

Indigo Dye Library Program

We have done this very popular program 3 times with a total of about 70 people – you can do it too! It takes a while to gather everything but once you have the supplies you can do it over again easily. People loved it and were so happy to be able to join in.

Indigo is amazing because it looks light green in the vat but when exposed to air, oxidizes to a deep blue. See ‘speaking notes’ at end which we used to explain it to attendees.

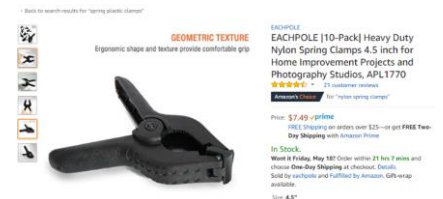
Materials and Supplies

- Jacquard Indigo Tie-Dye Kit(s)
 - You can find these kits for around \$9 to \$13 each.
 - Each kit “dyes up to 15 t-shirts”
 - We had two buckets of dye set up for around 20-25 people.
- Scarves, bandannas, T-shirts (we got ours from [Blick](#), [S&S](#), [Amazon](#), and [Dharma Trading](#))
 - You could also have people bring their own white cotton item to dye, since this is the most expensive of the supplies.
 - Cotton and 100% rayon fabrics dye the best with indigo. Silk doesn’t seem to take the color as intensely.
 - Although some items will say “ready to dye”, I like to wash them first in hot water, with detergent and soda ash, or ‘washing soda’ added. This removes sizing and stiffness. You can get soda ash through Dharma Trading, Amazon, and many other places. Some grocery and hardware stores carry this product which is the same as soda ash.



- A box of cheap vinyl gloves (Lowe’s and Home Depot have them)
- Large zip-lock style bags to take home wet items.


- Things to clamp with:
 - Clothespins (Dollar Tree has them)
 - Spring clamps (we bought two of [this set](#) from Amazon) (these are optional but really nice to have, and can be used over and over*)



- Things to clamp onto, bind into, and around fabric
 - String, rubber bands (lots)
 - Marbles, glass “gems”, small rocks, plastic lids
 - Small tiles, small squares of wood, etc.
 - Chopsticks, skewers, bamboo sticks

- Vessels/containers
 - One or two 5 gallon buckets (ask local bakeries or restaurants for free ones)
 - One or two other large containers for presoaking the bound fabric in clean water.
 - We had some of these party drinks tubs:



- One or two other containers to squeeze excess dye into before laying out the pieces to oxidize.
 - A place to oxidize the dyed pieces so that the air can reach all sides.
 - Really nice but possibly hard to find: free 'bread crates'. I got mine off the side of the road. Place upside down. These are so useful for all sorts of projects!
 - You could also use a large screen or old screen door elevated on bricks.
 - You could use a clothesline if you have room and are outside.
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- A water source, or you can premix the dye in your kitchen, outside at the hose faucet, etc.
 - We did one session without water at the program itself, but it is great if you do have it. Those who didn't want to wait until they got home had to go inside the library and down to the basement auditorium to rinse out their items.
 - Two of our sessions were done at a public park shelter, which had a sink and an outside faucet. That space was ideal!
 - Nice to have: Plastic trays to move wet pieces from place to place so they wouldn't drip on ground/pavement.
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Our Set up

- Dye was mixed an hour or more before the program.
 - Mixing takes less than 10 minutes and is very easy.
- We displayed either actual samples or printed out photos of the samples showing different tie methods for people to look at and copy the folding methods.
 - The samples were numbered and corresponded with the pattern handout.
- We had a variety of string, marbles, clamps – all the things mentioned above – set out in several spaces for people to grab.
- We had the soaking water*, dye buckets, excess dye catching container, and drying rack set up in a line at two or three stations.
 - (*only used at beginning to soak the white, bound items that were about to be dyed)

Our Process

- People arrived and were asked to listen to a short talk about indigo, shibori, and the method we would use to facilitate so many dyeing things at once.
- They then chose a dyeable item and bound it up however they wanted.
 - Some people did this part very fast. Some sat and talked and really worked on their binding/tying/clamping.
 - We had people write their name on a piece of white polyester ribbon and pin it to their folded pieces. That way they could find theirs amongst all the others.
- Assembly lines began as people finished binding
 - People chose to do a job and stay with it for a while. We called these jobs:
 - Wringer: Squeezed excess clean water out of soaking pieces and handed them to-
 - Dyer: Dipped each piece for a minute or two, and passed them on to -
 - Squeezer: Squeezed excess dye out of pieces into a container so they weren't dripping as much
 - Finisher: Took pieces from Squeezer and laid them out on racks

- Deliverer: Worked at racks and kept track of which pieces had been dipped once or twice. Brought pieces back to Dyer for second/third dips.
- All items went through the dye at least twice.
 - The more dips the darker the blue. Keep in mind: the color will look quite a bit lighter when dry.
- When finished dyeing, most people washed out their pieces and showed them off.
 - Note: if people take home their pieces still bound up, you will lose your rubber bands, clothespins, and worst – clamps. If you can allow them to wash them out somewhere, you can save the supplies, plus get a bunch of beautiful photos of their creations!

Results: A bunch of happy patrons!



Other information is available if desired. Contact ekoenig@everettwa.gov for any of the the following:

- Speaking notes (about indigo, shibori, process)
- Numbered images that go with pattern handout (print 8.5x14 size)
- Pattern Handout
- Email message sent to attendees before the program



Photo 1 shows dye bucket, container for squeezing out extra dye, and tray for transport.
 Photo 2 shows bread crates and oxidizing items.

Indigo Dye Program Email message

This is the message we sent out to people who'd signed up, with some links to good videos to watch beforehand:

Hello everyone!

Please reply with whether you will still be attending or not. (reason is below)

You are signed up for the indigo dye program (details below) this Wednesday beginning at 5pm.

There are some important things we need to tell you; please read:

- The class is full with a waiting list so please let me if you can no longer attend.
- This event is on the patio which is accessed through the doors to the rear of adult fiction.
- You will get a cotton bandanna to dye, but if you'd like to bring another item make sure it's all cotton, white, and fairly small (t-shirt, tank top, scarf, cotton fabric scrap, napkin, pillowcase). Rayon and linen also work well, but no synthetics.
 - Before the class, make sure to wash your extra item in very hot water as any oils or residues will affect the result.
- Wear old clothes!
- Please be on time. We won't have a chance to repeat the instructions because we will likely be busy.
- We will give a brief overview but here are a few short videos we highly recommend you watch to get the idea of what we will be doing.
 1. Nice general video with some good information: <https://www.youtube.com/watch?v=aZsWBxkKQys>
 2. This one shows some folding methods, (although she did not use indigo dye): <https://www.youtube.com/watch?v=KOot-ysZXOk>
 3. Although she is dyeing beach towels, this is a good overall video: https://www.youtube.com/watch?v=zBauv3n_21o
- We will have rubber bands, string, marbles, clothespins, clamps, etc. but if you think of some other item to bring after watching the videos, feel free.

Indigo Dyeing

Almost all blue dye comes from an organic compound called indigoid found in a variety of plants. These plants grow in many areas around the world and have been used to dye fabric for over 5000 years. Several scraps of cloth were found in Peru that are believed to be 6200 years old. The history is quite amazing. Cloth dyed with indigo was very valuable. Slaves were purchased with one piece of indigo dyed cloth. Trading for indigo was a huge business. Women kept indigo cloths protected and hidden because they were so valuable. Indigo has also been extracted from sea snails by ancient Egyptians!

In the 1700s, indigo was grown in S.C. because it was more profitable than sugar or cotton. (It was eventually replaced by tobacco) Jeans were dyed with real indigo originally but now almost all indigo dye is synthetic, since it was invented in 1880. You can buy very expensive jeans dyed with real indigo though!

The Dye Itself

It will seem like magic when you see the yellow-green fiber slowly change to blue before your eyes. This is because of oxidation that happens when the fabric is removed from the vat. Oxygen in the air reconverts the weakly attached indigo and allows it to attach to the fiber, forming a stronger bond and allowing the blue color to emerge.

You shouldn't splash or disturb the indigo in the bucket too much because oxygen will get in and weaken the color. This is because the previously alkaline pH moves toward neutral which causes the dye to not bond with anything.

The Tying: Shibori – “Japanese tie-dyeing”

There are at least 6 kinds of shibori.

- We have three methods shown in our examples
 - Kanoko (keh-NO-ko)– tying, binding with thread or rubber bands
 - Itajime (i-TEE-ji-meh) – clamping or tying on object to act as a resist
 - Kumo – wrapping or binding objects such as rocks or marbles into the fabric

Tips on dyeing

- Essential: Put your name on a piece of ribbon using a marker and pin it to your folded or bound piece. They will look a lot alike and we want you to go home with yours!
- Wear gloves! The blue takes days to wear off of your hands.
- Always wet your fabric first! Massage to get the water in the folds, then squeeze out excess right before adding to vat.
- No splashing in the dye vat!
 - Gently dip and undip. Very gently immerse fabric. Keep hands under water and gently squeeze before lifting out of dye.

- Dip at least two times. For dark colors you'll want to dip more. (we may not be able to do that due to time)
- Dip for 30 seconds to a minute.
- Lay out your pieces to oxidize on the 'bread trays' until they are completely blue (fully oxidized)
- Redip if desired. Remember, the color will be much lighter when dry.

After dyeing: If possible rinse with cold water while opening. This will keep your whites whiter. Start with cold, then move to warm, rinsing until clear. It is recommended to soak in a tub with citric acid (1tsp/gallon) if you have it. (we do not)

Wash in washer on cold *alone* the first time.

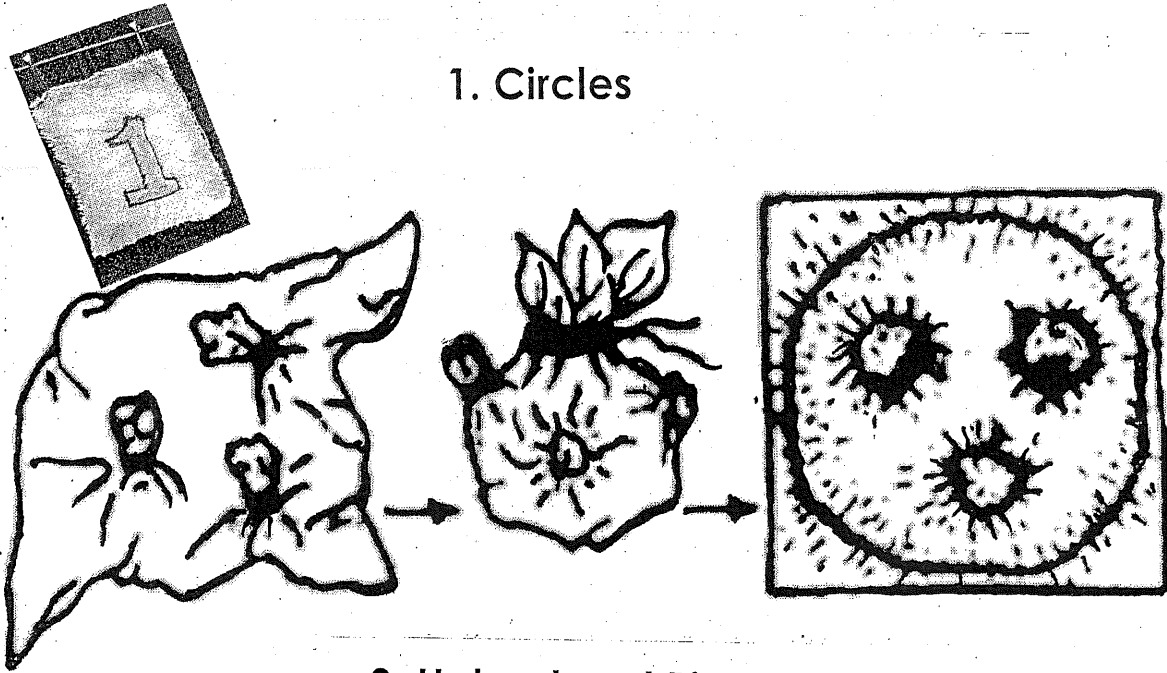
What you will do individually:

1. Look at samples, decide what you want to do.
2. Wrap, clamp, tie, or bind your two pieces.
3. Write your name on strips of cotton and safety pin to bound pieces.
4. Place dye-ready pieces in one of the three water bath.

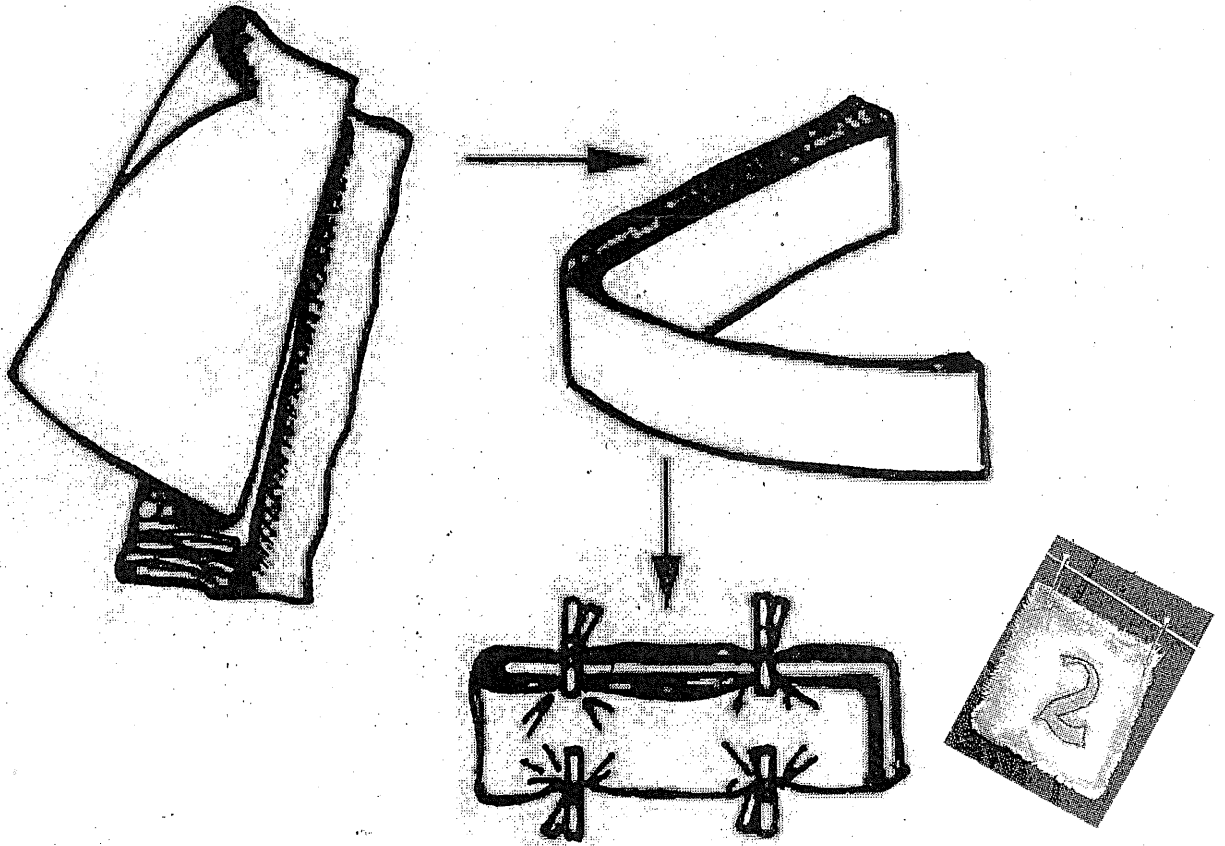
Group process (5 people at 3 stations)

1. Wringer: squeezes out excess water, hands dye vat person one piece at a time when ready.
2. Dyer: Gently dips and un-dips. Very gently immerses fabric. Keeps hands under water and gently squeezes before lifting out of dye.
3. Squeezer: Takes dyed pieces and squeezes excess dye into tub, hands to finisher.
4. Finisher: Takes pieces and places them on bread trays, making sure to spread them out as much as possible so air reaches all surfaces.
5. Deliverer: Takes oxidized pieces back to dyer for re-dipping (not back to wringer!)

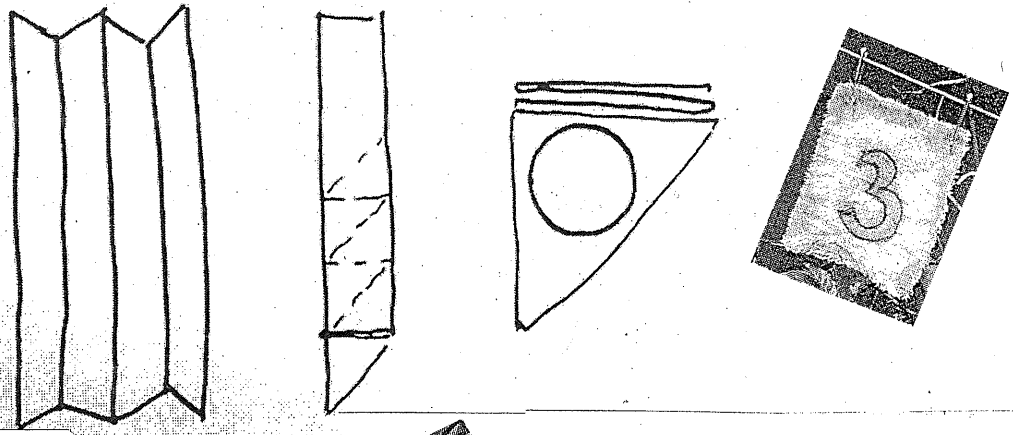
1. Circles



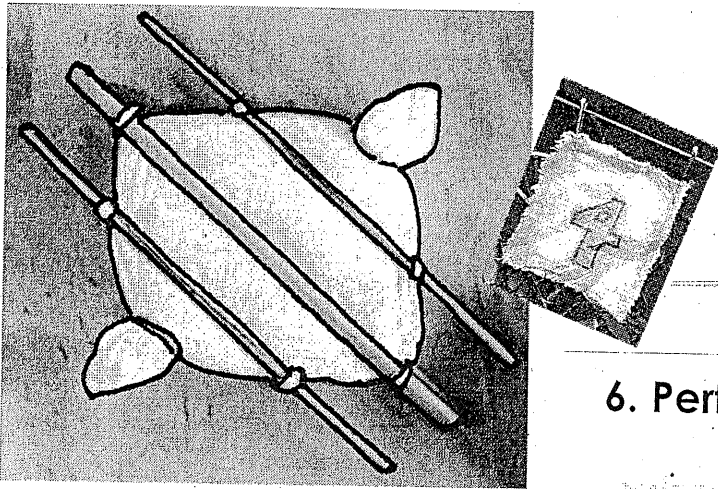
2. Halved and Pinned



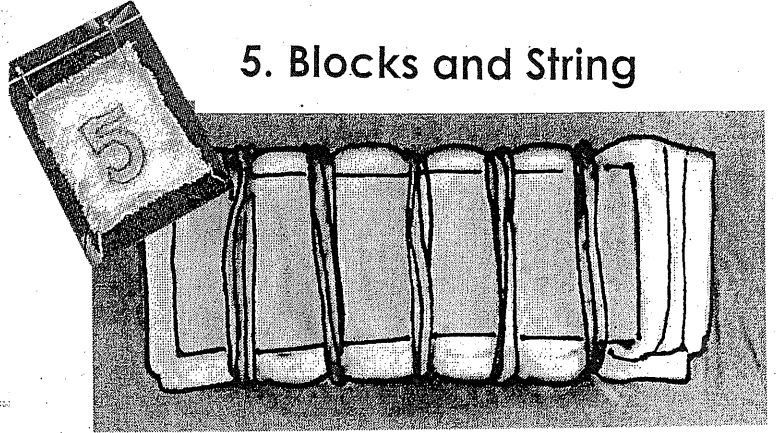
3. Edge Spots



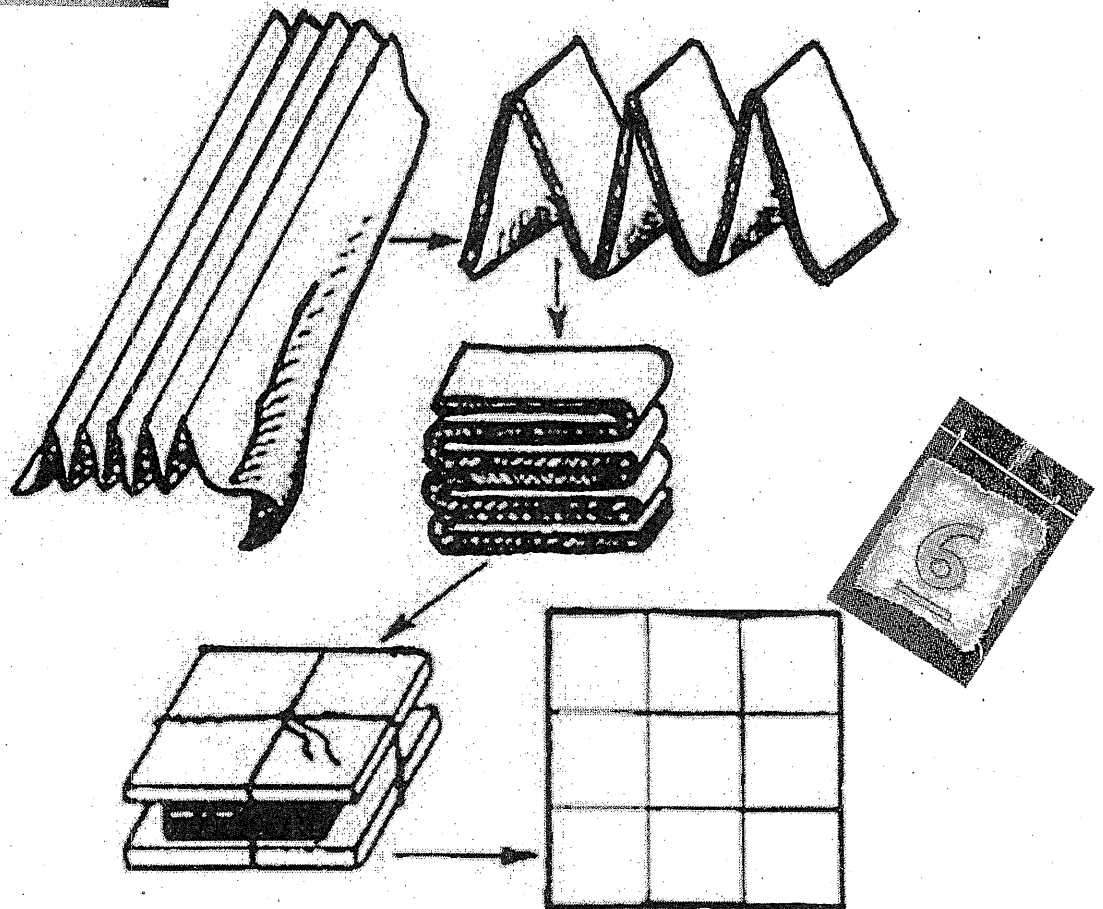
4. Xs and Diamonds



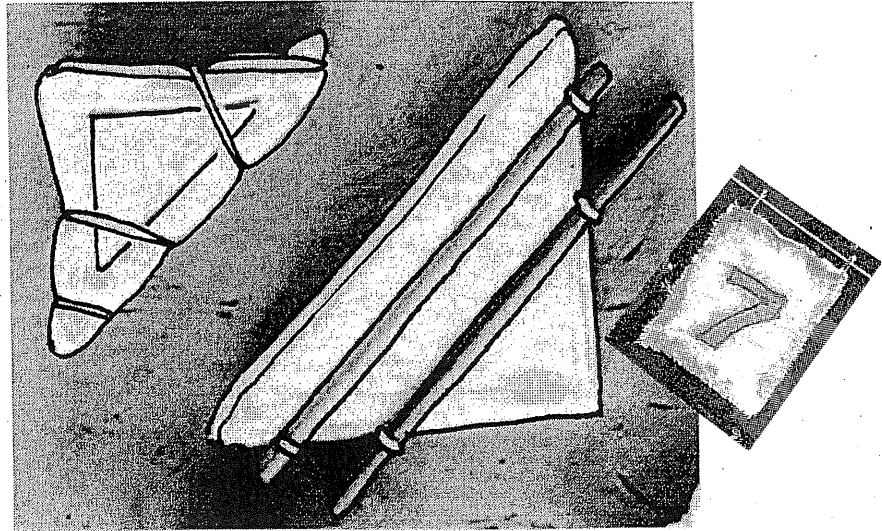
5. Blocks and String



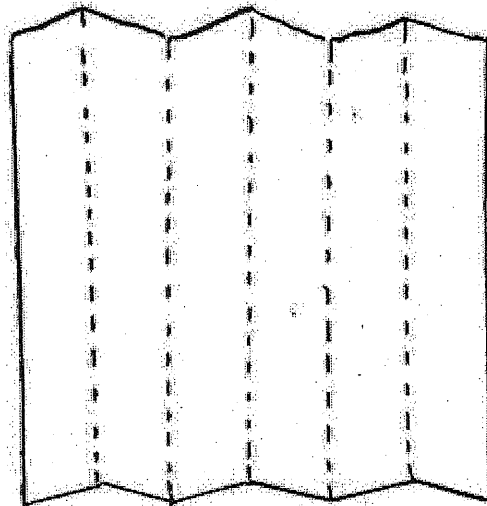
6. Perfect Squares



7. Chevron Edges



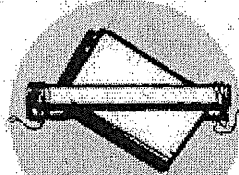
8. Narrow Diamonds



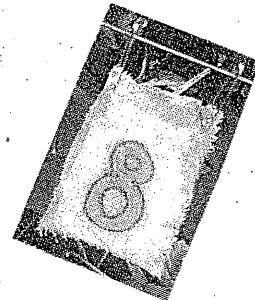
ACCORDION FOLD IN 4



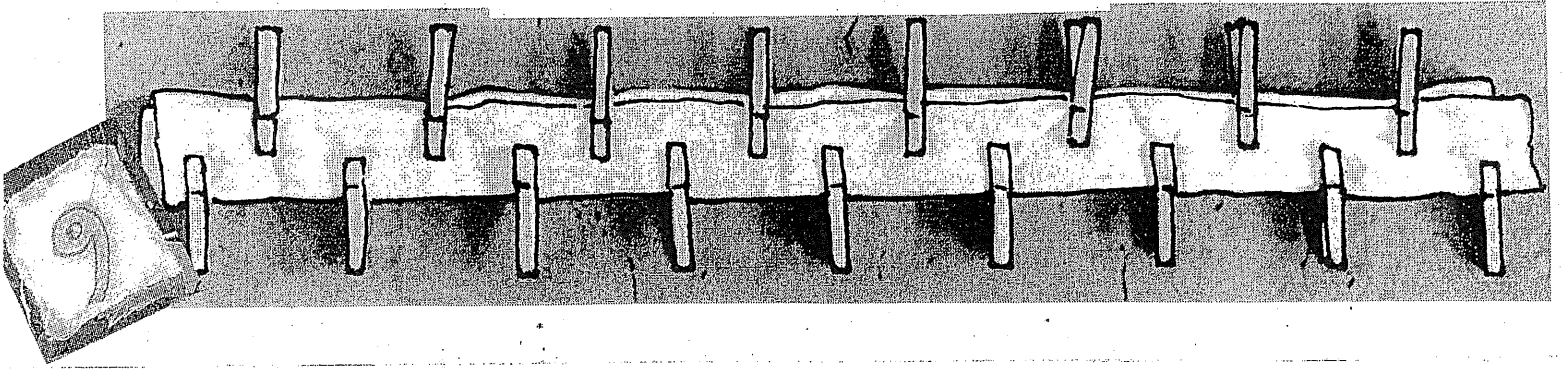
TIGHTLY TIE ENDS OF CLAMP



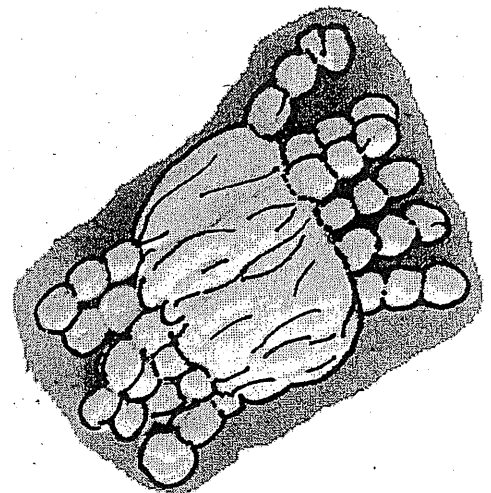
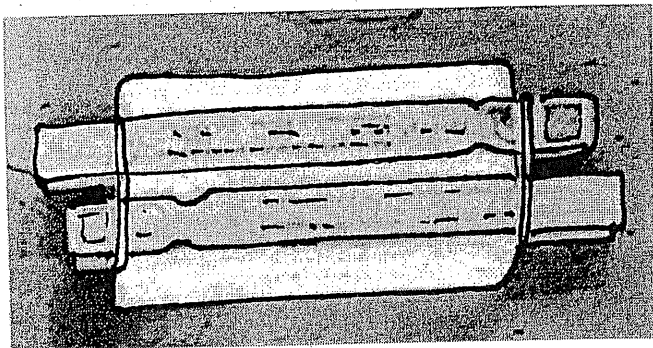
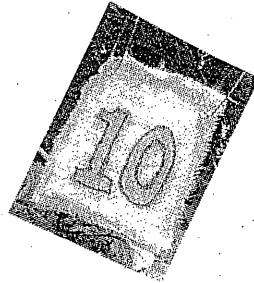
READY TO DYE



9. Clamped by Clothespins



10. Sun on the Water



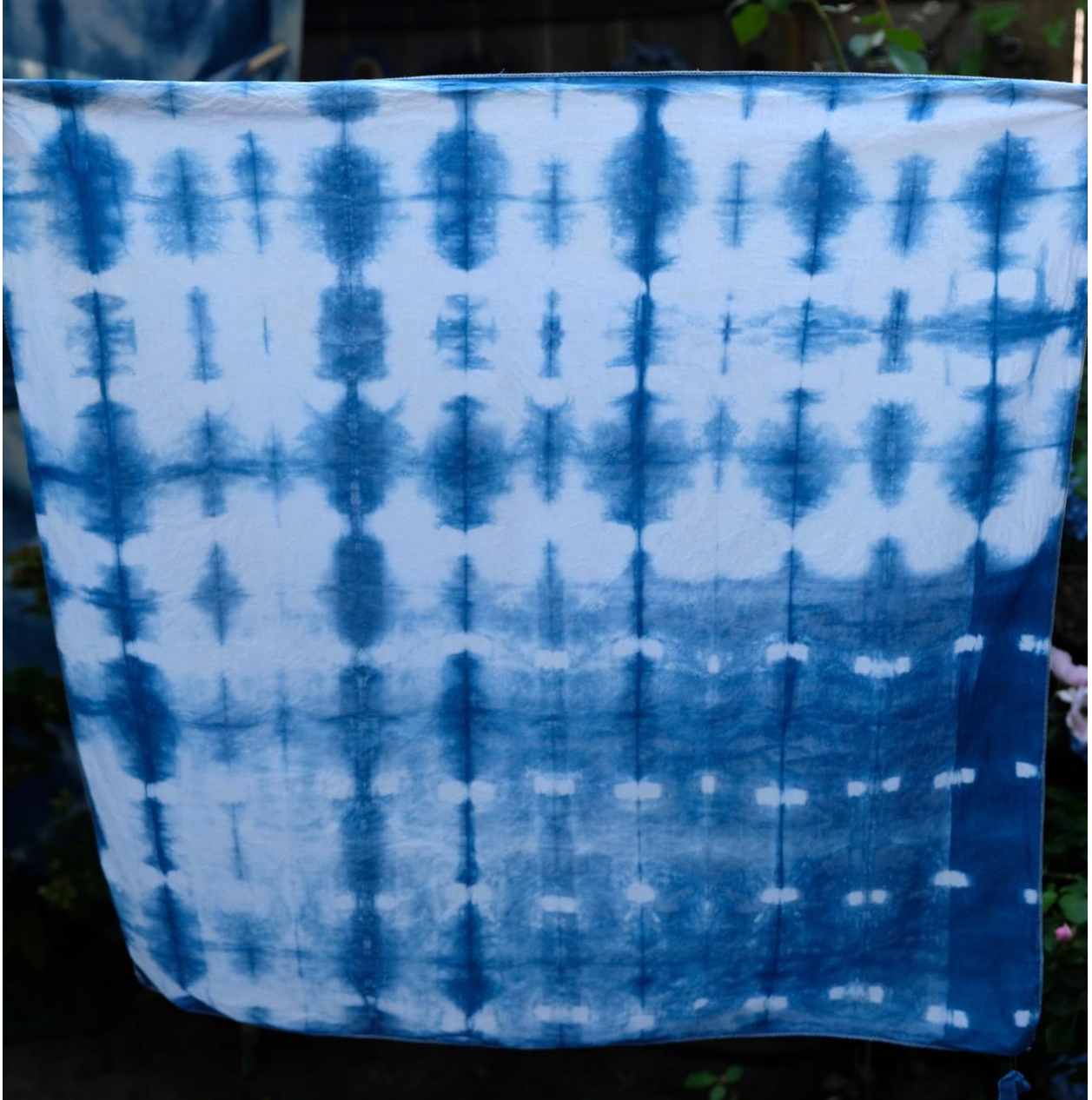
5. Blocks and String (itajime)



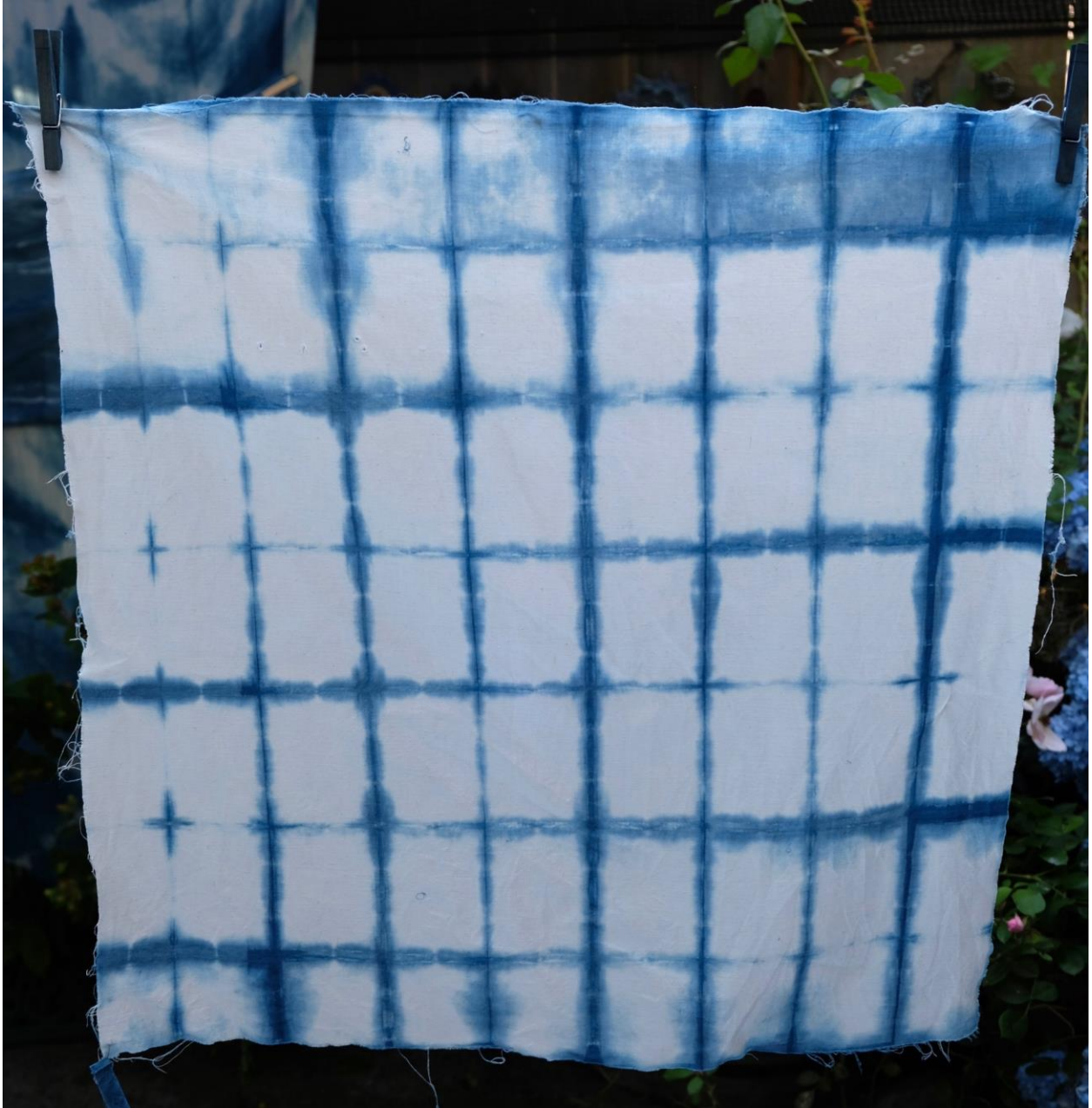
10. Sun on the Water (kinoko)



2. Halved and Pinned (itajime?)



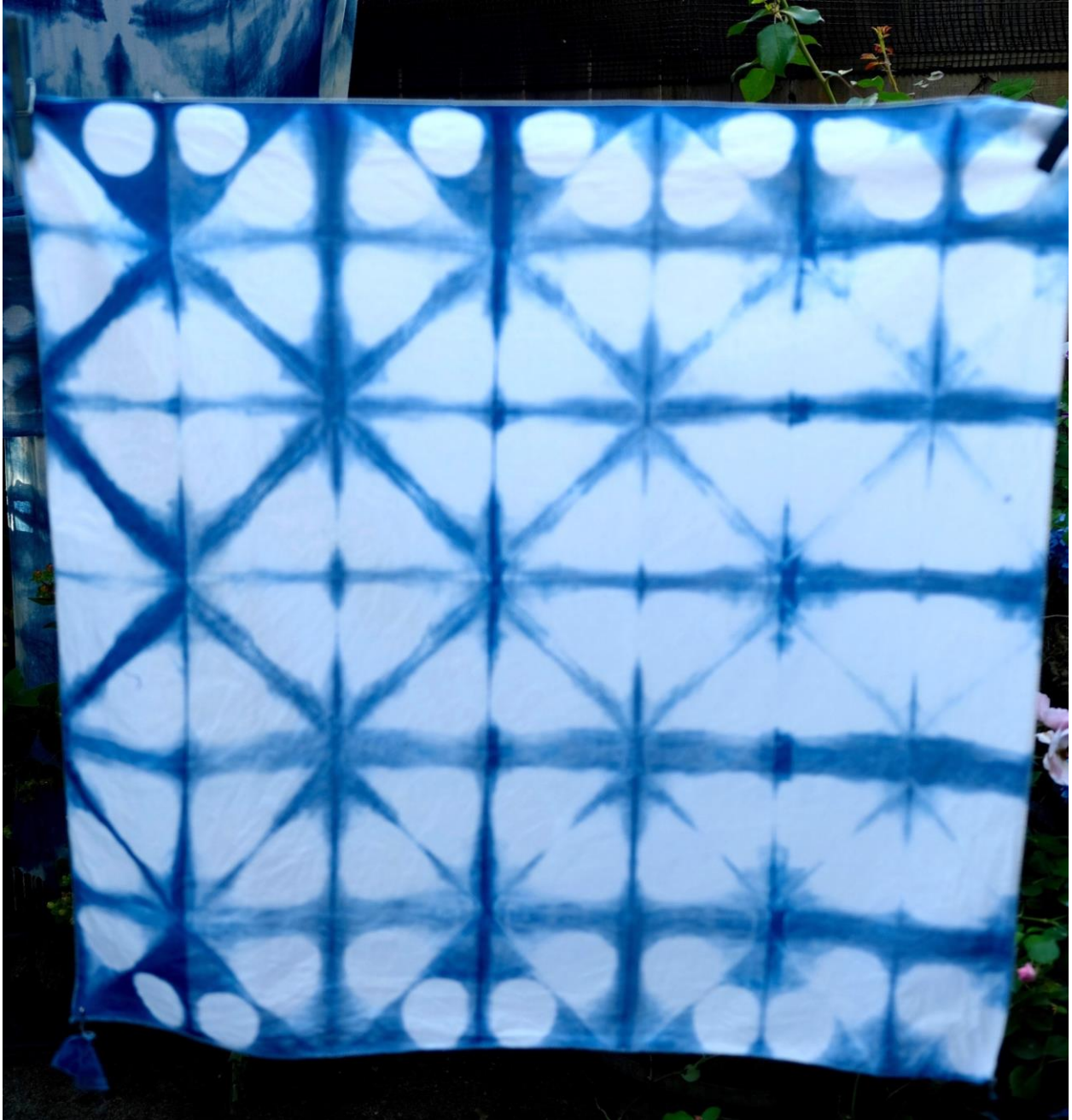
6. Perfect Squares (itajime)



8. Narrow Diamonds (itajime)



3. Edge Spots (itajime)



1. Circles (kumo)



4. Xs and Diamonds (itajime)



7. Chevron Edges (itajime)



9. Clamped by Clothespins (itajime)

