



Kids' Weaving Camp

Teaching weaving to kids
by Jane Patrick

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Classes are important

Weaving is one way to teach kids the power of creating things by hand. It also insures the craft for the future.



Teaching kids

- Don't be afraid to let kids warp. They think it's fun, especially when done together.
- Less talk; more do.
- Keep fun at the top of your class goals.



Instructions are provided for this spaced and felted scarf. It could be a second weaving project if time allows.

Who makes a good teacher?

The qualities of a good teacher seem obvious, but this is critical to the success of your classes and whether your students become enthusiastic.



Good teachers

- Know their subject.
- Have enough experience to help students out of trouble.
- Are friendly and welcoming.
- Use teaching principles of say, show, do.
- Check on progress.
- Restate areas of confusion.
- Adapt to special learning styles.
- Understand class management.



Classroom set up

You want to have enough room to work. You'll need tables, chairs, and enough space for peg warping.



Classroom check list

- Good lighting.
- Comfortable temperature.
- Clean space.
- Restroom close by.
- Enough chairs for each student.
- Tables for warping. You need two tables for each 4 students.
- A place to eat lunch.



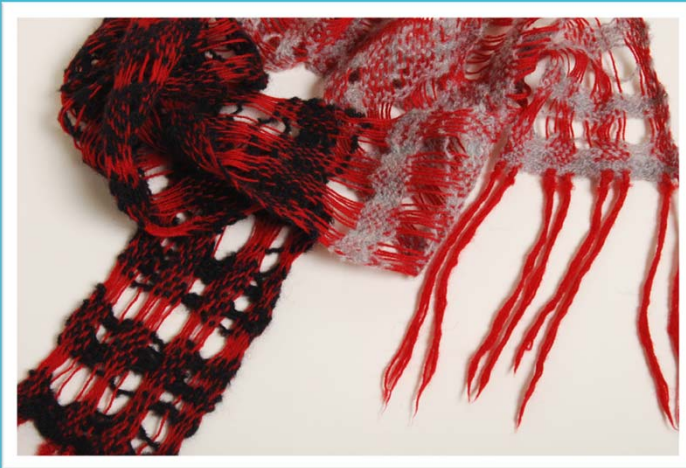
Equipment checklist

Before the class starts, have all of the materials out and ready when the students arrive.



To do:

- Have looms assembled and ready to weave.
- 1 shuttle for each loom.
- Threading hook for each student.
- Warping peg.
- Paper for winding warps.
- Yarn for project.
- Rulers and scissors.
- Handouts—you can print out the Cricket manual from the website.



Introductions

Begin the class with brief introductions as a way for class members to get to know each other.



Introductions

- Introduce yourself.
- Have students introduce themselves. Prompt them if necessary.



Introducing Weaving

Don't assume your students know what weaving is. The loom, no matter how sophisticated is for holding threads taut.



Very briefly, show students an example of the finished project so they know what they are going to make.

You have to be warped to weave.



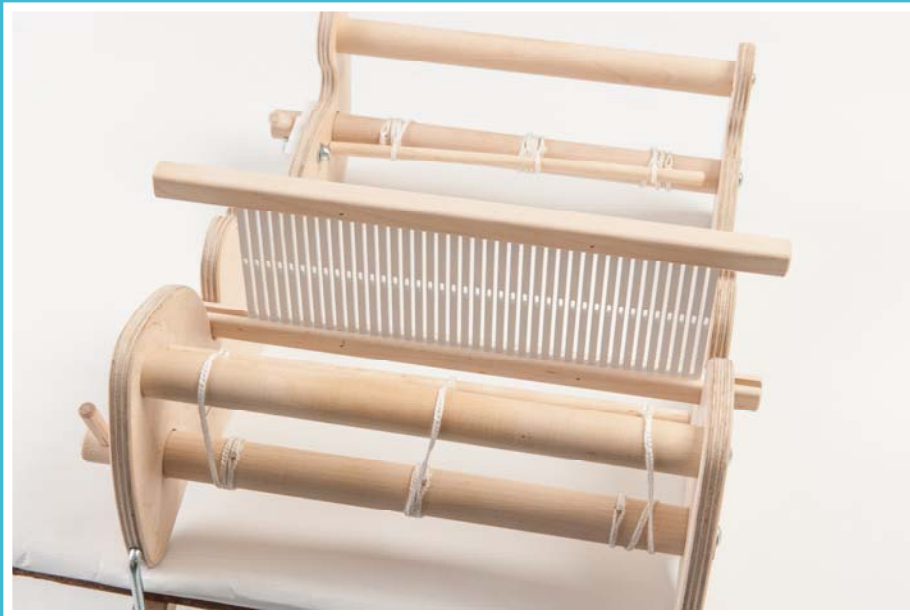
Explaining the heddle

The magic is in the heddle. It has 3 functions: makes the shed, establishes the sett (number of warp ends per inch [epi]), and beats in the weft.



The heddle explained:

- The heddle has slots and holes.
- The hole threads are fixed.
- The slot threads can move.
- Show the heddle in the neutral, up and down positions.
- Place the heddle up, the holes are up.
- Place the heddle down, the slots are up.



Note: to demonstrate warping, make a 2" wide warp. Say all the steps as you go, with an economy of words.

Clamp the back of the loom to the table edge. The back end of the loom is the shorter distance to the neutral slot. Place the heddle in the neutral slot.

Hints:

- Before the class starts, be sure that your tables have a lip for clamping on the looms.
- Setting up the looms for the class—clamp one loom to each end of the table, offsetting them. Teams of 2 will work along the length of one side of the table.





Determine threading point, or the edge of the warp.



Hints:

- Divide the width of the weaving in half. For example, if the weaving width is 8", measure 4" from the center to determine the point to start threading the heddle.
- This will place the weaving in the center of the heddle.
- You can mark the heddle with a string to help students with this step.



Securely tie the warp yarn onto the apron bar with a secure knot.



A square knot is very secure. Tie right over left, left over right.



Threading the heddle: line the knot up with the edge of the warp. Insert the heddle hook into the slot and grab a loop of yarn.



Hints:

- Make sure kids are inserting the heddle hook from the opposite side of the heddle. The hook comes from the front towards the apron bar at the back.
- It is easiest to thread the heddle if the printed side of the heddle is facing the back of the loom.
- It is easier to grab the yarn if it is held under tension.



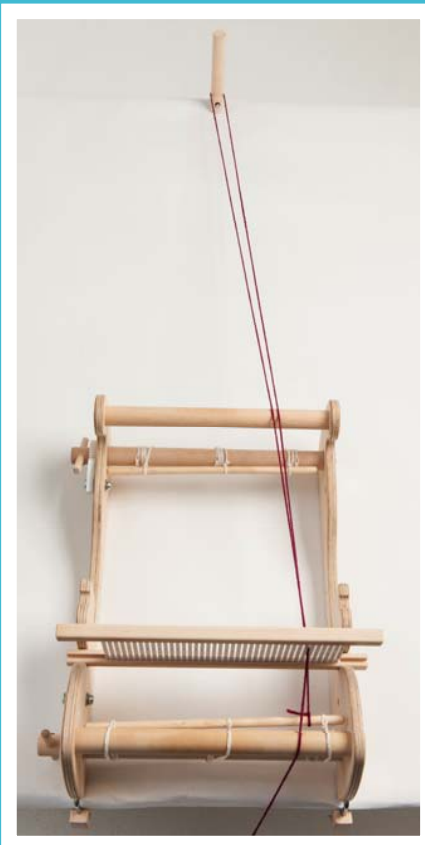
In direct peg warping, you thread the heddle and measure the warp at the same time.

Clamp the dowel to the other end of the table. You want to line it up with the center of the loom.



Warping in teams:

- Working in teams means that students have support, enjoy team work, and do the process twice.
- Pairs take turns: the first time one person threads the heddle and places the warp thread around the apron bar and the other person carries the loop of yarn to the warping peg. The second time, they switch places.

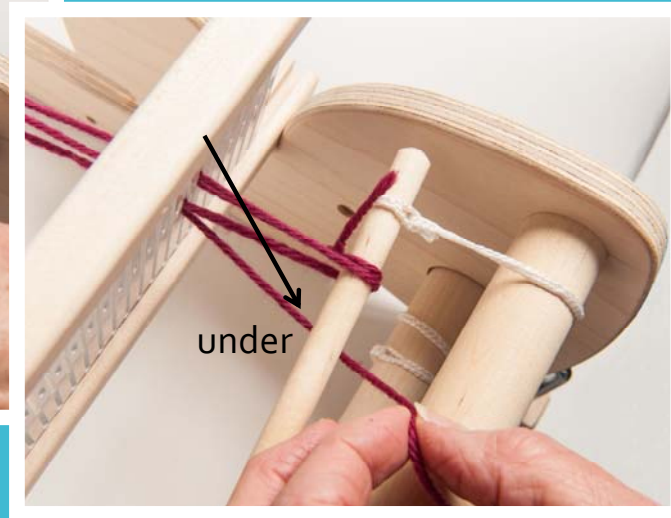


The distance from the back apron rod to the warping peg will be the length of your warp. Generally, 18"-24" is the expected loom waste on the Cricket Loom.



Manage by walking around:

- As students begin working, you can avoid problems by spying mistakes early on. Some of these are outlined on the next pages.
- You will find which pairs are having difficulty. Often partners at the table can be helpful to each other.
- If one student is having problems with a step, have the student's switch jobs or lend assistance.



Show that when going around the apron bar that on one pass the warp goes OVER the bar and on the next pass the warp goes UNDER the bar. It is a continuous warp.



Common mistake:

- Instead of going around the apron rod, students just go into the next slot of the heddle.
- Find this error by looking at the back of the heddle to see if the yarn goes from one slot to the next.
- You can often fix this by pulling out some length from the measured warp threads and tying the loop around the warp beam with a piece of yarn.



There will be two warps in each slot. This is as it should be.



Common mistake:

- Instead of wrapping around the apron bar, the student goes around the back beam.
- If many threads have been done, you can insert a stick along side the warp beam, take off the warp beam, then transfer the threads to the apron rod. You'll need to remove and replace the apron cords as you work.



Changing colors. For broad stripes, tie off color A and then tie on the new color and continue measuring as before.



Hints:

- We suggest making the first warp all one color.
- More than one color can be used on a second project.
- Stripes in warp or weft?
 - Warp stripes are set at the beginning; weft stripes can be changed.
 - It is faster to weave with one shuttle (stripes in warp) than use more than one shuttle in the weft.



Threading 2-end stripes. When alternating colors, thread color A, skipping every other slot, and then fill in with color B. Each stripe is 2 warp threads.



Notes:

- When using the direct peg warping method, it is most straight forward to work in pairs (because the slots have 2 threads).
- You can thread single ends, but this takes a bit of messing around and we don't recommend this for the direct peg warping method.



After all of the threads are measured, tie off the last warp thread at the apron bar.



Hints:

- We suggest checking the student's work before proceeding to the next step.
- The most important thing to check is to make sure that all of the warp loops go around the apron bar. If you see a loop from one slot to the next, pull the loop out the back of the reed and tie onto the apron bar with a piece of scrap yarn.
- Any missed slots can be fixed after the the warp is wound onto the back beam.



Remove the loop with a finger to preserve the end of the loop. Insert scissors into the end of the loop and cut.



Hints:

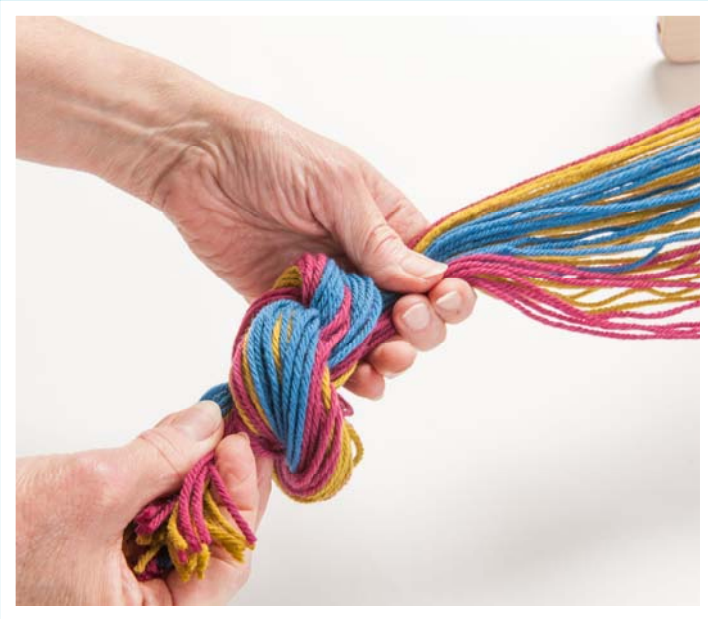
- Hold the loop firmly, as the warp is under tension and might pop off the peg.
- If the end of the loop is lost, try to realign the yarns and cut the group, or pull the warps taut and cut the end loops a few at a time.



After all of the threads are measured, remove the loop from the peg, snip the end and tie in a loose overhand knot



- The purpose of the overhand knot is to prevent the warp ends from going through the reed during winding on.



Tie a loose overhand knot. The purpose of the knot is to prevent the warp ends from going through the heddle as the warp is being wound onto the warp beam.



Hint:

There will be a tendency to tie the knot super tight. Just try to explain that if the knot is tight, it'll be hard to untie. Be prepared to assist with untying these knots.



The warp prepared for winding on.



When working in teams of two, one person will crank the warp onto the warp beam. The other person will adjust the warp in front of the heddle as needed.

When the apron bar reaches the warp beam, it is time to insert the paper.

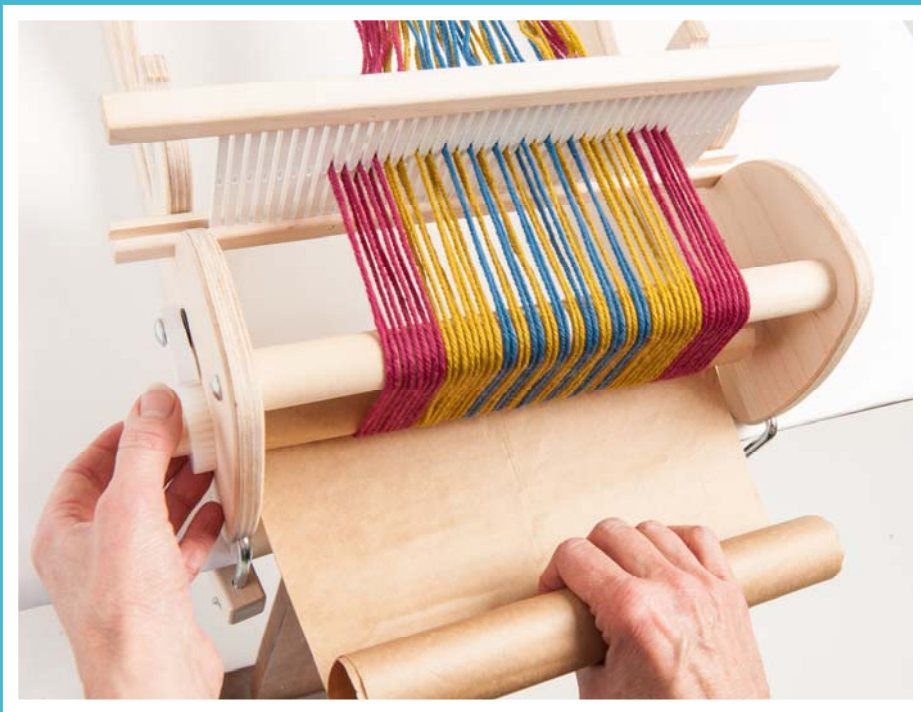
The paper should be about 1" wider than the warp.



Winding onto the warp beam. The warp goes OVER the back beam and around the warp beam. Turn the handle clockwise.



Note:
If the warp goes around the warp beam in the wrong direction, the brake (pawl) will not hold the ratchet gear. The warp should be wound on in a clockwise direction. To check, from the front of the loom, pull on the warp. If it unwinds, the warp is wound on in the wrong direction. Just unroll the warp and begin winding on in the opposite direction.



Wind onto the warp beam with paper.

Things to check during winding on:

- Make sure that the warp is not falling off the edge of the paper as it winds around the beam.
- Be sure that the warp is winding on tightly around the beam—you can tighten it around the beam by pulling on the paper with both hands.



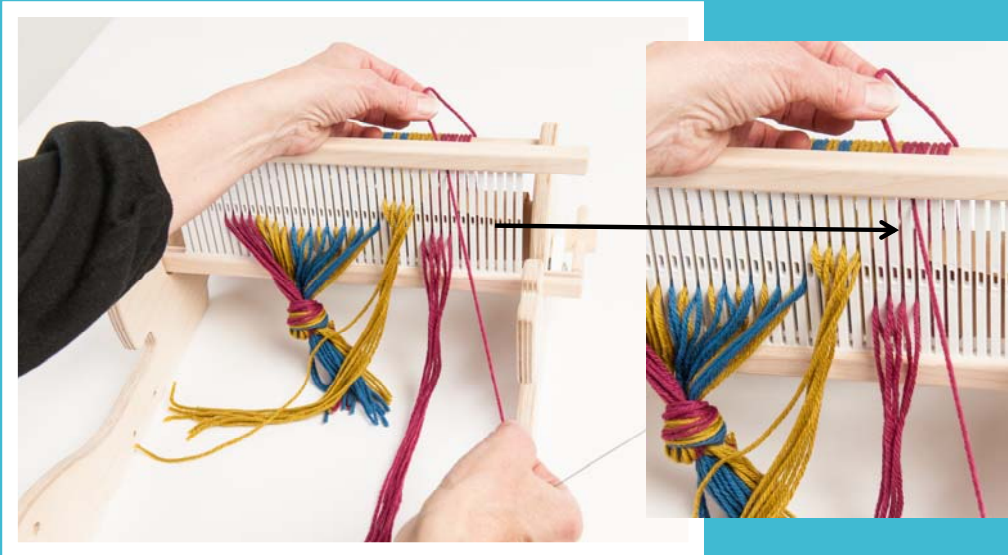


Stop winding on when the warp knot is a few inches from the front of the heddle.



Change Looms

When working in pairs, the students stop working on the first loom at this point and switch to the second loom, repeating the process again up to this point. This way both students have the opportunity to do all of the steps.



Take one warp out of the slot and thread in an adjacent hole.

Threading the holes. Untie the knot and take out an inch or so of warp yarns. Retie the rest of the warp. This safeguards the threads in the heddle and prevents them from falling out if the loom is moved.



Threading the holes

- There are 2 warp threads in each slot.
- Take one out. It doesn't matter which one.
- Pull the warp thread all the way out of the heddle.
- Insert the heddle hook in the adjacent hole.
- You can work to the right or left. It doesn't matter, except that the direction should be kept consistent across the entire warp.



After all of the holes are threaded, check the work to make sure no holes have been missed. Correct any errors.



Hint:
As the holes are threaded, tie loose knots again to prevent the threads pulling out if the loom should be moved and the heddle fall out.

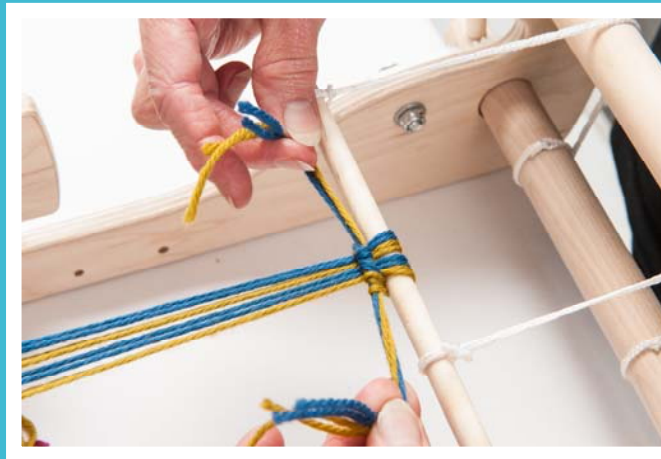
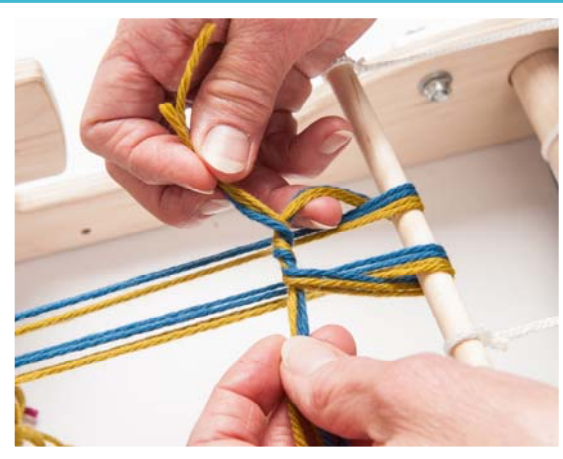


Tie on to the front apron bar. Working in 1" groups, divide the group in half (4 ends per side), take these over the apron rod and around to the outside.



Hints:

- Since groups generally finish at different times, it is often easiest to show this step to individual teams.
- If you start tying in the center, this first knot will support the apron bar when the other groups are tied.

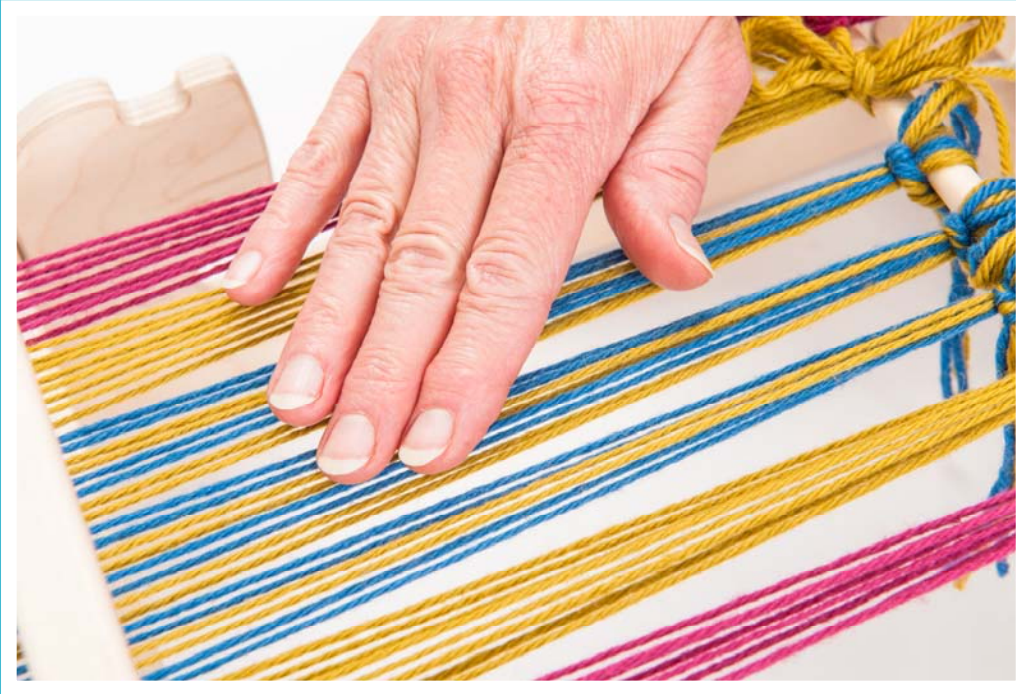


Tie the warp to the apron bar with a surgeon's knot. Bring the two groups around from the outside to the top. Tie them together as for tying your shoes but go around twice (surgeon's knot). Pull up and towards the heddle to tighten the warp around the bar. Then pull down firmly to tighten.



The surgeon's knot

The reason we like to use this knot, is that it holds fast, but can be easily adjusted by pulling up on the knot and then snugging it down again. Tie 1" groups all the way across the warp, working on one side then the other.



Pat across the warp to check for even tension.



Checking tension

We suggest that you check all of the warps prior to having the students tie the final bow tie.

Loosen and tighten groups of knots if needed to achieve an even tension.



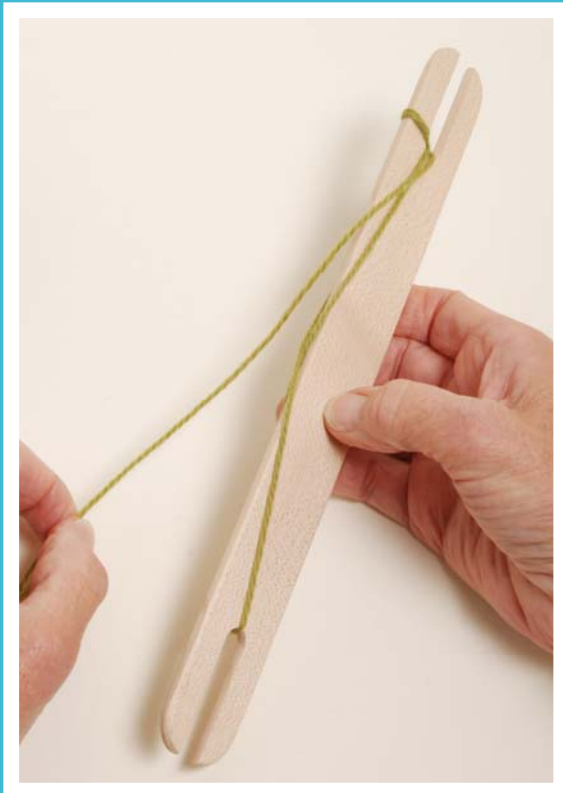
Tie the final bow tie to secure the knots.



Why we use a bow tie

We like to finish the knot with a bow tie, instead of a second knot, because it holds fast and can be easily pulled out to loosen or tighten an area if the tension needs to be adjusted even after weaving has begun.

NOTE: we occasionally come across kids who don't know how to tie their shoes...so you'll have an opportunity to teach this during your class.



Now you're ready to weave! Wind the shuttle with the warp yarn. We like to use a figure 8 pattern.



Figure 8 vs end-to-end

We like to wind a figure 8 along the edge of the shuttle. The yarn comes off easily from the shuttle and more yarn can be wound on the shuttle using this method—and still get the shuttle through the shed.

Kids will often wind their shuttle end-to-end. Just let them use it this way, instead of correcting—they are eager to weave.



Firmly press down the three weft rows as far as possible.

To prepare to weave. It is necessary to spread the warp to close up the spaces between where the knots have been tied onto the front apron bar.



Spreading the warp

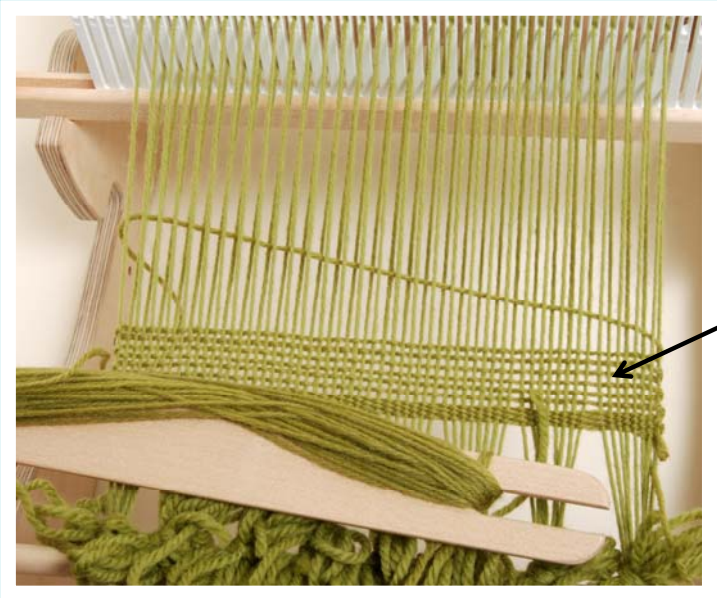
Use the project yarn.

Step 1: Open the shed and insert the shuttle through the opening. Don't beat.

Step 2: Change the shed and weave back to the other side. Don't beat.

Step 3: Repeat a third time and then beat.

Step 4: Repeat steps 1-3 again.



For a balanced weave, weave the same number of weft rows as warps per inch. Look for square spaces between the intersecting yarns.

Weaving. Open the shed (heddle in up or down shed). Insert the shuttle into the shed. The yarn should be snug at the edge but not drawing the edge in. There should be no loops at the edge.



The Weaver's Angle

The weft yarn goes over and under the warp yarns as it travels from one side of the weaving to the other. Because of this, the yarn does not travel across the warp in a straight line. Additional weft length is needed in the shed to accommodate this.

Angling the weft about 30 degrees allows for weft take-up.