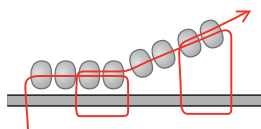


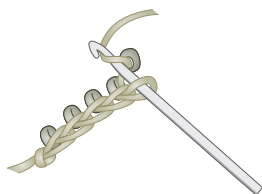
BACKSTITCH BEAD EMBROIDERY

Tie a knot at the end of the thread. Pass up through the foundation from back to front. *String 4 beads and lay them against the foundation. Pass down through the foundation next to the last bead added. Pass up through the foundation between the second and third beads just added, then pass through the third and fourth beads. Repeat from *.

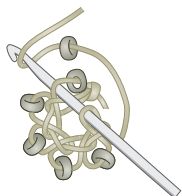


BEAD CROCHET

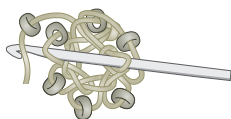
Work 5 chain stitches, incorporating 1 bead in each stitch.



Join the stitches into a ring by inserting the crochet hook under the thread that goes through the first A. Make sure the first A is to the right of the crochet hook and that the working thread is passing over the first A.



Slide 1 bead down next to the work and form a slip stitch. This new bead becomes the first bead in the second round. *Insert the crochet hook under the next thread, taking care that the hook is just to the left of the next bead in the previous round. Slide the next bead down and form a slip stitch. Again, make sure the working thread passes over the previous A.



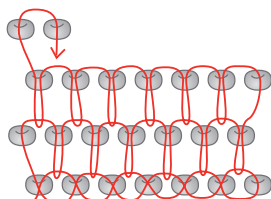
Repeat from * using medium tension to continue slip-stitching 1 bead at a time. There will be 5 beads in each round; no step up is required at the end of each round, just continue slip-stitching.

BEAD KNITTING

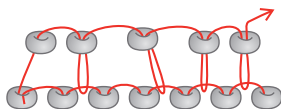
Knitting one bead into one stitch is the technique to use for knitting charted designs. Insert the needle into the stitch to be knit as usual, slide the bead up against the needle, and pull the bead through to the front as you complete the stitch.

BRICK STITCH

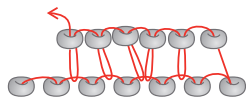
Stitch a foundation row in one- or two-needle ladder stitch. String 2 beads and pass under the closest exposed loop of the foundation row and back through the second bead. String 1 bead and pass under the next exposed loop and back through the bead just strung; repeat.



To decrease within a row, string 1 bead and skip a loop of thread on the previous row, passing under the second loop and back through the bead.



To increase within a row, work 2 stitches in the same loop on the previous row.



For tubular brick stitch, join a ladder-stitched foundation row into a ring by passing through the first and last beads of the row, with the holes facing up. *String 1 bead and pass under the closest exposed loop of the foundation ring. Pass back through the same bead and repeat, adding 1 bead at a time. Finish the round by passing down through the first bead and up through the last bead of the current round, then string 2 beads to begin the next round.

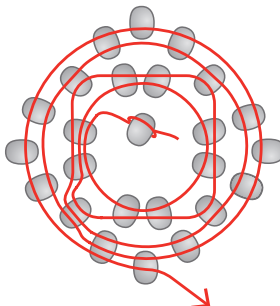
CHAIN STITCH

Make a slipknot on crochet hook, *yarn over and draw through loop of slipknot; repeat from * drawing yarn through last loop formed.



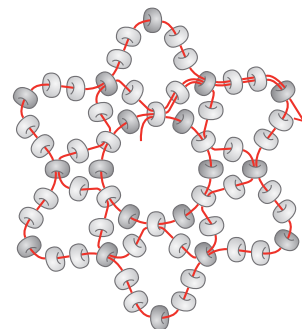
CHENILLE STITCH

Add a stop bead, leaving a 6" tail. String 8 beads; pass through the first 2 beads to form the foundation round. String 1 bead and pass through the next 2 beads; repeat three times, then step up for this and all subsequent rounds by passing through the first bead of the round. *String 2 beads and pass through the next bead; repeat three times and step up. String 1 bead and pass through the next 2 beads; repeat three times and step up. Repeat from * until you've reached your desired length of rope. Remove the stop bead and unweave the foundation round for a symmetrical ending.



CIRCULAR NETTING

String a multiple of 4 beads; pass through them again to form the foundation round. String 3 beads, skip 3 beads in the foundation round, and pass through the following bead to form a "net"; repeat around the foundation round. Step up for the next round by passing through the first 2 beads added in this round. *String 3 beads and pass through the center bead of the next net in the previous round; repeat to connect all the nets from the previous round. Step up through the first 2 beads added in this round. Repeat from * to the desired length.



COIL

To make a coil, use one hand to hold the end of your wire against a mandrel (or whatever object you want to coil around). With the other hand, wrap the wire around the mandrel. When finished, slide the coil off the mandrel.



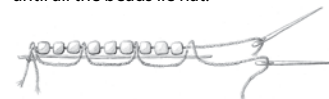
CONES

Use cones to finish a multistrand piece. Attach each strand of beads to a wrapped loop or an eye pin. Use the wrapped-loop wire or eye pin to string the wide end of a cone, covering the ends of the strands; form a wrapped loop at the tip of the cone that attaches to a clasp.



COUCHING

Tie a knot at the end of one thread. Pass the needle up through the foundation from front to back. String a number of beads and lay them onto the foundation in the chosen design. Tie a knot at the end of a second thread. Pass the second needle up through the foundation, over the thread between 2 beads, and back down through the foundation; repeat every three to four beads until all the beads lie flat.



CRIMP BEADS

Crimp beads are serrated metal beads. Twisted crimp tubes and crimp beads can be secured by squeezing them flat with chain- or flat-nose pliers.

CRIMP COVERS

Crimp covers hide crimp tubes and give a professional finish. To attach, gently hold a crimp cover in the front notch of the crimping pliers. Insert the crimped tube and gently squeeze the pliers, encasing the tube inside the cover.



CRIMP/CORD ENDS

Crimp/cord ends consist of a loop attached to a tube. Dab the leather, plastic, ribbon, or other cord with jewelry glue, then place it in the crimp/cord end. If you're using a crimp end, crimp it as you would a crimp tube.

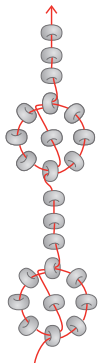


CRIMPING

Crimp tubes are seamless metal tubes used to secure the end of a beading wire. To use, string a crimp tube and the connection finding (i.e., the loop of the clasp). Pass back through the tube, leaving a short tail. Place the crimp tube in the front notch of the crimping pliers and squeeze to shape the tube into an oval. Use the back notch of the crimping pliers to press the length of the tube down between the wires, enclosing them in separate chambers of the crescent shape. Rotate the tube 90° and use the front notch of the pliers to fold the two chambers onto themselves, forming a clean cylinder. Trim the excess wire.

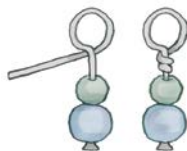
DAISY CHAIN

String 8 beads and pass through the first bead strung to form a circle. String 1 bead and pass back through the bead opposite the first bead of the circle, forming the "daisy." String 3 beads to form a strand. Repeat from the beginning to create the next daisy.



DANGLES

Dangles can be strung as they are, attached using jump rings, or linked to other loops. Use a head pin or eye pin to string the bead(s), then form a simple or wrapped loop.

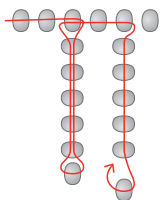


FINISHING AND STARTING NEW THREADS

Tie off the old thread when it's about 4" long by making an overhand knot around previous threads between beads. Weave through a few beads to hide the knot, and trim the thread close to the work. Start the new thread by tying an overhand knot around previous threads between beads. Weave through several beads to hide the knot and to reach the place to resume beading.

FRINGE

Exit from the foundation row of beads or fabric. String a length of beads plus 1 bead. Skipping the last bead, pass back through all the beads just strung to form a fringe leg. Pass back into the foundation row or fabric.



GLUING

Place a sparing amount of glue on knots to secure them (we recommend G-S Hypo Cement) or use enough glue to completely secure beads to a surface (E6000, Terrifically Tacky Tape). Allow any glue to cure thoroughly before continuing.



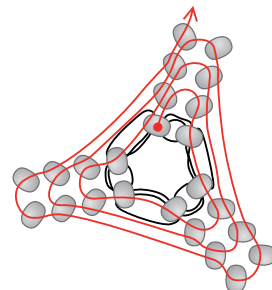
HALF-HITCH KNOT

Half-hitch knots may be worked with two or more strands—one strand is knotted over one or more other strands. Form a loop around the cord(s). Pull the end through the loop just formed and pull tight. Repeat for the length of cord you want to cover.



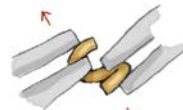
HEAD PINS/EYE PINS

Head pins are straight wires with a flat disc, ball, or other shape at one end. Eye pins are straight wires that end in a loop.



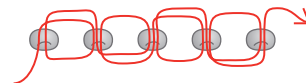
JUMP RINGS

Jump rings connect holes and loops. Open a jump ring by grasping each side of its opening with a pair of pliers; don't pull apart. Instead, twist in opposite directions so that you can open and close without distorting the shape.

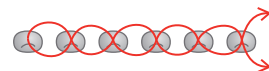


LADDER STITCH

For **one-needle ladder stitch**, string 2 beads and pass through them again. Manipulate the beads so their sides touch. String 1 bead. Pass through the last bead added and the bead just strung. Repeat, adding 1 bead at a time and working in a figure-eight pattern.

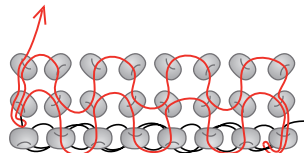


For **two-needle ladder stitch**, add a needle to each end of the thread. String 1 bead and slide it to the center of the thread. String 1 bead with one needle and pass the other needle back through the bead just added; repeat to form a strip.



HERRINGBONE STITCH

Form a foundation row of one- or two-needle even-count ladder stitch and exit up through the final bead. String 2 beads, pass down through the next bead in the ladder, and pass up through the following bead; repeat to the end of the row. Step up for the next row by wrapping the thread around previous threads to exit up through the last bead strung. To form the next row, string 2 beads and pass down through the second-to-last bead of the previous row and up through the following bead. Repeat, stringing 2 beads per stitch, passing down then up through 2 beads of the previous row and stepping up as before. The 2-bead stitch will cause the beads to angle in each column, like a herringbone fabric.



Begin **tubular herringbone stitch** with a foundation ring of one- or two-needle even-count ladder stitch. String 2 beads. Pass down through the next bead and up through the following bead in the ladder. Repeat around the ring. At the end of the round, pass through the first beads of the previous and current rounds to step up to the new round.

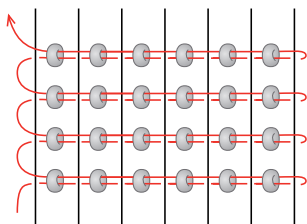
LARK'S HEAD KNOT

Lark's head knots are great for securing stringing material to another piece, such as a ring or a donut. Fold the stringing material in half. Pass the fold through a ring or donut, then pull the ends through the loop created and pull snug.



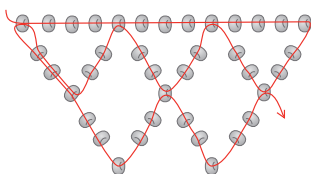
LOOMWORK

Follow the manufacturer's instructions for warping your bead loom. Note that you will need one more warp thread than you have number of beads in a row. Tie a thread to an outside warp (tie onto the left warp if you are right-handed or the right warp if you are left-handed). Use a needle to string the first row of beads and slide them down to the knot. Bring the beaded weft thread under the warp threads and push the beads up so that there is one bead between each two warp threads. Hold the beads in place and pass back through all the beads, making sure that the needle passes over the warp threads. End the threads by weaving back through the beadwork, tying knots between beads.



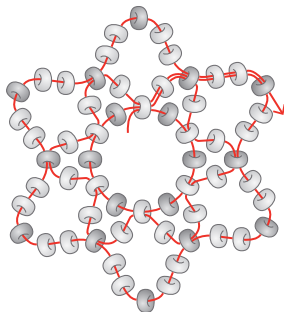
NETTING

String a base row of 13 beads. String 5 beads and pass back through the fifth bead from the end of the base row. String another 5 beads, skip 3 beads of the base row, and pass back through the next bead; repeat to the end of the row. To turn, pass back through the last 3 beads (one leg of the last net). String 5 beads, pass back through the center bead of the next net, and continue.

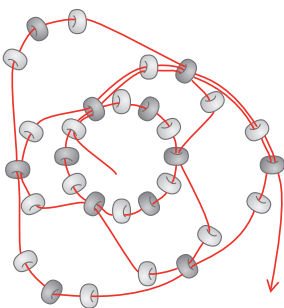


For **circular netting**, string {1A and 1B} six times; pass through the beads again to form a circle for the foundation round and pass through the next 1A. *String 1A, 1B, and 1A; skip 1 bead and pass through the following bead in the previous round to form a "net." Repeat from * five times, then step up for the next round by passing through the first 2 beads of the first net. String 2A, 1B, and 2A; pass through the middle bead

of the nearest net in the previous round. Repeat five times, then step up for the next round by passing through the first 3 beads of this round. Work each round the same way, increasing the number of A beads as necessary to keep the work flat, and stepping up by passing through the first half of the first net.



For **tubular netting**, string {1A and 1B} six times; pass through the beads again to form the foundation round. *String 1A, 1B, and 1A; skip 1B and pass through the following 1B in the previous round to form a "net." Repeat from * twice, then step up for the next round by passing through the first 2 beads of this round. **String 1A, 1B, and 1A; pass through the middle bead of the nearest net in the previous round. Repeat from ** twice, then step up as before. Work each round the same way.



OVERHAND KNOT

This is the basic knot for tying off thread. Make a loop with the stringing material. Pass the cord that lies behind the loop over the front cord and through the loop; pull snug.



OXIDIZING SILVER WITH LIVER OF SULFUR

Always wear vinyl or latex gloves, work in a well-ventilated area (liver of sulfur has an unpleasant odor that quickly dissipates), and carefully read manufacturer's directions when using chemicals.

Wash all silver to be colored with soap and water. Mix liver of sulfur nuggets in hot (not boiling) water according to manufacturer's directions in a disposable container. Most suggest mixing 1 pea-size nugget for every 1 cup of water. A weaker solution will produce a lighter patina with warm hues; a stronger solution will produce a darker patina.

For ease of dipping your silver into the solution, use 12" of beading or sewing thread to string the bead(s), chain, or finding(s) you wish to oxidize; tie the ends in an overhand knot. If coloring small items that cannot be strung (such as crimp covers), you will need to drop them in the solution and then quickly scoop them out with a utensil (fig. a).



fig. a

Or, place small items on a paper towel and brush them with the solution; this method, however, often results in uneven coloring.

Dip the silver in the solution as many times as necessary to achieve the desired patina. If the silver becomes darker than desired, it can always be lightened later by buffing or polishing.



fig. b

Rinse the silver in cold water (fig. b). To further stop oxidation, dip the silver in a weak solution (1:4) of baking soda and water. Remove any threads you used to suspend the metal. Allow the silver to dry, then, if desired, use a polishing cloth or #0000 (extra fine) steel wool to buff and polish it (fig. c).



fig. c

Store all used solution in the disposable container. After about a week, it will degrade enough to be washed down a sink (preferably a utility sink) with a lot of water. Contact your local hazardous waste facility for more information on disposing of the liquid safely.

PASS THROUGH VS PASS BACK THROUGH

Pass through means to move the needle in the same direction that the beads have been strung. *Pass back through* means to move the needle in the opposite direction.

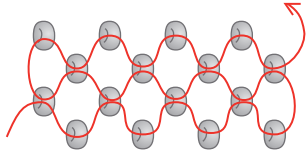
PEARL KNOTTING

Pearl knotting is traditionally worked with silk cord. Generally packaged with a needle attached at one end, silk cord can be prestretched by pulling it inch by inch through the thumb and forefinger. Use the needle to string a bead, then form a loose overhand knot. Place a needle (or an awl, tweezers, or knotting tool) in the knot and hold it next to the bead. Gently pull the cord to tighten the knot around the needle and snug to the bead. Pull the needle back out of the knot and string the next bead.

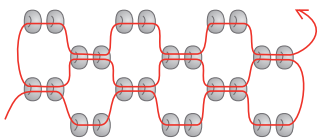


PEYOTE STITCH

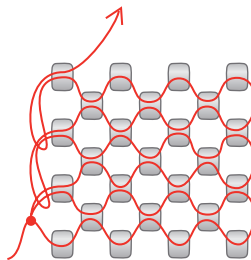
For **one-drop even-count flat peyote stitch**, string an even number of beads to create the first two rows. Begin the third row by stringing 1 bead and passing back through the second-to-last bead of the previous row. String another bead and pass back through the fourth-to-last bead of the previous row. Continue adding 1 bead at a time, passing over every other bead of the previous row.



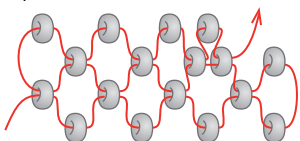
Two-drop peyote stitch is worked the same as one-drop peyote stitch, but with 2 beads at a time instead of 1 bead.



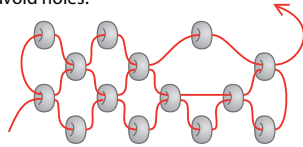
For **odd-count flat peyote stitch**, string an uneven number of beads to create Rows 1 and 2. String 1 bead, skip the last bead strung, and pass through the next bead. Repeat across the row (this is Row 3). To add the last bead, string 1 bead and knot the tail and working threads, clicking all beads into place. Start the next row (Row 4) by passing back through the last bead added. Continue in peyote stitch, turning as for even-count at the end of this and all even-numbered rows. At the end of all odd-numbered rows, add the last bead, pass under the thread loop at the edge of the previous rows, and pass back through the last bead added.



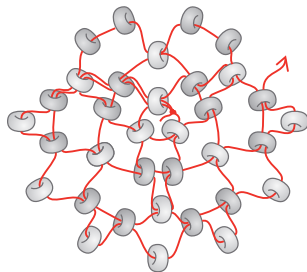
Begin a **midproject peyote-stitch increase** by working a stitch with 2 beads in one row. In the next row, work 1 bead in each stitch, splitting the pair of beads in the previous row. For a smooth increase, use very narrow beads for both the two-drop and the one-drop between.



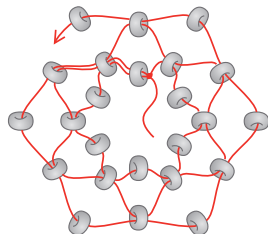
To make a **midproject peyote-stitch decrease**, simply pass the thread through 2 beads without adding a bead in the "gap." In the next row, work regular one-drop peyote stitch over the decrease. Work with tight tension to avoid holes.



For **circular peyote stitch**, string 3 beads and knot the tail and working threads to form the first round; pass through the first bead strung. For the second round, string 2 beads and pass through the next bead of the previous round; repeat twice. To step up to the third round, pass through the first bead of the current round. For the third round, string 1 bead and pass through the next bead of the previous round; repeat around, then step up at the end of the round. Continue in this manner, alternating the two previous rounds. It may be necessary to adjust the bead count, depending on the relative size of the beads, to keep the circle flat.



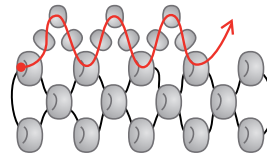
For **even-count tubular peyote stitch**, string an even number of beads and knot the tail and working threads to form the first 2 rounds; pass through the first 2 beads strung. To work Round 3, string 1 bead, skip 1 bead, and pass through the next bead; repeat around until you have added half the number of beads in the first round. Step up through the first bead added in this round. For the following rounds, string 1 bead and pass through the next bead of the previous round; repeat, stepping up at the end of each round.



Work **odd-count tubular peyote** stitch the same as even-count tubular peyote stitch; however, it isn't necessary to step up at the end of each round.

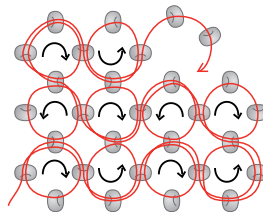
PICOT

A picot is a decorative net, most often made with 3 beads, used to embellish a beadwork surface.



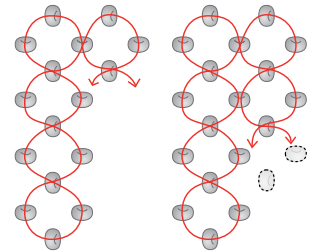
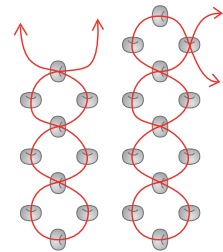
RIGHT-ANGLE WEAVE

For **one-needle right-angle weave**, string 4 beads and pass through the first 3 beads again to form the first unit. For the rest of the row, string 3 beads and pass through the last bead exited in the previous unit and the first 2 beads just strung; the thread path will resemble a series of figure eights, alternating direction with each unit. To begin the next row, pass through beads to exit from the top bead of the last unit. String 3 beads and pass through the last bead exited and the first bead just strung. *String 2 beads; pass back through the next top bead of the previous row, the last bead exited in the previous unit, and the 2 beads just strung. Pass through the next top bead of the previous row. String 2 beads; pass through the last bead of the previous unit, the top bead just exited, and the first bead just strung. Repeat from * to complete the row, then begin a new row as before.

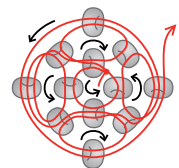


To begin **two-needle right-angle weave**, add a needle to each end of the thread. Use one needle to string 3 beads and slide them to the center of the thread. *Use one needle to string 1 bead, then pass the other needle back through it. String 1 bead on each needle, then repeat from * to form a chain of right-angle-weave units. To turn at the end of the row, use the left needle to string 3 beads, then cross the right needle back through the last bead strung. Use the left needle to string 3 beads, then cross the right needle back through the last bead strung. To continue the row, use the right needle

to string 2 beads; pass the left needle through the next bead on the previous row and back through the last bead strung.



For **cubic right-angle weave**, string 4 beads, leaving a 3" tail. Pass through the beads again to form a tight circle; use the working and tail threads to tie a square knot and pass through the first bead strung. For the first face of the cube, string 3 beads and pass through the last bead exited at the bottom of the first face, then pass through the first bead just added. For the second face of the cube, string 2 beads and pass back through the next bead at the bottom of the cube, then pass up through the nearest bead on the side of the first face, pass through the 2 beads just added, and pass through the next bead at the bottom of the cube. For the third face of the cube, string 2 beads; pass down through the nearest side bead on face 2, pass through the next bead at the bottom of the cube, and pass up through the first bead just added. For the fourth face of the cube, string 1 bead; pass down through the nearest side bead on face 1, pass back through the next bead at the bottom of the cube, pass up through the nearest side bead of face 3, and pass through the first bead just added. Pass through the 4 beads at the top to complete the cube. For subsequent cubes, the beads at the top of the previous cube will act as the bottom of the new cube.



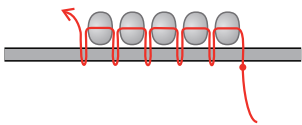
SIMPLE LOOP

For a **simple loop**, use flat-nose pliers to make a 90° bend at least ½" from the end of the wire. Use round-nose pliers to grasp the wire at the tip; roll the pliers toward the bend, but not past it, to preserve the 90° bend. Adjust the pliers as needed to continue the wrap around the nose of the pliers. Trim the wire next to the bend. Open a simple loop by grasping each side of its opening with a pair of pliers. Don't pull apart. Instead, twist in opposite directions so that you can open and close it without distorting the loop's shape.



SINGLE-STITCH BEAD EMBROIDERY

Tie a knot at one end of the thread. Pass up through the foundation from back to front. String 1 bead and pass the needle back down through the foundation right next to the bead. *Note:* If using bugle beads, string them with a seed bead on each end to protect the thread from the bugle's sharp edges; stitch all 3 beads as 1 bead.



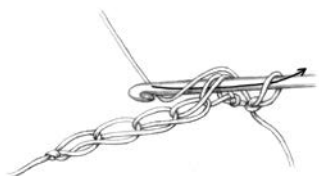
SLIDE KNOTS

This knot also works for creating adjustable closures for jewelry. Place the left and right cords parallel to one another with the ends in opposite directions. Fold one of the cords back onto itself about 3 inches. This is your working cord. Wrap the working cord around the other cord three times. Insert the working cord through the wraps, exiting the folded end. Tighten. Turn the necklace or bracelet over and repeat entire step for the other side.



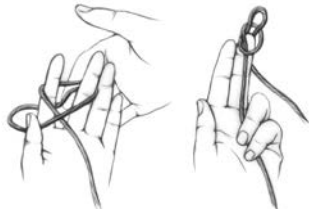
SLIP STITCH

*Insert crochet hook in stitch, yarn over and draw loop through stitch and loop on hook; repeat from *.



SLIPKNOT

With the tail end of the thread in your palm, wrap the working thread around your index and middle fingers, and lay the working thread across the tail end, forming an X. Spread your fingers slightly and push the working thread through your fingers from the back of your hand. Pull this loop up slightly while holding the tail end of the thread to form a knot. Place the loop onto the crochet hook and pull working thread to adjust the tension.



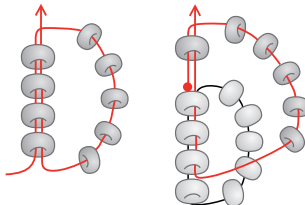
SPIRAL

To start a spiral (or scroll), make a small loop at the end of a wire with round-nose pliers. Enlarge the piece by holding on to the spiral with chain-nose pliers and pushing the wire over the previous spiral with your fingers for as many revolutions as desired.



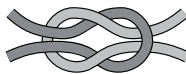
SPIRAL ROPE

The basic formula for a spiral rope has larger beads as the center core, with smaller and more beads in the outer loops. String 4A (core) and 5B (loop). Pass through the 4A again, forming a D shape. *String 1A and 5B; pass through the top 3A and the 1A just strung. Repeat from *.



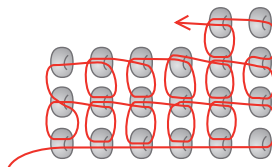
SQUARE KNOT

This knot is the classic sturdy knot suitable for most stringing materials. Make an overhand knot, passing the right end over the left end. Make another overhand knot, this time passing the left end over the right end; pull snug.

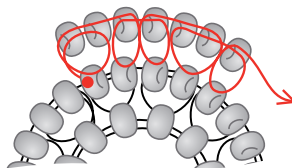


SQUARE STITCH

String a row of beads. For the second row, string 2 beads; pass through the second-to-last bead of the first row and through the second bead just strung. Continue by stringing 1 bead, passing through the third-to-last bead of the first row, and passing through the bead just strung. Repeat this looping technique to the end of the row.



For **circular square stitch**, string the first round of beads and pass through them again to form a circle. Start a new round by stringing 2 beads; pass through the last bead of the first round and through the 2 beads just strung. Repeat around, passing through the next bead of the previous round for each 2 new beads strung. At the end of the round, pass through the whole round again to tighten the beads. Start a new round by stringing 2 beads; pass through the last bead of the previous round and through the 2 beads just strung. String 1 bead and pass through the next bead of the previous round and the bead just strung. Repeat around, stitching 1 or 2 beads to each bead of the previous round, adjusting the count as necessary to keep the work flat.



For **tubular square stitch**, string the first round of beads and pass through them again to form a circle. Start a new round by stringing 1 bead; pass through the last bead of the first round and through the bead just strung. Repeat around, passing through the next bead of the previous round for

each new bead strung. At the end of the round, pass through the whole round again to tighten the beads.

STOP BEAD

A stop bead (or tension bead) holds your work in place. To make one, string a bead larger than those you are working with, then pass through the bead one or more times, making sure not to split the thread.



STRINGING

Stringing is a technique that uses beading wire, needle and thread, or other material to gather beads into a strand.



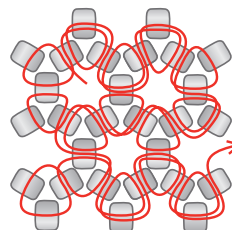
SURGEON'S KNOT

This knot is a secure way to connect two threads: Wrap the two ends around each other two or more times, then wrap one end around the other in the other direction once; pull snug.



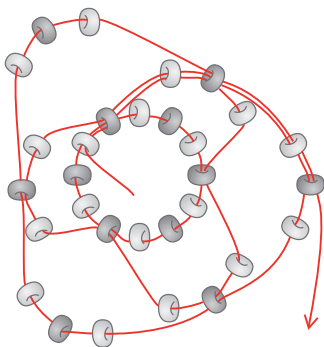
TRIANGLE WEAVE

String 3 beads and tie them into a circle to form a triangle, then pass through the first bead to form the first unit. String 2 beads; pass through the bead just exited and the 2 beads just added. Continue adding 2 beads at a time to make a series of triangles. To form the second row, exit from the first bead of the last unit added. String 2 beads; pass through the last bead exited and the 2 beads just added. String 2 beads; pass through the second bead of the last unit and the first bead just added. String 1 bead; pass through the edge bead of the adjacent unit from the previous row. String 2 beads; pass through the bead added in the last unit and the first bead just added. Repeat across the row, creating units by alternating 1-bead and 2-bead additions.



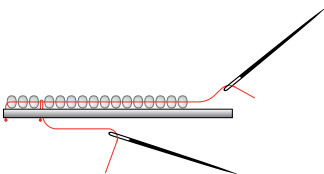
TUBULAR NETTING

String 1A and 1B six times; pass through them again to form the foundation round. *String 1A, 1B, and 1A; skip 1B and pass through the following 1B in the previous round to form a "net". Repeat from * twice, then step up for the next round by passing through the first 2 beads of this round. **String 1A, 1B, and 1A; pass through the middle bead of the nearest net in the previous round. Repeat from ** twice, then step up as before. Work each round the same way.



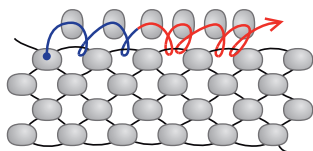
TWO-NEEDLE APPLIQUÉ FLAT BEADWORK

For two-needle appliqué flat beadwork, tie a knot at the end of the thread. Pass up through the template and foundation from back to front. String your desired number of beads onto this needle and set it aside. Thread a second needle and tie a knot at the end of the thread. Hold the work in your non-dominant hand, keeping tension on the first thread by wrapping the thread around a finger. Use the second needle to pass up through the template and foundation from back to front, 2 or 3 beads from the start, following the design on the template. Pass down through the foundation and template from front to back on the other side of the beads, forming a couching stitch over the first thread. Repeat until your pattern ends, couching every 2-3 beads, keeping tension on the first thread taut and adding beads as needed. Tie off your threads on the back of the beadwork.



WHIPSTITCH EDGING

To add a low-profile edging, start by exiting away from the beadwork from 1 edge bead. String 1 bead and pass the needle under the nearest thread loop on the side of the beadwork. Pull the thread to snug the bead against the edge of the beadwork. Repeat along the edge (blue thread). As with brick stitch, this edging allows you to use any size bead because you can change the number of stitches attached to the thread loops (red thread).



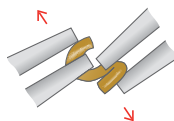
WIREGUARDS

Wireguards provide a smooth metal channel to protect the stringing material from chafing against a connector. String a crimp tube, then pass up through one half of the guard and down the other half. Pass the guard and wire through the loop of the connector, pass the wire back through the crimp tube, snug the tube up to the guard, then crimp.

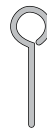


WIREFORMING

To open a **jump ring**, grasp each side of its opening with a pair of pliers. Don't pull apart. Instead, twist in opposite directions so that you can open and close it without distorting the ring's shape.



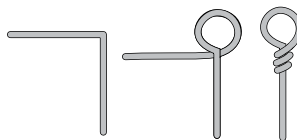
For a **simple loop**, use flat-nose pliers to make a 90° bend at least 1/2" from the end of the wire. Use round-nose pliers to grasp the wire at the tip; roll the pliers toward the bend, but not past it, to preserve the 90° bend. Adjust the pliers as needed to continue the wrap around the nose of the pliers. Trim the wire next to the bend. Open a simple loop by grasping each side of its opening with a pair of pliers. Don't pull apart. Instead, twist in opposite directions so that you can open and close it without distorting the loop's shape.



To form a **double simple loop**, make the 90° bend at least 1" from the end of the wire. Make a simple loop and continue wrapping the wire around the round-nose pliers to form two complete loops.



To form a **wrapped loop**, begin with a 90° bend at least 2" from the end of the wire. Use round-nose pliers to form a simple loop with a tail overlapping the bend. Wrap the tail tightly down the neck of the wire two or three times. Trim the excess wire to finish. Make a thicker, heavier-looking wrapped loop by wrapping the wire back up over the coils, toward the loop, and trimming at the loop.



For a **wrapped-loop bail**, center a bead on a 3" or longer piece of wire. Bend both ends of the wire up the sides and across the top of the bead. Bend one end straight up at the center of the bead, then wrap the other wire around it two or three times. Form a wrapped loop with the straight-up wire, wrapping it back down over the already-formed coils. Trim the excess wire.



For **wrapped-loop links**, link a wrapped loop to another loop by passing the wire through the previous loop before wrapping the tail down the neck of the wire.



For a **coil**, use one hand to hold the end of the wire against a mandrel. With the other hand, wrap the wire around the mandrel in tight loops. To remove the coil, slide it off the mandrel and cut the wire from the spool. Add vertical loops on either end to use the coil as is, or cut the coil at certain intervals to make jump rings or split rings.



For a **spiral**, form a small loop at the end of a wire with round-nose pliers. Enlarge the piece by holding onto the spiral with chain-nose pliers and pushing the wire over the previous coil with your thumb.

Kumihimo 101

- › If your nylon cords are curly, lightly steam them to straighten. Doing so will make stringing your beads much easier.
- › Cut a ½" slit in the back side of each bobbin to anchor your cord ends.
- › Using a kumihimo stand allows you to use both hands for braiding instead of using one hand to hold your disk while stringing beads and braiding with the other hand. Your tension will be more uniform, and your project will look more professional. In addition, using a kumihimo stand gives you a tangle-free way to store your project if you are interrupted.

- › If you get interrupted while braiding, move the bottom-left cord to the top position and leave it there. You'll have three cords at the top position and you'll always know exactly where to begin again when you resume your project. When you start again, pull the top right cord down, turn the disk a quarter turn, and continue.
- › Keep your point of braiding centered in the hole of the disk as you work.

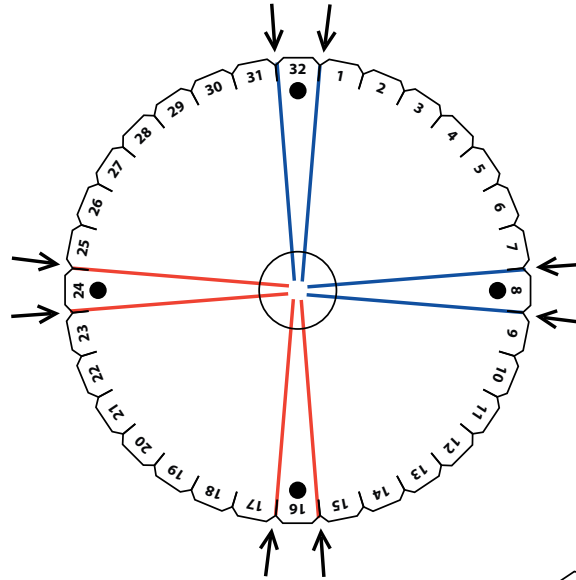
1. Hold the disk parallel to the floor with number 32 held away from you. Tuck the cords into the slots around the disk and place the wire/knot/button through the center hole (Fig. a). Add a weight to the wire/knot/button below the disk to maintain correct tension. The braid will form at the center hole, extending below the disk as you work. Do not allow the cords to tangle, and keep the weight suspended.

2. Move the bottom left cord from slot 17 up to slot 31. Move the top right cord from slot 1 down to slot 15 (Fig. b). Rotate the disk one-quarter turn clockwise so number 24 is now at the farthest (top) position where number 32 used to be (shown at the top of Fig. c).

3. Move the bottom left cord from slot 9 up to slot 23. Move the top right cord from slot 25 down to slot 7 (Fig. c). Rotate the disk one-quarter turn clockwise.

4. Using the cords that are now the farthest and closest to you after the turn, repeat Steps 2 and 3 until the braid is the desired length.

5. When making beaded braids, slide each bead to the center hole and tuck it firmly under the cord that crosses to the right or left to lock the bead in place. Do not allow the bead to pop up.



The numbers of most kumihimo disks refer to the slot on the left. The slot between the numbers 31 and 32 is considered "slot 32." Some kumihimo disks have the numbers directly in line with the slot.

Fig. a: Load 1 cord into each of these slots: 32, 1, 8, 9 (blue thread), 16, 17, 24, and 25 (red thread).

Fig. b: Moving the first two cords. The dotted green line shows the cord's movement from its starting point to its new position. New positions also marked by black arrows.

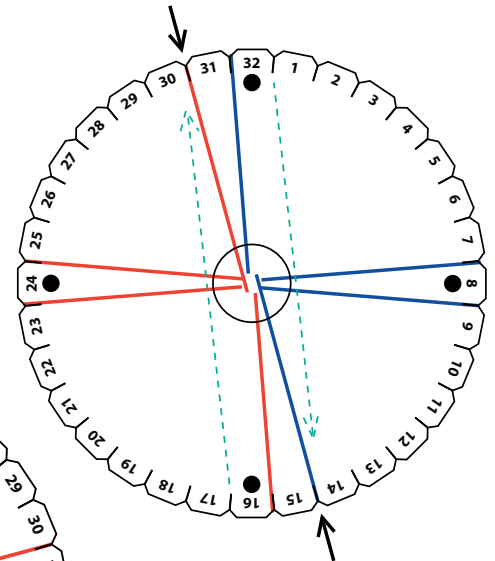


Fig. c: Moving the second two cords after making the quarter turn. The dotted green line shows the cord's movement from its starting point to its new position. After the next quarter turn, number 16 will be at the farthest (top) position.

