



Macrame

Knots and Projects



Macrame is a creative art that can inspire nearly anyone who enjoys doing handwork.

Macrame is done by making patterns of knots with materials such as string, twine or cord.

The combination of colored cords and the added beads, rings and attachments is what makes macrame an art.

Reviewed by

Sharon Query

4-H Youth Development Specialist
NDSU Extension Service

NDSU EXTENSION
SERVICE

April 2015

Objectives

- Learn to tie basic macrame knots
- Create macrame works of art

Suggested Project Requirements

These are the minimum suggested requirements for beginning, intermediate and advanced levels of this project. Use the 4-H Project Plan (PA095) to record each activity as it is completed.

Beginner

(two years or less in project)

1. Visit a resource person or local craft shop to obtain supplies needed for a basic macrame project. You also can obtain supplies and project ideas through the Internet and by mail.
2. Learn to tie four basic macrame knots (lark's head, square, half-hitch and half-knot).
3. Make three simple macrame articles, such as those suggested below. Two projects should be made from instructions given in this project publication.
 - Mouse or small animal
(sample pattern included)
 - Necklace (sample pattern included)
 - Belt
(sample pattern included)
 - Bracelet
 - Simple plant hanger using two to three knots
(sample pattern included)
 - Wall hanging
 - Place mat
4. Prepare and give at least one demonstration on something you have learned in the project.

Intermediate and Advanced

(intermediate, three to four years in project; advanced, five or more years in project)

1. Learn two additional macrame knots or techniques each year you take the project. Incorporate these knots or techniques into an article you make.
2. Make two or more macrame articles that are a challenge to you and help you perfect your new skills.

Intermediate projects:

- Collar
- Candle cradle
- Purse
- Wall hanging
- Belt
- Pillow
- Place mat
- Animals
- Plant hanger
- Project of your choice

Advanced projects:

- Large wall hanging
 - Lamp shade
 - Window treatment
 - Hanging shelf
 - Hanging table
 - Lawn chair
 - Hammock
 - Project of your choice
3. Visit a local resource person or library to locate resources for intermediate and advanced macrame work. No advanced instructions are given in this project publication. Remember the Internet as a resource site.
 4. Prepare and give at least one demonstration on something you have learned in this project.
 5. If your club situation allows, assist one or more beginners with the macrame project.

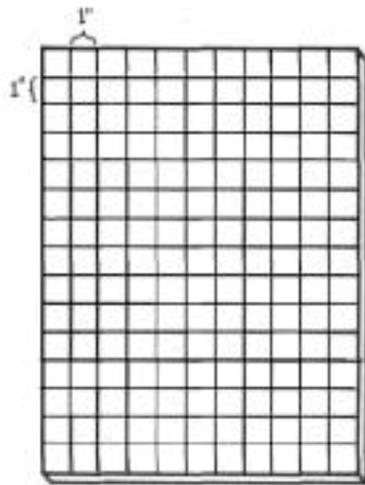
Working Surface

The working surface you use depends on the size of your project. If you choose to do a large hanging, supporting your project on hooks on pegboard might be easiest. This method will enable you to move your hanging higher more easily as you work, or lower it as you sit down. If you are going to macrame a smaller object such as a belt or necklace, a mounting board will aid you in securing your project while you work.

For learning to tie knots, select a mounting board that is at least 12 inches high and 6 inches wide.

A **mounting board** can be made from a piece of heavy cardboard, a discarded fabric bolt, a small bulletin board or a ceiling tile. The mounting board will help you keep the size of knots and the pattern uniform.

When planning a macrame project, choose a mounting board of appropriate size for your pattern. To help keep your pattern even, draw lines on the mounting board in 1-inch squares or use contact paper with 1-inch squares.



MOUNTING BOARD

Materials

Knitting is worked from a holding cord or mounting stick. The holding cord can be cord, but it also could be sticks, rings, driftwood, belt buckles, etc. – anything that is appropriate for your project. These items are used to mount the project and begin the knotting process.

Almost any kind of cord that has a little body and is moderately stiff can be used. Jute is one of the materials that shows the knots best and is easy to obtain. Other materials often used in macrame are

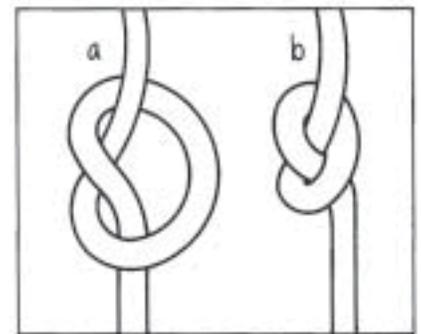
cotton and sisal. Cotton rug yarn does not give as nice an effect as other materials, but it provides an inexpensive practice material for the beginner. Determining what yarns and cords are like by looking at pictures or reading descriptions is difficult, so experiment with different cords while you learn basic macrame techniques. Project instructions often tell you the type and amount of cord needed.

You also will need pins (such as corsage pins, T-pins or push pins), rubber bands, a ruler and scissors.

Preparation for Knotting

To tie an overhand knot:

1. The first step is to determine the finished length of the project. For practice purposes, your finished length will be 12 inches.



OVERHAND KNOT

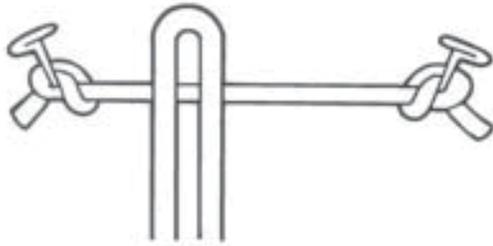
2. Cut four cords four times the finished length of your project – 48 inches.
3. The cord must be mounted on a holding cord or some other object. As you learn to tie knots, use a holding cord made by cutting a 10-inch length and tie an overhand knot in each end.

Tip:
If you are a beginner, using different colors of cord, or painting the ends different colors with permanent markers or nail polish will be less confusing while learning to tie knots.

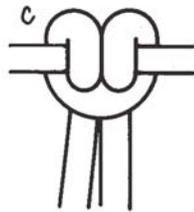
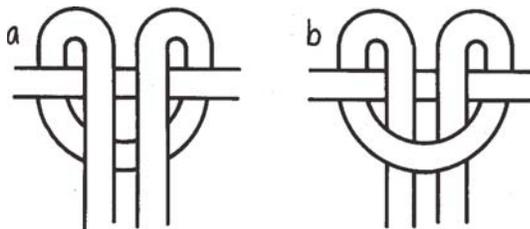
- a. Make a loop with your cord. Bring the end of your cord down through the loop.
- b. Pull both ends tightly to complete the knot.
4. Use a corsage pin or a T-pin to pin the cord securely to your mounting board.

Attach the Knotting Cords

1. Fold each of your 48-inch lengths of cord in half as shown.



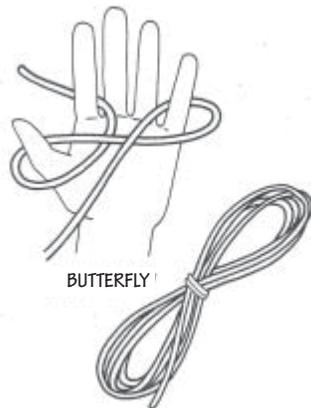
2. Mount a cord length on the holding cord using a lark's head knot.
 - a. Place the center point of the cord over the holding cord to form a loop.
 - b. Pull the cord ends through the loop.
 - c. Pull the cord ends so the knot will be tight against the holding cord.



LARK'S HEAD KNOT

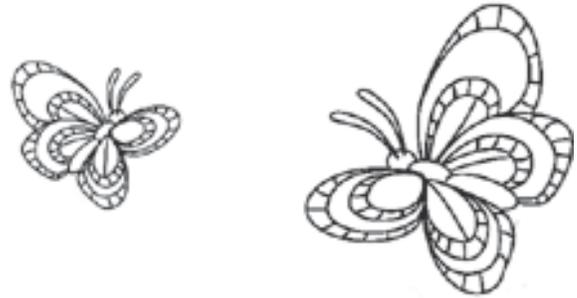
3. Mount the other three cords the same way.
4. Make working with the cords easier by making a butterfly.

- a. With the palm of your hand facing you, put the cord between your index and third fingers. With the knot and one end of the cord to the back of your hand, wind the front cord around the thumb between the ring and little finger and back to the thumb in a figure-8 motion.



- b. When the bundle is complete, secure it with a rubber band in the center where the cords cross. This bundle is called a butterfly. A gentle pull will release the cord as you need it.

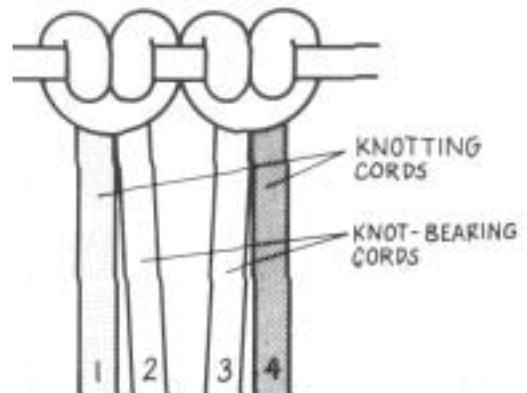
You are ready to begin knotting.



Basic Knots

Square Knot and Half-knot

A square knot is made of two half-knots. Using holding cord and pieces of cord mounted on the mounting board, follow the illustrations. Begin with the first four loose cords on the holding cord.



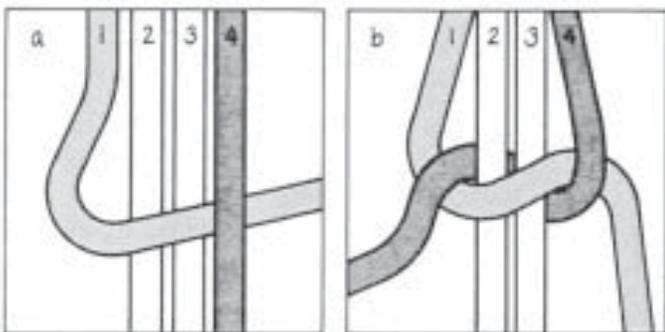
- a. Take the left outside (knotting) cord and place it over the two center (knot-bearing) cords in an L shape. Place cord 4 over the top of cord 1 at the end of the L.
- b. Now bring the right outside cord (4) under cords 2 and 3. Pull cord 4 up through the hole between cords 1 and 2. You will have a half-knot, or the first half of a square knot.

Tip:

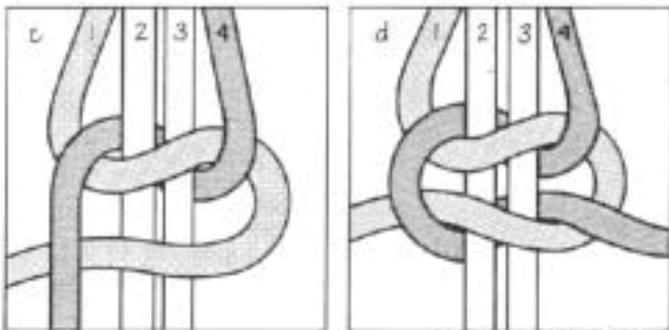
When tying macrame knots, tie every knot closely against the previous knot unless your instructions say otherwise.

- c. To finish the square knot, bring cord 1 back over cords 3 and 2. Place cord 4 over the top of cord 1.
- d. Now bring cord 4 under cords 2 and 3. Pull cord 4 up through the hole between cords 3 and 1. Pull your knot-bearing cords up tightly against the first half of the knot. You have a completed square knot.

To avoid a lopsided knot, be sure to put an equal amount of tension on the knot-bearing cords when pulling knots into place.



HALF KNOT



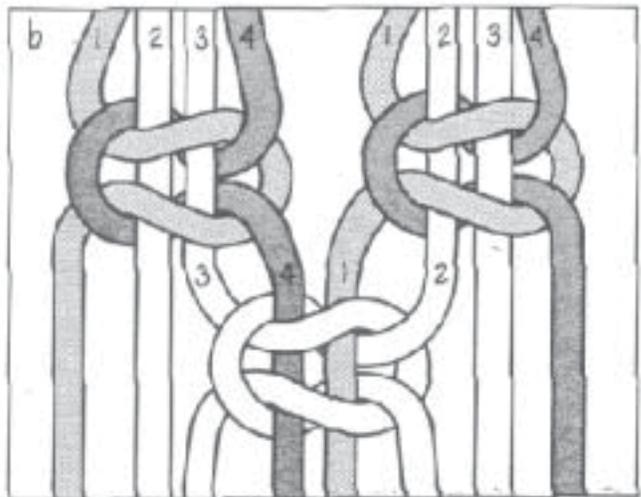
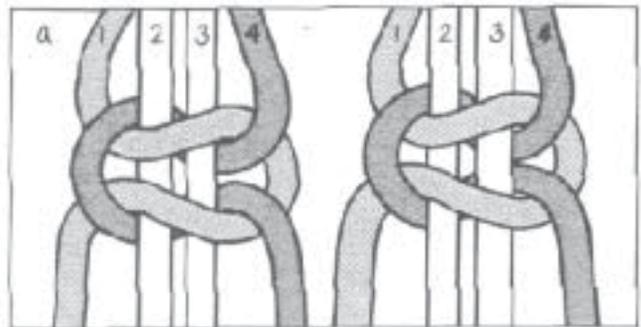
SQUARE KNOT

Alternating Square Knots

To tie an alternating square knot pattern, use eight cords.

- a. Tie one square knot with each group of four cords, one knot alongside the other.
- b. Tie a second row of square knots using the following four cords: 3 and 4 from the square knot on the left side, and 1 and 2 from the square knot on the right side.

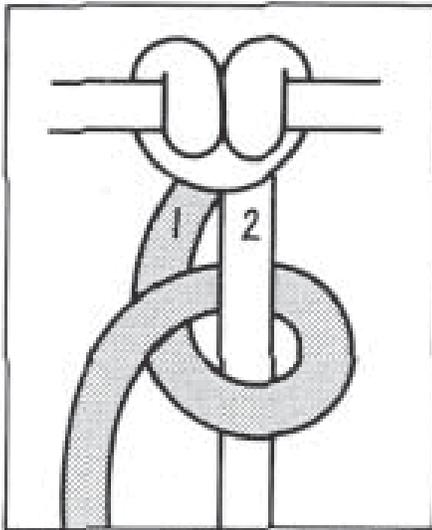
Tie another square knot using 4 and 1 for the knot-bearing cords, and 2 and 3 for the knotting cords. This square knot should join the cords below your two square knots in the top row.



ALTERNATING SQUARE KNOTS

Half-hitch Knot

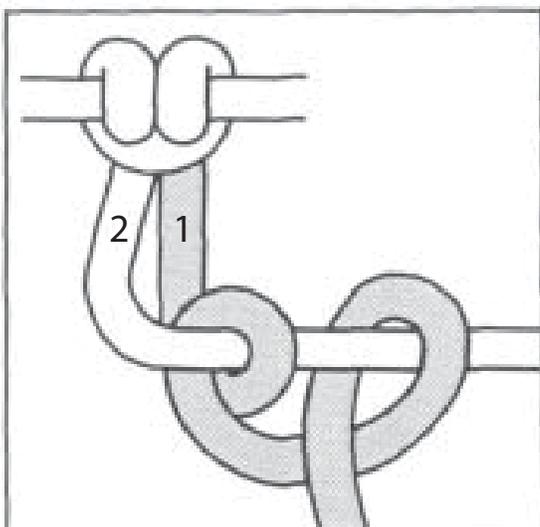
A half-hitch knot creates a raised riblike design. It can be tied from the right or the left to achieve the desired effect. A half-hitch is done with two cords: a knotting cord (1) and a knot-bearing cord (2). Always lay the knotting cord across the top of the knot-bearing cord. Then loop cord 1 behind cord 2 and down through the loop. Pull up on knot-bearing cord until desired tension is achieved.



HALF HITCH KNOT

Double Half-hitch Knot

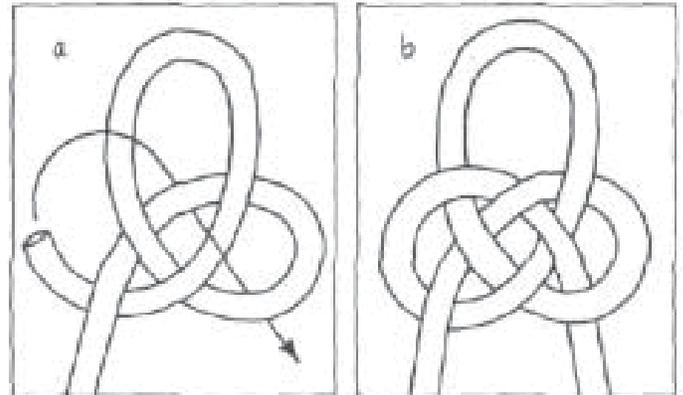
Make a single half-hitch. Bring cord 1 (gray) up over cord 2 (white) again, then down through the loop to complete a double half-hitch.



DOUBLE HALF HITCH KNOT

Josephine Knot

Fold the cord in half lengthwise. Make a loop, bringing the left cord under the right cord, then under the first loop to form a lower loop. (Figure a.) Loop right cord under loose left cord, and weave over left, under center, over right and under lower loop, as illustrated in Figure b.



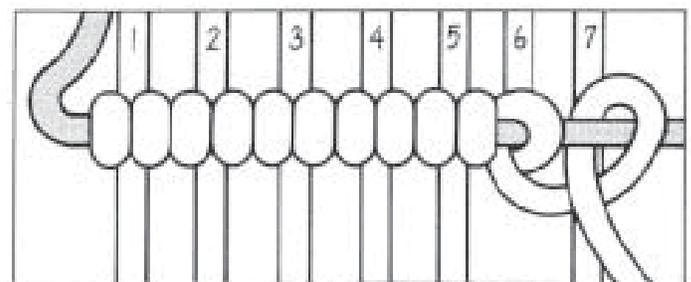
JOSEPHINE KNOT

Rows of Half-hitch Knots

Variations of the half-hitch knots are used to make horizontal, diagonal and vertical rows.

Horizontal Rows

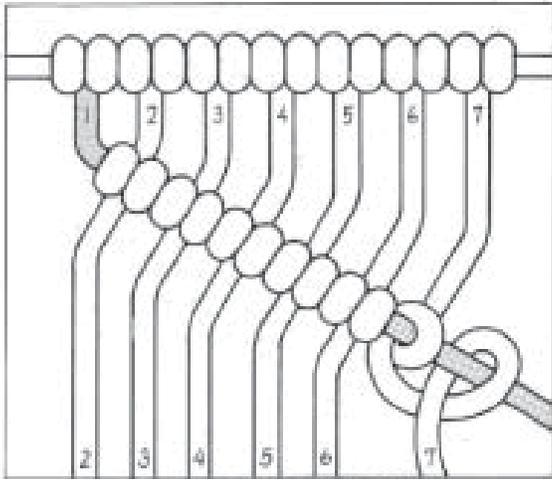
This is a row of half-hitches. The illustration shows seven different cords



HORIZONTAL HALF HITCHES

Diagonal

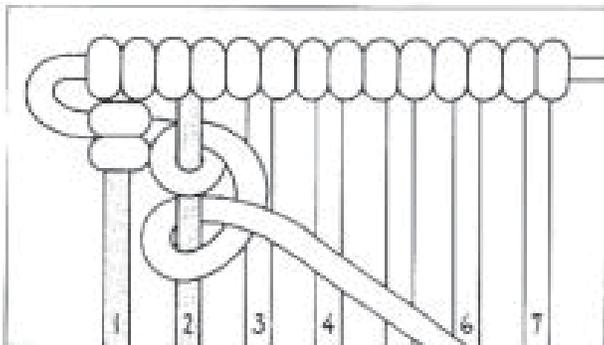
When the instructions call for a diagonal double half-hitch, hold the knot-bearing cord tightly at a downward slant, then tie the knotting cord around it in double half-hitches.



DIAGONAL HALF HITCHES

Vertical

To tie a vertical double half-hitch, hold the knot-bearing cord in a vertical position, then tie the knotting cord around it in double half-hitches.



VERTICAL HALF HITCHES

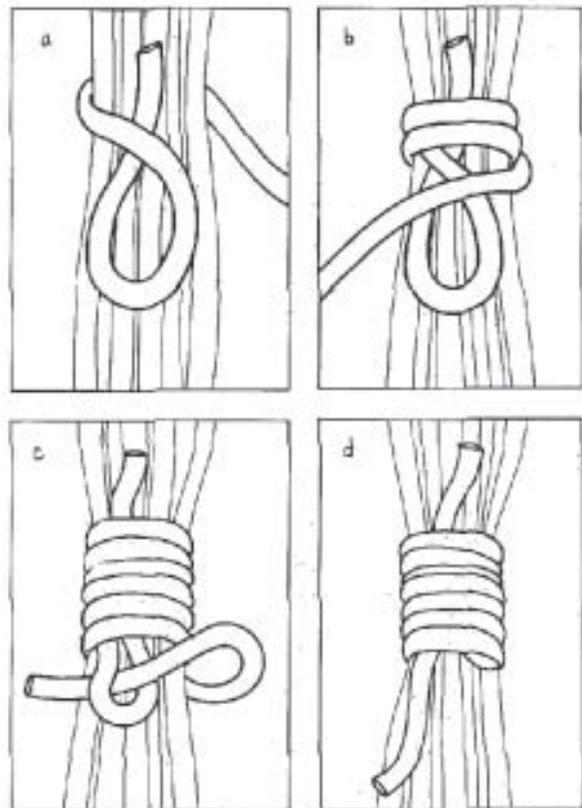
Wrap Knot

A wrap knot is made by bringing a group of cords together and placing the cord used for wrapping over the top of the group of cords to form a loop.

Using the same cord you used to make the loop, begin wrapping neatly around and around your group of cords. Almost cover the loop completely under the wrapping.

When you have wrapped as much as you want, pull the end of the wrapping cord through the loop at the bottom of the wrap.

Pull the cord at the top. This will pull the loop and cord up and underneath the wrap. The loop should be completely hidden underneath the wrap. Trim off the top and bottom cord as closely as possible to the wrap.



WRAP KNOT

Projects

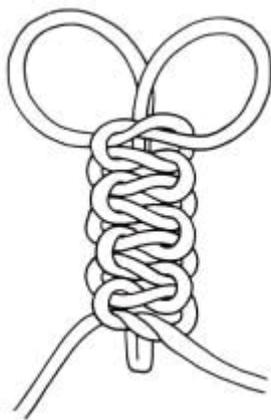
Select an article that will not be too difficult to make and that you can use.

Your first project could be a wall hanging made by completing samples of the knots described in this publication and arranging them on a piece of driftwood.

■ Macrame Mouse

Materials

- 30-inch piece of jute or cord
- 3-inch piece of jute
- 2 small movable eyes
(optional)
- Small seed bead
(optional)
- Craft glue
- Mounting board
- Ruler
- Corsage pin



Work on a mounting board.

1. Find the center of the cord. Place a pin (A) in the center of the cord and pin it near the bottom of the board.
2. Work toward the top of the board. Measure 3 inches up from pin A and place pin B through both cords
3. Fold one cord down each side and cross over the two strands between pin A and pin B, forming two loops about 1 inch in size.
4. Place pins C and D in the tops of the loops to hold them secure. These loops form the mouse ears.
5. Make four square knots between pins B and A with the cord that was crossed. Pull the knots tightly against pin B.
6. The mouse should look like the illustration.

7. Take the bottom knot-bearing cord, which forms the loop under the mouse. Cut it off even with the last square knot. Dot with glue so it can't come loose.
8. Cut off one knotting cord even with the last square knot. Dot with glue. The last cord becomes the mouse's tail.
9. You may want to add two eyes, nose and whiskers. Glue on the two movable eyes below the ears. For the nose and whiskers; unravel the 3-inch piece of jute to make single strands. Put several strands through the eye of the seed bead, spread them out to look like whiskers and glue the bead in place.

■ Necklace

Supplies for finished length of:

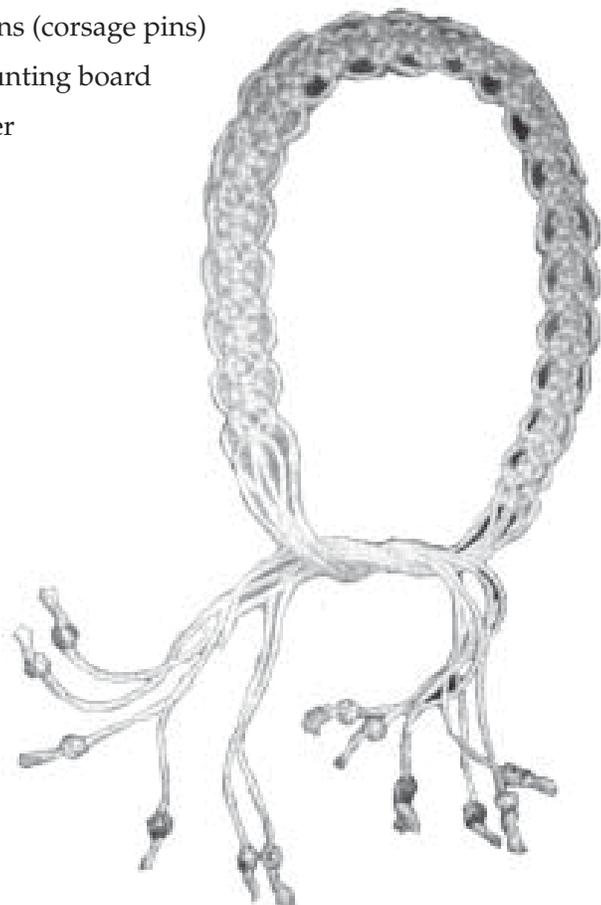
	16"	19"
• Waxed nylon or cotton cord	6 yards	6 yards
• 18 orange "E" beads	6	6
• Wooden beads		
– color choice 1	3	5
– color choice 2	3	4
• Mounting board		
• T-pins (corsage pins)		
• Scissors		
• Ruler		



■ Basic Belt

Supplies

- 21 yards of number 30 cotton cord
- 12 beads with holes large enough to pull through one cord
- T-pins (corsage pins)
- Mounting board
- Ruler



Preparation:

Cut cord into 4 lengths 1½ yards long each

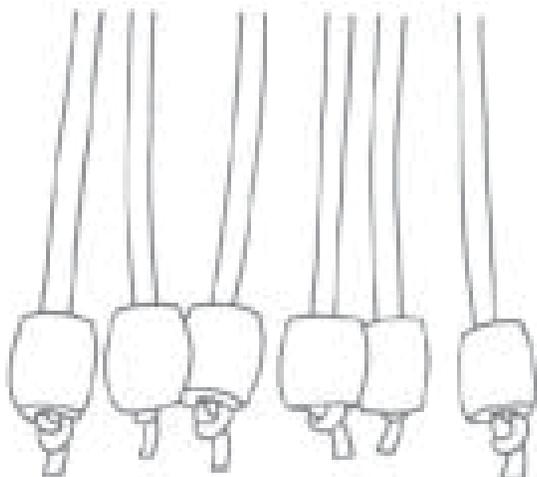
1. Tie an overhand knot with all cords and pin to the mounting board.
2. Tie 3 inches of regular hair braid. There are four cords. Hair braid usually is tied with three. Place the extra cord in with one of the other cords.
3. Tie five square knots using two knotting cords and two knot-bearing cords.
4. Pull two knot-bearing cords through a Color 2 bead.
5. Repeat step 3 and pull two knot-bearing cords through a Color 1 bead.
6. Repeat steps 3 and 4.
7. Tie six square knots using two knotting cords and two knot-bearing cords.
8. Pull two knot-bearing cords through a Color 1 bead. String three "E" beads on each knotting cord.
9. If the 19½-inch necklace is desired, repeat steps 7 and 8 two more times.
10. Repeat steps in the following order:
7, 4, 5, 3, 4, 3, 2.
11. Tie an overhand knot and trim off excess cord.

Finished length: 20 inches without tassel

Preparation: cut six cords 3½ yards long

1. Pin each of the six cords to the mounting board, spacing evenly apart, 13 inches from the ends of the cords. This will become the tassel when the belt is complete.
2. Number your cords 1 to 6 from left to right. Using cords 2 through 5, tie a square knot using two knotting cords and two knot-bearing cords.
3. Separate your cords into two groups: 1 to 3 and 4 to 6. Tie one square knot with each group, using two knotting cords and one knot-bearing cord.
4. Using cords 2 to 5, tie two square knots using two knotting and two knot-bearing cords.

- Repeat **steps 3 and 4** 20 more times, or until the belt is the length you want it.
- Tie one square knot using groups of cords 1 to 3 and 4 to 6 with two knotting cords and one knot-bearing cord.
- Tie one square knot using cords 2 to 5.
- Measure down 13 inches and cut off all cords evenly.
- Unpin belt from board and place one bead on each cord end. Tie an overhand knot under each bead on both tassels so it will not slide off.



■ Plant Hanger

Materials

- 66 yards of polyester cable cord or comparable cord
- 8 beads of a color that contrasts or blends with the cord; beads must have a hole large enough for two cords to pass through
- 1 2½-inch solid metal ring
- Rubber bands
- Ruler

Finished length: 5½ feet

Preparation:

Cut eight cords 8 yards long.

Cut two cords 1 yard long for wrapping.

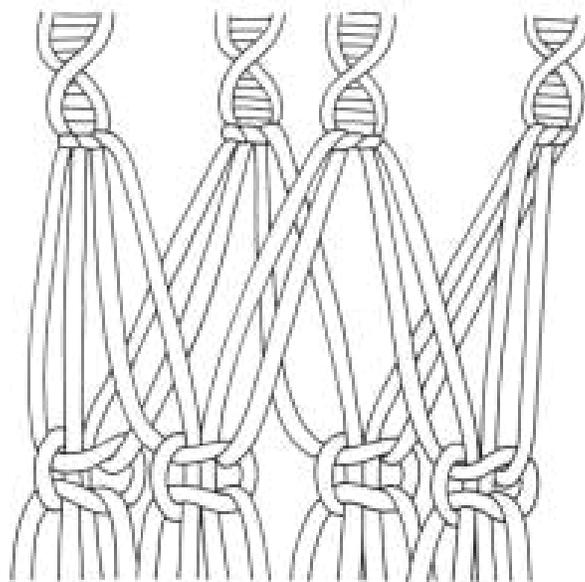
- Pull the eight 8-yard cords exactly halfway through the ring

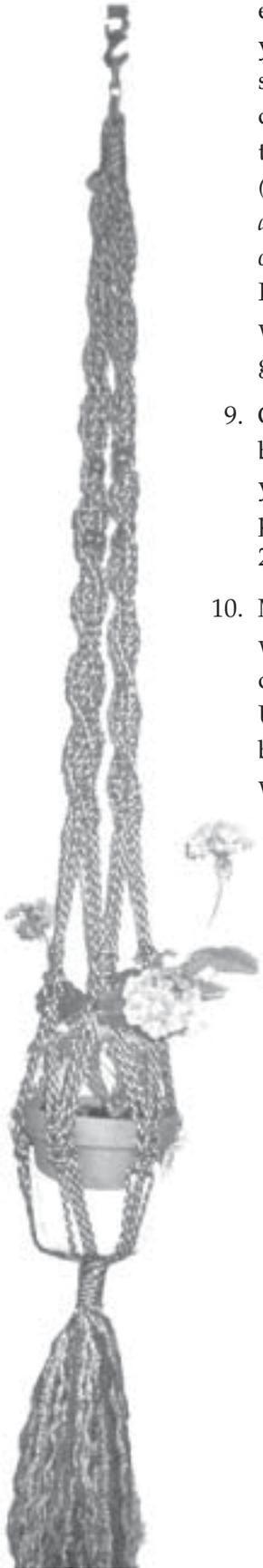
- Gather all cords together under the ring. Using a 1-yard piece of cord, tie 1½ inches of wrap knot (described earlier in this publication). Butterfly each cord once and secure with rubber bands.
- Separate the cords into four groups of four cords. Tie 12½ inches of half knots with each group, using two knotting cords and two knot-bearing cords (*half square knot instructions described earlier in this publication*).

- Pull the two knotting cords in each group through a bead and bring the two knot-bearing cords to the outside to use as knotting cords. This is done so all of the cords will be used evenly.



- Tie 2½ inches of half square knots on each group, using two knotting and two knot-bearing cords.
- Pull the two knot-bearing cords in each group through a bead.
- Tie 12 inches of half square knots on each group, using two knotting and two knot-bearing cords.
- Now form the **cradle** – the place on the hanger where the pot will sit. Take two cords from each group (*see illustration*) and, leaving 5 inches of





each end unknotted from your last knot, tie three square knots with four cords – two knotting and two knot-bearing cords.

(Square knot instructions are given in the first part of this publication.)

Repeat this step again with the three remaining groups of four cords.

9. Gather all the cords 5 inches below the last square knot in your cradle. Using a 1-yard piece of cord, wrap knot for 2 inches.
10. Measure down from the wrap knot 12 inches and cut off all cords evenly. Unravel each cord and brush cords out nicely with a hairbrush.

Standards

1. Incorporate good design principles throughout the project.
2. Make sure the material used matches the intended use of the article.
3. Use string or cord with a hard twist for an article that needs a stiff shape.
4. Use more flexible string or cord for airy designs and decorations.
5. The knot patterns should be the first consideration and should dominate any macrame design. This pattern should be enhanced, not obscured, by the texture, color and shape of any added materials.
6. Make sure the tension throughout the article is uniform.
7. Fasten cords neatly.
8. Articles should have a finished look and be ready for use.

Online Resources

www.macramesuperstore.com/

Macrame books to purchase

www.powells.com/subsection/CraftsMacrame.html

Macrame supplies

www.artcove.com/Macrame/macrame.shtml

Macrame patterns, including chair patterns

www.kingskountry.com

This publication was prepared by the former North Dakota 4-H Clothing Committee:

*Peggy Anderson, Gayle Gette, Merry Green, Cindy Swenson,
Rachel Vettern and Sue Wold.*

Illustrations were created by NDSU staff.

Visit North Dakota 4-H on-line at www.ndsu.edu/4h

NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit www.ag.ndsu.edu/agcomm/creative-commons.

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, sex, sexual orientation, status as a U.S. veteran, race or religion.

Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708.

County Commissions, NDSU and U.S. Department of Agriculture Cooperating.

This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.