and coupler in hot soapy water. Use a light cleaning brush, if necessary.
4. Use small brushes to get the icing out of the small ends of the tips, if necessary. Dry the tips, using a soft towel or place tips on a clean towel on the counter to air dry.
5. Throw away used wax paper and wipe off any icing that may be on the practice sheets or table.
Reflect

- What did you discover when comparing homemade and store bought cakes? How do you think this would compare to other types of food products that you often buy but could make at home?
- What was most challenging about creating your own cake designs? How did you overcome those challenges?
- How can practicing what you will put on your final product be helpful? What would happen if you didn’t practice?

Apply

- What other things can you think of that require practice before you do them so they turn out well?

Belonging

Give words of encouragement and praise to the youth as they help in making and preparing the cake.

Independence

Providing opportunities for the youth to practice and create their own designs will help them gain confidence.

Science

Store bought vs. made by self.
Math skills to calculate how much icing is needed.

References

DISCUSS HOW TO PROPERLY TRANSPORT A CAKE ONCE IT IS DECORATED AND TIPS FOR DISPLAYING A CAKE
(Wilton Industries, 2013)

Transporting a cake and having it look its best when it arrives can be challenging. If you are going to be transporting a cake, be sure to place a stiff surface under the cake before decorating. It should be slightly larger than the cake so you can pick up and carry the cake easily. You can use a cake board (white cardboard) for this or you can cut cardboard from a box and cover it with aluminum foil.

Once it is decorated, it is a challenge to transport the cake without damaging the icing. Many stores that sell cake decorating supplies (or bakeries) carry assorted size boxes (for round or square cakes) that can be used to transport cakes. One benefit of using a box is that the lid is usually above the cake far enough that there is less worry about smashing the icing. If using a box, it may be helpful to cut a cake board or cardboard the size of the box (before you put the cake on it) so it won’t slide around in the box. If you choose to use a box, be sure to get a size that is slightly larger than the cake itself in order to get the cake in and out of the box.

Some people choose to put their cake on a plate instead of cardboard. If you do this, be sure to have someone hold the plate carefully as you are transporting it, being careful not to damage the icing. If you choose to cover the cake, it may be best to put a few toothpicks in the cake before putting on any plastic wrap so that the icing won’t be as likely to get damaged by the covering. This is also true if you choose to leave the cake in the pan.

Supplies
- Cake, cookies or other appropriate items to decorate
- Reusable pastry bags
- Icing tips
- Couplers
- Cleaning brushes for tips
- Spatula or butter knives
- Icing (at least on batch for one or two youth, see Club Meeting 1)
- Practice sheets (laminated, if desired)
- Wax paper
- Tape
- Table coverings, if desired
- Aprons, if desired

Transporting and Displaying a Cake
It is also important to remember that most icings may melt in the heat. Some homemade icings can even be ruined in the heat because of the ingredients used. If you are traveling a long distance or if the cake will be exposed to heat once you arrive at your destination, you may want to take this into consideration as you are choosing the type of icing to use. Some kinds of icing, such as royal icing, don’t have any fat in them so they will not melt in the heat. Keep in mind, however, that while some icings may hold up better in the heat, they do have drawbacks, such as a less desirable texture or taste. Is it best to take all factors into consideration and then choose what is most important for the occasion. For instance, if you were making the cake to display, such as for the county or state fair, it wouldn’t matter what the icing tasted like as long as it looked its best. On the other hand, if you were making a cake for a birthday party, it may be more important how the icing tasted even if it ended up melting a little in the heat.

Being a Cake Decorator

DISCUSS CAKE DECORATING AS A CAREER

1. Discuss some of the skills to learn in school that would help make a successful cake decorator.

2. Discuss how much money a cake decorator can make as a career. Information about current wages for local cake decorators may be obtained from state government websites, such as www.jobs.utah.gov under the economic information.

3. Note: Most cake decorators employed by stores require little training and minimal education, but they are usually not full-time positions and have relatively low wages. Many cake decorators have their own small businesses out of their homes and, therefore, need business management skills to know how to promote their business and manage their money.

4. Optional: Have a local cake decorator visit with the group about their experiences. Many craft stores have cake decorators who teach classes and may be willing to speak about their experiences. Most local grocery stores also employ cake decorators in their bakeries.

Decorate!

Using the skills learned in the previous activities, decorate a cake, cupcake, cookie or other appropriate item. Encourage youth to use the designs created in Activity #5. Provide cookies or cupcakes that could be decorated and given to an appropriate group as a service project.
ASSIST YOUTH IN CLEANING UP

1. Remove tip and coupler from the bag.
2. Squeeze and scrape out any extra icing.
3. Turn the bag inside out and immediately wash the bag, the tip, and coupler in hot soapy water. Use a light cleaning brush, if necessary.
4. Use small brushes to get the icing out of the small ends of the tips, if necessary. Dry the tips, using a soft towel or place tips on a clean towel on the counter to air dry.
5. Throw away used wax paper and wipe off any icing that may be on the practice sheets or table.

Reflect

• What would happen if you did not take precautions to transport cakes carefully? Has that ever happened to you? What have you learned you could do differently so this doesn’t happen in the future?
• What other items do you need to transport carefully? What precautions do you need to take to transport them?
• Why do we give service? How does giving service help others? How does it help us? What are other examples of service you have given?

Apply

• How can practicing what we will put on our final product be helpful? What would happen if we didn’t practice?
• What other things can you think of that require practice before you do them so they turn out well?
Belonging
Give words of encouragement and praise to the youth as they help in making and preparing the cake.

Mastery
By modeling how to properly create designs with their pastry bags, youth will be able to better learn and master cake decorating skills.

Independence
Providing opportunities for the youth to practice and create their own designs will help them gain confidence.

Generosity
Encourage youth to create a product to give to someone in the community, either individually or as a group.

Healthy Lifestyles
Eat in moderation.

Citizenship
Entrepreneur skills

References
Practice Sheet

Masters*

Use the icing tip listed in the left-hand corner of sheet.

References


*Information from this section is taken from and used with permission from Wilton Enterprises 2003a, 2003b, 2003c.
Round Tip 3

Embroidery & Lace
Lily of Valley

Tip 1 Stems and Bulbs

Tip 1L Pulled Dots

Tip 1 Sotas

Stringwork

Tip 3

Triple Drop

Overlapping Double Drop
Congratulations on completing your Discover 4-H club meetings! Continue with additional curriculum in your current project area, or discover other 4-H project areas. Check out the following links for additional 4-H curriculum.

1. http://utah4h.org/htm/discover4hclubs
2. http://www.4-h.org/resource-library/curriculum/

Become a 4-H Member or Volunteer

To register your Utah club or individuals in your club visit:

http://www.utah-4.org/htm/staff-resources/4-h-online-support
http://utah4h.org/htm/about-4-h/newto4h/

Non-Utah residents please contact your local 4-H office:

http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/

Stay Connected

Visit Your County Extension Office

Stay connected with 4-H activities and news through your county Extension office. Ask about volunteer opportunities and don’t forget to register for your county newsletter. Find contact information for counties in Utah here:

http://extension.usu.edu/htm/counties

Enjoy the Fair!

Enter your project or create a new project for the county fair. Learn about your county fair and fair judging here:

http://utah4h.org/htm/events-registration/county-fairs
Participate in Local or State 4-H Activities, Programs, Contests or Camps

For Utah state events and programs visit:
  - http://utah4h.org/htm/events-registration
  - http://www.utah4h.org/htm/featured-programs

For local Utah 4-H events and programs, visit your county Extension office.
  - http://extension.usu.edu/htm/counties

Non-Utah residents, please contact your local 4-H office.
  - http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/

Discover Service

Become a 4-H Volunteer!

- http://www.youtube.com/watch?v=UBemO5VSyK0
- http://www.youtube.com/watch?v=U8n4o9gHvAA

To become a 4-H volunteer in Utah, visit us at:
  - http://utah4h.org/htm/about-4-h/newto4h/

Serve Together as a 4-H Club or as an Individual 4-H Member

Use your skills, passions, and 4-H to better your community and world. You are needed! Look for opportunities to help in your area or participate in service programs that reach places throughout the world (religious groups, Red Cross, etc.).

Hold a Club Service Project

USU Collegiate 4-H Club hosted “The Gift of Giving” as a club activity. Club members assembled Christmas stockings filled with needed items for CAPSA (Community Abuse Prevention Services Agency).
  - http://tinyurl.com/lu5n2nc
Give Us Your Feedback

Help us improve Discover 4-H curriculum. We would love feedback or suggestions on this guide; please go to the following link to take a short survey:

http://tinyurl.com/lb9tnad

Donate 4-H Projects

Look for hospitals, nursing homes, or other nonprofit organizations that will benefit from 4-H projects. Such projects include making quilts for CAPSA or Primary Children’s Hospital, or making beanies for newborns. During Utah 4-H State Contests, 40 “smile bags” were sewn and donated to Operation Smile.

Partner with Local Businesses

92,000 pounds of processed lamb, beef, and pork were donated to the Utah Food Bank in 2013 by multiple companies.

http://tinyurl.com/pu7lxyw

Donate Money

Clubs or individuals can donate money gained from a 4-H project to a worthy cause. A nine-year-old 4-H member from Davis County donated her project money to help a three-year-old battle cancer.

http://tinyurl.com/mqtfwxo