
4-H Heritage Arts: Macrame

MJ0709

Member's Pilot Manual

**STATE 4-H OFFICE
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ACKNOWLEDGMENTS

The Colorado State University 4-H heritage arts committee prepared the 4-H heritage arts series. The committee included Linda Carlson, curator and lecturer, historic costume and textiles and Kathleen Williams, Cooperative Extension specialist and lecturer, design, merchandising and consumer sciences department, College of Applied Human Sciences; Carol Schneider, Colorado Cooperative Extension 4-H agent, Weld County; and Sue Cummings Colorado State Cooperative Extension specialist, 4-H youth development.

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Introduction

Welcome to the 4-H heritage arts project. Without individuals such as yourself, interested in heritage crafts, many historic arts and crafts would be lost with the passing of generations.

You may through the heritage arts project, choose from a variety of fiber, fabric and yarn related arts and crafts. The projects and activities you experience depend upon your enthusiasm and the availability of resources within your home and community.

Heritage arts are the practical skills, passed down from generation to generation that were developed to provide basic family needs, such as clothing, home furnishings, or decorations. It also is defined as a traditional craft with methods that have been maintained throughout history and passed on to others, often by observation and example.

Classes on traditional crafts are available in many communities, taught by skilled artisans. The techniques taught often incorporate new techniques and materials with the old, traditional methods to enhance the craft.



P roject Objectives

The Heritage Arts project is designed to help you:

- learn about a variety of historic arts and crafts.
- create a craft that connects you to the past.
- learn about historic influences on arts and crafts.
- have fun learning.
- develop skills that might lead to a home-based business.

P roject Expectations

We encourage you to learn about and try a variety of different historic crafts. Think of fun places in your community where you can learn more. Ask your parents or leader about interesting, creative artisans who are willing to share their skills with you. Take a field trip to local museums that feature historic fabric and yarn displays. Go to the library and look up interesting facts about a craft that is of particular interest to you. Evaluate or judge fabric and yarn crafts and do a demonstration to share your skills with others. The more activities you do, the more you learn.

To complete your project, respond to all questions in the Heritage Arts record. Check with the Colorado State Cooperative Extension office in your county for fair requirements *if* you want to exhibit your project.

Textile Crafts

What is a textile craft? It is defined as any method of creating a unique design with fiber, fabric or yarn. Patchwork and applique quilting are examples of textile crafts that use fabric as the main design ingredient. Macrame, needlepoint, embroidery, crochet and weaving are textile crafts that use yarns. All textile crafts have one thing in common—they use fibers, fabric or yarn to create a design.

Some textile crafts focus on making fabric, such as weaving, crochet or needlepoint. Other textile crafts change an already existing fabric into something different. Quilting and embroidery create a design that changes the appearance of fabric.

Creating a Design

Once you decide on a heritage craft, it's time to think about the design. Many books show how to create a pleasing design. There also are many printed patterns that can be purchased. There's no better way to enjoy and understand design than to try it. Designing, like most activities, can come naturally once you understand what you are doing.

A design is really a plan - a plan for using all materials so they look good together. To begin planning the design, examine your materials - yarns or fabrics or some other material - in a special way. For example, regardless of what materials are used, these basic components of design are:

- line
- shape
- space
- texture
- color

These components are called the *elements of design*. They are important to your plan because they are the visible details of a design. Without a design plan, these elements may seem haphazard or clash. Let's take a closer look at each of these elements of design.

- *Line*

Line is an element that's found everywhere around us. In a garment, lines are created by a seamline, a hem, a dart, a row of trim, a plaid or stripe. A row of embroidery stitches creates a line, as does a row of crochet stitches or the pattern in a quilt square. Some lines are straight and angular, others are curved. Some are thick and sturdy, others fine and delicate. The kind of lines used in a design will affect the character of that design.

- *Shape*

When lines are connected and overlapped, they create shapes: squares, circles, triangles, any shape imaginable. The outline of an applique is a shape, the pieces in a patchwork quilt are shapes, the outline of a garment is a shape, and so on. Just as lines create feelings, so can shapes.

- *Space*
When we talk of space, we mean the actual space an object or a design occupies. When we design, we work within a specific space; so not only must the design itself be well thought, out but so must the space around it. That space might be an individual quilt square or entire quilt.
- *Texture*
Texture is the surface characteristic of an object; it may be smooth, fuzzy, soft, pebbly, scratchy, or one of many other textures. Sometimes we don't have to touch an object to know its texture - we can *see* the texture. In planning a design, texture adds character or feeling, just as lines and shapes do.
- *Color*
When we think of colors, we usually think of color names (or hues) such as red, green, yellow or blue. We can create different feelings in a design by the colors we use. For instance, a design in yellow and green will give you a different feeling from the same design in purple and blue.

But, there are other ways we use colors to give a design the feeling we want. The way we use color *values* also can affect a design. Value is the lightness or darkness of a hue. The same hue can have lots of different values for example, think about the different kinds of blue - baby blue, light blue, sky blue, peacock blue, navy blue and royal blue. Visualize a design in all light colors, such as lime green, pink, light blue and lemon yellow. Now visualize that same design in dark green, navy blue, dark red and gold. Does it seem different? How about the same design in lime green and navy blue? Does it seem different in style?

The *intensity* of the hues we use in a design also affects the feeling we get from it. Intensity refers to the brightness or dullness of a color. Imagine a design in all bright colors - usually a design made of bright colors is more than our eyes can take. So, use bright colors sparingly.

Evaluate Your Plan — Pattern to Follow

Take a look at the fibers, yarns, fabrics or threads you plan to work with. What kind of feeling do you want to create with your design? Do the materials create that feeling in their textures and colors? Can you create the kinds of lines and shapes you want with your materials? Are the materials suitable for the space in which you've chosen to create? If you can say yes to these questions, you're on your way to a well-designed piece.

But it doesn't stop there. Because even with all the right materials together, designers still need some guidelines on *how* to use them together. You can think of these guidelines as a recipe for deciding just how much of each ingredient (colors, textures, lines, and other elements) to use and where to add them. These guidelines are called the principles of design.

Principles of Design

- *Proportion*

Proportion is the relationship of all the parts of a design to each other and to the whole garment or article. Each part needs to be in proportion to the rest of the design. No part should overpower the others. If a garment does not have proportion:

- one part of the design might be too big for the rest of the design,
- the design may be too big or too small to look good on the garment,
- there may be too much bright, shiny color that overpowers the other colors,
- the design is too overpowering for the person wearing it or the decor in which it will be used.

- *Balance*

Balance is a feeling of steadiness, of everything in the design looking like it belongs. Balance can be formal when each side of the center is identical, or informal when the sides are different, but weigh the same.

- *Emphasis*

Emphasis is the creation of a center of interest. Without the center of interest, a design may seem cluttered and busy, or boring and uninteresting. If a design is not well-planned and is missing emphasis, it may be cluttered with too many colors, different textures, different lines, shapes or sizes. Or, there may not be sufficient contrast to attract attention. The center of interest doesn't have to be centered in the design.

- *Rhythm*

When we look at a design, the eye follows a certain route around the design. It notices differences in lines, shapes, textures, colors and spaces. The route the eye follows is known as rhythm. In a well-planned design, the eye is led from one to another to the point of emphasis. That rhythm is created in a design by repeating something throughout the design - color, texture, shape or size. If an item misses rhythm, it may have too many unrelated colors, textures, shapes, lines or sizes. Or, the design may be placed so that it is spotty or scattered and doesn't seem to fit together.

- *Unity*

When we say that a design has unity, we mean that it is complete. Unity means all the materials together in a pleasing combination. If unity is missing, the colors, textures, lines, shapes and spaces are not compatible, or there may not be a central theme.

Inspiration Sources

Now that you have learned something about a well-planned design, it's time to begin thinking about developing your *own* designs. How do you start?

Actually, there are several ways to begin. One of them is to become aware of the design of the objects around us. Take a good look; there are examples everywhere. Look at the grain of the wood on a table top. What kind of lines or shapes are created? How does the rhythm in the grain move your eye over the design? Can you create a similar design - perhaps with weaving or needlepoint or with embroidery?

Look outside at the patches of grass, sunsets and clouds for shapes and colors, or the cracks in sidewalks, the frost on windows, the bark on trees.

Everywhere you look, there are examples of colors and textures, shapes and lines. Design examples aren't limited to nature. Look at designs in things around the house like baskets or pictures. Perhaps there's a design on pottery that you'd like to try in embroidery, or the shape of an old bottle gives you an idea for an applique. You can find ideas in magazines, wallpaper and comic books.

Doodle on paper to develop and finalize a design. Or, try arranging yarns or scraps of fabrics or cut shapes out of construction paper. It does not matter how, but it is important to plan a design first.

The designer whose work shows fine quality, adapts and stylizes a design to suit the materials used. A designer does not attempt to imitate real objects, such as flowers using thread. Instead, if a flower idea is chosen as a theme for the design, the designer alters it to suit the shape of the article, its purpose and the limitations of materials and tools.

Resources

There are lots of good sources to help you create textile crafts. Your Colorado State Cooperative Extension agent can help you locate brochures, fliers and slides available on specific textile crafts.

Your talents are an excellent resource for the club. Share your knowledge and special interests to help others. Bring tools and let everyone experiment. Bring in others from the community to share their craft knowledge. A local craft or fabric store may work with you or help you contact someone with an interest in a specific textile craft.

Libraries can be an excellent source of information, especially if you want to understand why and how heritage crafts began by reading historical publications. Other sources of information are the Internet, craft magazines, pattern books and craft organizations and councils. Check with your county Cooperative Extension office, library or craft store for contact information.

Sharing What You Have Learned

Now that you have learned many new things about a heritage craft, why not share? This helps you learn more about the topic and become more comfortable teaching others. Making an exhibit to show at the county fair is another way to share with others. You also may share your knowledge by giving a demonstration and show how to do something.

Demonstration

Select a topic that relates to something you learned about your project and plan a demonstration. Some ideas include:

- Use of design principles and elements
 - Selecting fabric or yarn for a project
 - Sharing the history of a craft
 - Purchasing supplies
 - Steps to complete a craft item
- Can you think of others?

Evaluation or Judging

Learn the standards of quality for your craft. Standards are printed in the 4-H craft project guidelines, or may be found in craft publications or fair judge's guides available through the local Colorado State Cooperative Extension office. Evaluate your creations against the standard of quality. Evaluating your project yourself will enable you to see how well you applied the skills you learned. How well did your item compare to the standards? What did you do well? Where can you improve? Answers to these questions will help you do a better job next time. The exhibit item will be compared to these standards at fair or craft competitions.

Community Service

You can learn a great deal about your community when you get involved to help others. You can:

- Make lap robes for elderly people or AIDS victims
 - Make quilts for a homeless shelter
 - Work on a fund raiser for a local cause
 - Go to a local nursing home and visit residents
 - Help an elderly or lonely neighbor with household chores
 - Help younger members with their projects
- Can you think of others?

Fair Exhibit

Remember to record all of your activities during this year. It's easier to write them down as soon as you do them rather than wait until the end of the year and try to remember them. Be sure to include the things you made, your experiences, special things you learned and how you felt about them in your story.

You must complete the History Page of the record. Plan ahead to gather enough historic information. This record book gives several options as to what you can learn about and share. Some suggestions of topics you can find include:

- the craft itself,
- what tools are used to make it,
- new techniques that have been developed,
- special uses of the finished items,
- influences of wars or trade,
- interesting artisans within the community,

The key is provide information directly related to the craft you are exhibiting.

Two photos of your finished product or products are optional. However, photos of Heritage Arts exhibits enable judges to see how well the items fit your intended use.

If you used a pattern, please securely attach a clear copy to your record, to help judges evaluate the project.

Projects will be divided into three age categories for exhibit based on the age of the exhibitor as of December 31 of the year prior to the show. Age categories are:

- Junior - 8 to 10 years old*
- Intermediate - 11 to 13 years old*
- Senior - 14 to 18 years old*

All exhibit items are to be fiber-, fabric- or yarn-based arts and crafts. Crafts exhibited must be those traditional crafts which have been passed down through generations. For a complete listing of Fair Exhibit Requirements, see pages 2-3 of your *Heritage Arts Record Book*, RJ0700.

Introduction

Through macrame you can express your creativity in a constructive way while developing a skill that is relaxing and fun. You also will have the opportunity to learn more about the history of macrame, when and where it originated, how it has been passed down through the ages and more.

You may want to experiment with different yarns and decorations to make unusual articles for yourself, others and your home. Visit with others who do macrame in your community to discover how they learned to macrame, what projects they have made and any suggestions they may have for a beginner. Locate resources in your local Colorado State Cooperative Extension office, the Internet, library and yarn shops to get new ideas. Most important, have fun!

P Project Evaluation

Members are encouraged to develop new skills each year in the macrame project. Check the following list to see what skills would be best for you.

Junior — 8 to 10 years old

Suggested techniques for this age group: lark's head knot, reverse lark's head knot, double half hitches, horizontal, vertical and diagonal half hitch, square knot sinnet, half cast sinnet, square knot button, alternating square knot, and/or gathering knot; measuring and bundling long cords, and preventing ends from raveling.

Intermediate — 11 to 13 years old

Suggested techniques are: Chinese crown knot, josephine knot, turk's head knot, monkey's fist, berry knot, coil knot, wrapping a ring, scorpion knot; adding additional cords and reverse typing cords.

Senior — 14 to 18 years old

Suggested techniques: variety of basic and ornamental knots from the lists above.

Macrame exhibits will be evaluated on:

Overall appearance

- Clean
- Neat

Creative Contribution

Cord Choice — right for project

Workmanship

- Correct knots used for project
- Tightness of knots (appropriate to use)
- Finish (including ends)

History of Macrame

Macrame, the art of ornamental knotting, originated as a decorative way of securing the ends of a piece of woven fabric, creating a lacy edge. Later macrame was worked separately and attached to both household items and garments as a trim. By the Victorian era, entire items were made of macrame.

The word macrame is of Arabic origin, from a word meaning fringe.

Many cultures have a history of knot-tying. The Incas in Peru had no written language but developed a method of knot-tying called quipu to send messages and to record history. Knotted items in Egyptian tombs have been discovered and dated to be 3,500 years old. British and American sailors knotted to fill long hours at sea and then used the belts, hammocks and bottle covers they had made for barter when they went ashore.

Macrame Basics

Materials and Tools

Basic tools and materials are needed for macrame. They are generally available from variety stores, craft shops, supermarkets or hardware stores.

You will need:

- Cord
- Scissors
- T-pins or U-pins
- Rubber bands or bobbins
- A working surface such as a knotting board
- Measuring tape or ruler
- Household glue

Cord

Fiber content

Cords for macrame can be classified as natural and man-made.

- **Natural cords** are made from plants such as cotton, flax, hemp, jute, sisal, raffia, manila, linen, wool and silk.
- **Man-made cords** include the following synthetic materials: rayon, nylon, plastic, polypropylene, polyethylene, fiber-wrapped wire, etc.

Cord construction

- **Cords that are twisted** from two or more pieces of fiber are said to be a specific ply. A cord made by twisting three lengths of fiber together is three-ply. A five-ply cord will have five pieces of fiber twisted together. The number of plies to a cord has no bearing on its size.
- **Some cords are braided.** Polypropylene is often found as a solid braid or with a hollow center. Venetian blind cord is an example of braided cord.

Diameter and weight

Cords are measured according to diameter and weight. *Diameters* vary from three-thirty seconds of an inch and smaller to three-fourths inch and larger. Cords may be sold by the foot, yard or pound, depending upon the supplier.

Proper use

Take care to select the right cord for each item to be made.

- Cords that are very slippery will not hold knots.
- Items to be used outdoors should be made of materials that can withstand the elements.
- If the item is to be washed, everything used on it also should be washable.
- Weight bearing items such as pot slings, plant hangers, hammocks, etc., should use cord that will not stretch out of shape when weight is added.

Precautions

Some cords, such as baling twine, can have a rough texture and be hard on bare hands. When working with such material, gloves should be worn.

Persons with allergies sometimes have been sensitive to jute cord fibers, dyes or chemical treatments. Eye irritations may be caused by some cords as they fray. Working outside sometimes helps. If allergy symptoms occur, an alternate cord type should be used. If irritations continue, consult a physician.

Scissors

Utility shears or heavy-duty scissors should be used to cut heavy cord. If plied cords are very difficult to cut, they can be untwisted at the cutting point, and one ply cut at a time.

Pins

T-pins are used to hold cords in place on working surfaces. They are heavier and larger than regular pins or dress pins and do not bend easily.

U-pins are good for holding heavy cords and bars or sticks that hold the working cords in place. They are available where upholstery materials are sold.

Rubber bands or bobbins

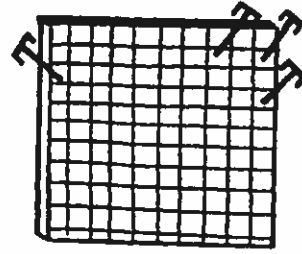
Rubber bands are used to bundle long lengths of cords for easier handling. A thick, pure rubber band will withstand repeated use.



Bobbins hold long lengths of cord. They can be made from a heavy weight cardboard or from wood. Commercial bobbins are available at weaving supply stores in plastic and wood.

Knotting board

A knotting board has to be thick enough to support work but porous enough to have pins inserted in it. Some suitable boards are insulating material, fiberboard, cork board or a thick slab of foam rubber. Cover the board with paper marked off in 1-inch squares to help keep the cords and knots even. Knotting boards also are sold commercially at craft supply stores.



Measuring tape or ruler

Use a measuring tape or ruler to measure the specific lengths of cord needed and the length or size of the item as it is being tied.

Glue

Glue is used to prevent fraying of the cord ends and to secure various knots in completed items. White glue that dries clear and pliable is recommended.

General Macrame Techniques

Some techniques are used whether you are making a very simple or difficult item.

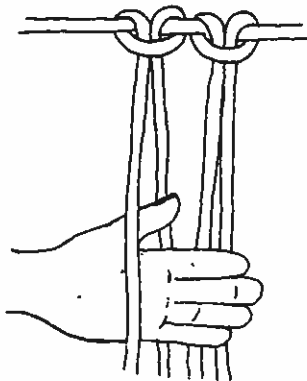
Measuring cords

- Decide what the length of the finished product will be.
- Multiply this length by eight. (NOTE: for belts or items where the working cords are not folded in half; multiply the desired length by four)
- Cut the required number of cords this length.

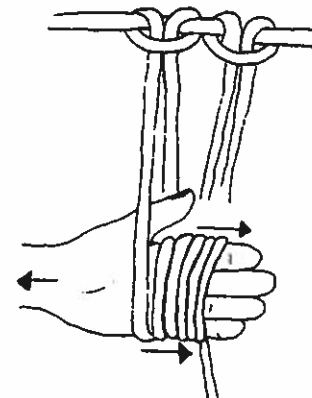
Bundling long cords

Easy-pull bundle

- Hold cord about twelve inches down from top, with the cord laying flat across the palm of your hand.
- Wrap the length of the cord around your hand until you reach the end of the cord.

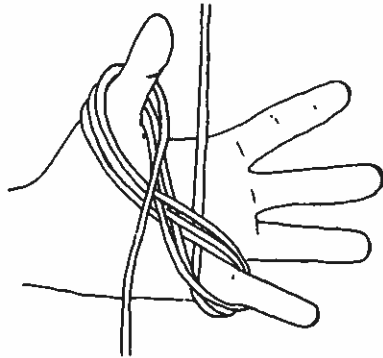


- Slide the bundle off of your hand and rubber band it in the middle.

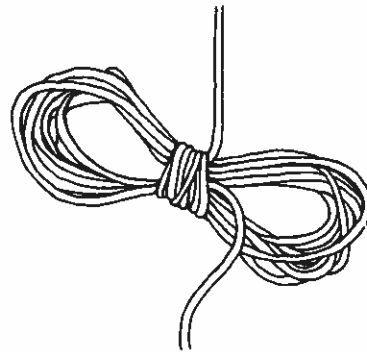


Butterflies

- Wrap a cord around your thumb and little finger in a figure-eight pattern.



- Remove the butterfly from your fingers and wrap it in the middle with a rubber band.



Bobbins

- Wrap bobbins from the end of each cord up toward the point of attachment.

Finishing ends

Ends of cords may be treated when you begin the project to prevent them from raveling or fraying. You also may treat the ends when you have completed your project. Ends may be treated by dipping them into lacquer, glue, varnish or nail polish.

A

bbreviations

Abbreviations are used in patterns so that individual knot names do not need to be repeated. Here are some abbreviations:

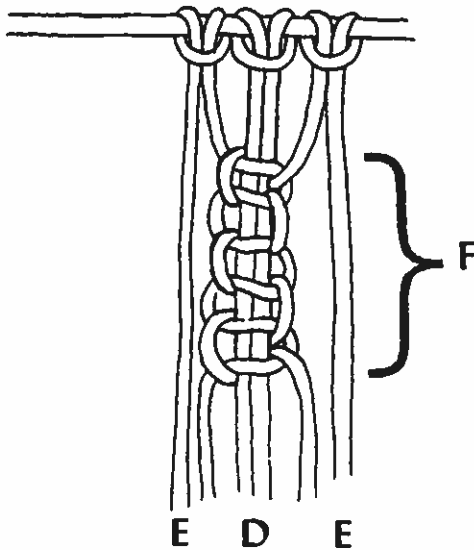
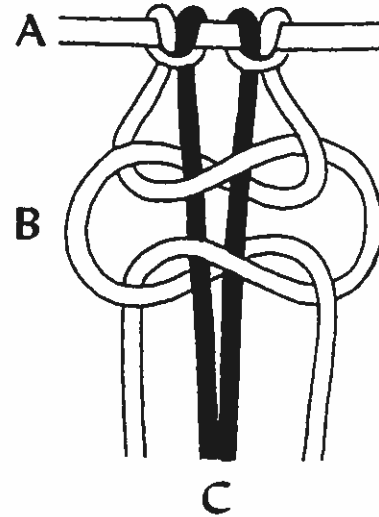
ask alternating square knot
ddhh diagonal double half hitch
dhh double half hitch
hdhh horizontal double half hitch
hk half knot
hc holding cord

jk Josephine knot
lh lark's head knot
ok overhand knot
rlh reverse lark's head knot
sk square knot
vdhh vertical double half hitch

Terms

Terms used relate to what the function of the cord being worked.

- (A) *Mounting cord.* Support on which the other cords are tied. May not always be a cord. It may also be a ring, dowel or a buckle.
- (B) *Knotting cord.* Cords that are actually tied into a given knot.
- (C) *Anchor cord.* Cords that run through a knot that are not tied.



- (D) *Holding cord or knot-bearing cord.* A cord on which other cords are tied.
- (E) *Floating cords.* Any cord within a design that are not knotted.
- (F) *Sennit.* A chain made up of a series of one kind of knot.



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.