



ARTS PLUS

Triangle Accordion Books

A fun Saturday workshop for adults

“Part Two: Assembling the book”

Time from start to finish = 1 hour

You will need the following materials:

- **Heavy paper, which will be cut into three 4 5/8” X 20” strips, the best option is to cut these strips from one large 22” X 30” sheet of watercolor paper** (this will be used for the inner “accordion” of the book)
- **2 pieces of chipboard or thick cardboard, 6x6 inches each**
- **Painted paper or scrapbooking paper at least 6x6 inches in size**
- **Pencil**
- **Ruler**
- **Glue** (regular white glue or glue sticks)
- **Clean scrap paper**, computer paper or newsprint is good
- **X-acto Knife** or scissors
- **Cutting matt** (or a piece of scrap cardboard to protect your work surface)

Brief description:

The next part of our process is to measure, cut and assemble your book. This part is made up of several smaller steps within each major step and requires precise measurement and patience. For Part Two, I suggest making a cup of your favorite tea and putting on some relaxing music in the background. While, this may be the most challenging step for some, if you follow the instructions closely and don't rush, you should come out of it with a fully assembled book ready for creative alteration and decoration!

For those new to bookmaking here are a few helpful hints:

- **Measure! Measure! Measure!:** Nothing is more disappointing than assembling several pieces only to find at the final step that they don't quite fit, especially when you're out of materials to try again! During this process, we will be measuring out strips of paper, then folding, cutting and gluing them together at specific points. When you measure out a large sheet, make your initial measurement marks on both the top edge and bottom edge of the paper, then use a ruler to match up the marks. This ensures both accurate measurements and straight dividing lines.
- **Cutting with an X-acto:** If you are using scissors, it is best to use a drawn ruler line for your cuts; however, if you are using an X-acto knife (which I prefer) it is best to use a ruler *while* you cut. Simply spread out your paper with your measurement marks at both the top and bottom of the sheet, line up

your ruler with your two marks to make a straight line, use one hand to press firmly down on the ruler (which will hold your paper in place), and drag your X-acto knife along the edge of the ruler to cut a perfectly straight line.

- **Glue application:** A heavy coating of gluestick works perfectly well for this type of bookmaking and tends to be less messy. However, If you are using white liquid glue like me, I find it best to use a brush to apply the glue to different surfaces. Before you start gluing, lay down a piece of scrap paper as a protective surface. Then place the paper you wish to glue face down on top of your scrap paper. Spread glue on the back of your paper all the way up to the edge of the sheet (the scrap paper underneath will catch any overlap and reduce mess).

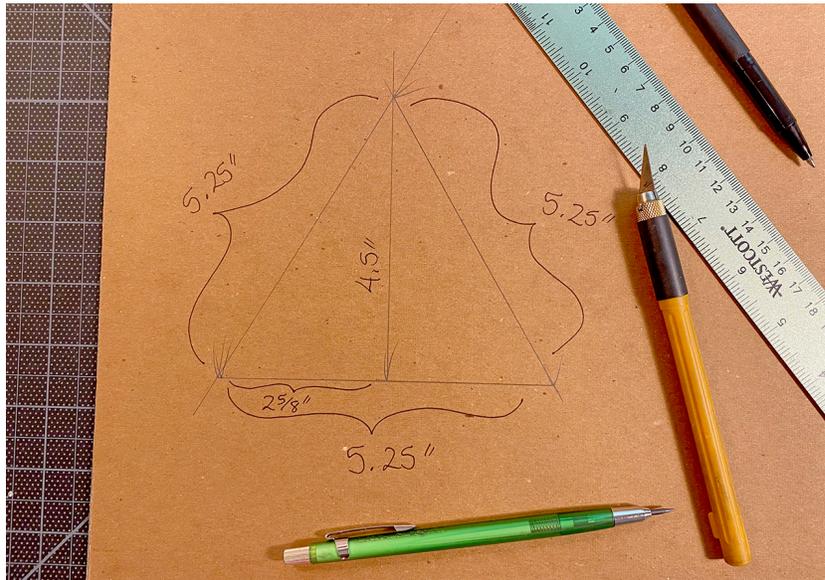
Steps

- **#1: Set up your workspace with a cutting surface.**

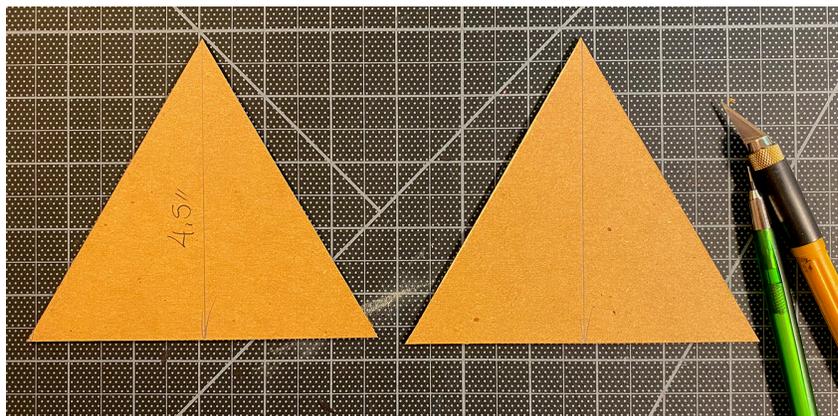
Gather together your chipboard or cardboard.

Start by measuring out an equilateral triangle on each piece of cardboard.

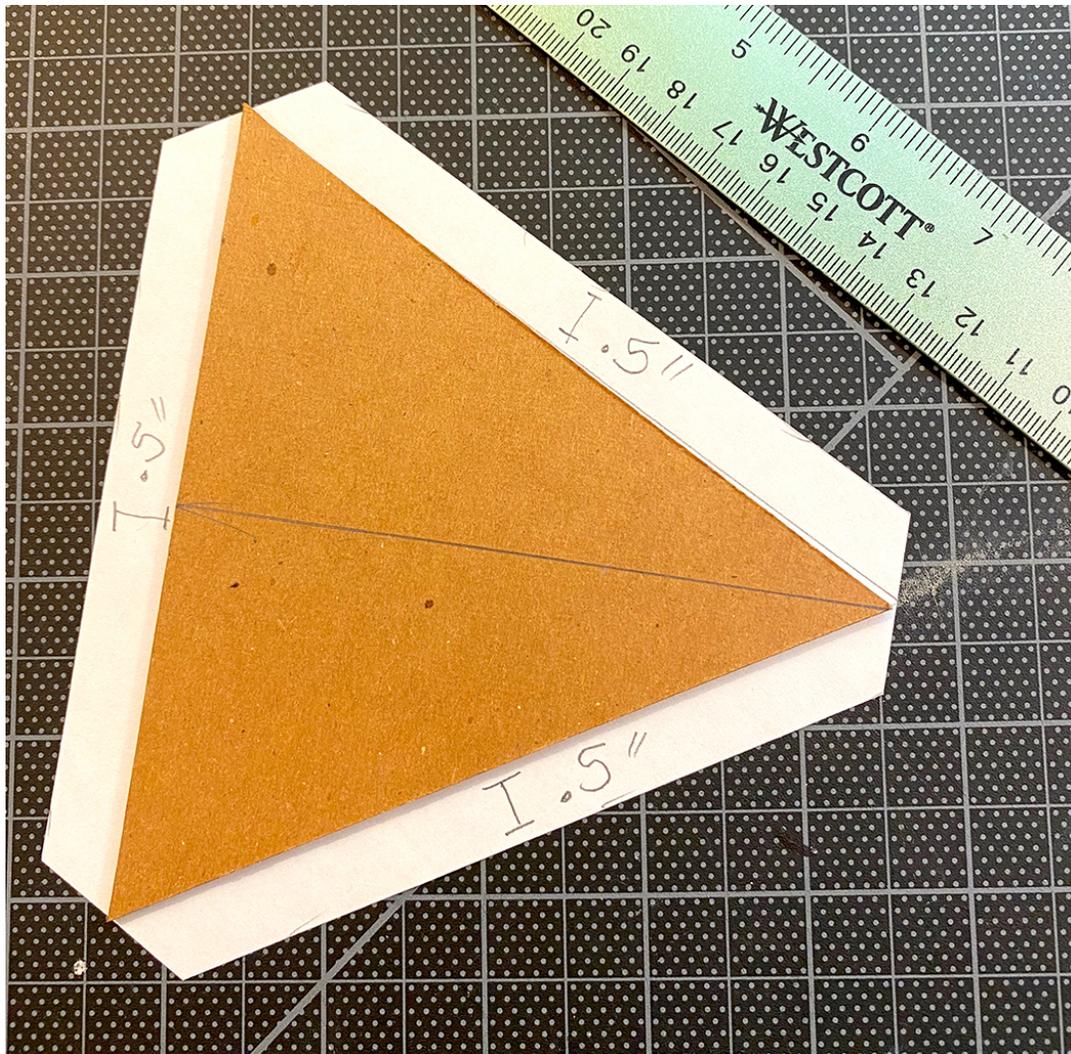
To do this, first measure and draw out a line that is $5\frac{1}{4}$ " wide. Then mark the exact halfway point of that line (which will be at $2\frac{5}{8}$ "). Up from the halfway point, and perpendicular to the first line, draw another line that is $4\frac{1}{2}$ ". Now connect the end of the $4\frac{1}{2}$ " line to the ends of the first line and you will have a perfect triangle, with all sides measuring exactly $5\frac{1}{4}$ " in length.



Now cut out your two triangles, with an exacto knife, or scissors if you prefer.



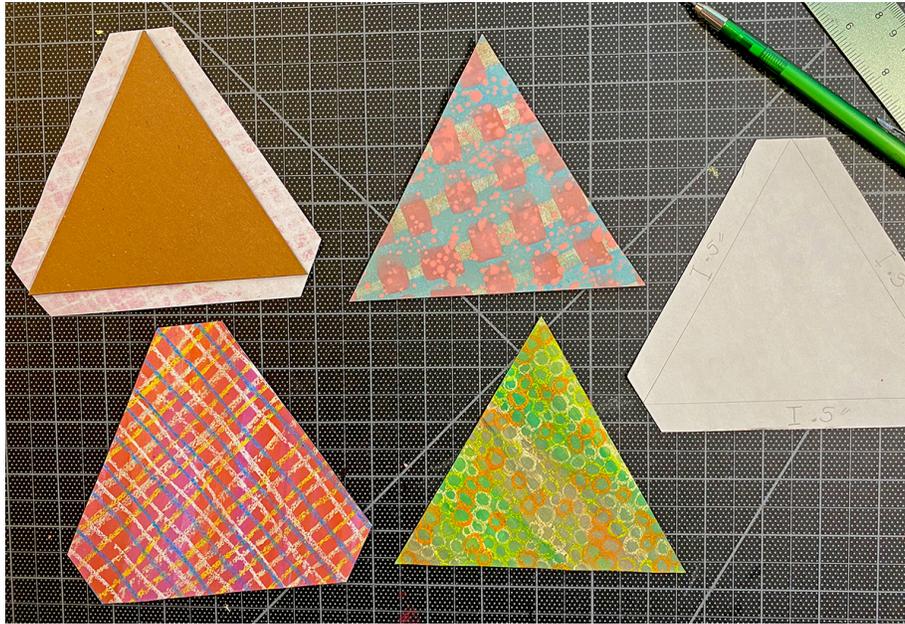
Next, choose two pieces of painted paper or scrapbooking paper. These two pieces may be contrasting or similar colors or patterns. I chose two pieces with the same pattern and color palette. Flip over your painted paper to the back, unpainted side. Place your cardboard triangle on top and center it in the middle of the page. Trace the triangle on the back of the painted paper. Now draw a border about $\frac{1}{2}$ " from the edge of the triangle. This will give you an edge to fold over and cover your cardboard edges when you are gluing. Finally, cut out the larger triangle.



Now it's time to glue the decorative paper to the cardboard. Cover your work surface with scrap paper first. Then lay out your two pieces of triangle cardboard and your two pieces of triangle painted paper. Flip your painted paper over with the "good side" (the side you want to show) down. Using your glue, cover one side of one piece of cardboard. Once you have covered the entire surface, lay the glue side of the cardboard down onto the center of the back of one sheet of painted paper. The painted paper is larger than the cardboard and should leave an overlap edge. Repeat this gluing process with the second piece of cardboard and painted paper.

• **#2: Complete your bookboards** by using scissors or an exacto knife to cut off the *tips of the triangle paper* that extend past the cardboard edge.

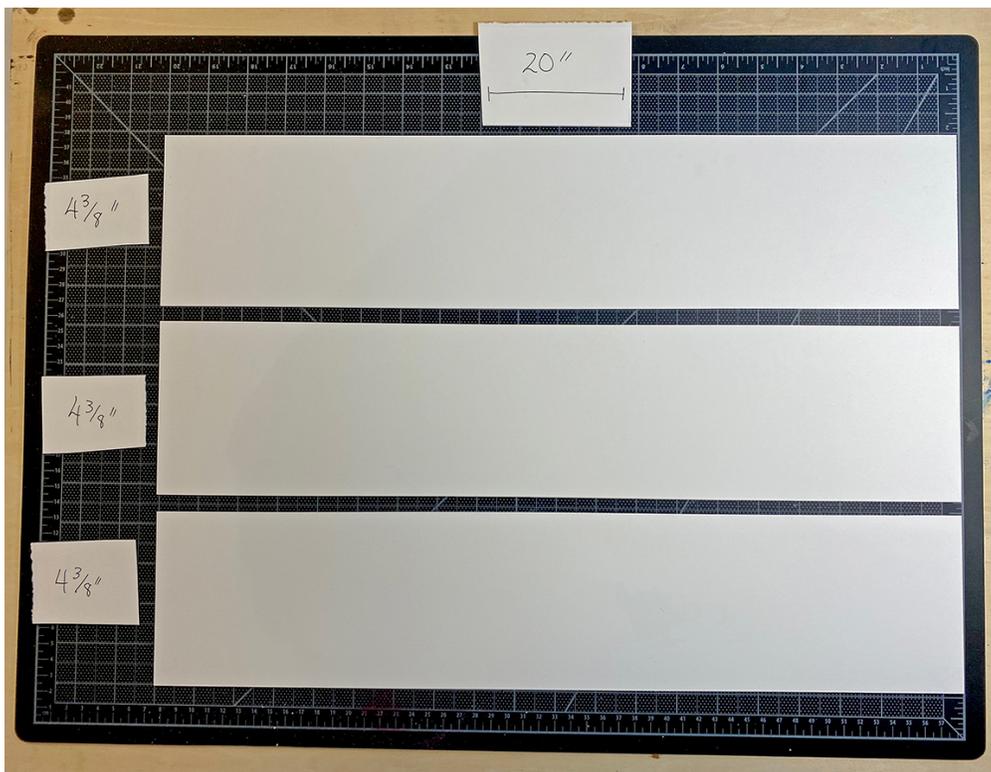
Now we are going to finish the edge of our bookboards by doing a "wrap to back". Add glue to the remaining paper edges that extend beyond the cardboard and fold them back over the cardboard. This wrapped edge both ensures that your paper will stay attached to the cardboard and creates nice clean edges for your book covers. Do this "wrap to back" process for both of your bookboards.



This image shows how the cardboard triangles fit within the larger triangle cut from my painted paper. The excess edge is used for the wrap-to-back gluing. I will use the blue and green painted papers for the “endpapers” on the interior of my book’s front and back cover.

• **#3: Cut and fold the inside pages of your book.** The cutting and folding for the inside “pages” of your accordion book requires careful measurement and a bit of patience but it is really not that difficult to accomplish.

First off cut three strips of paper that are exactly 20” long X 4 3/8” high.



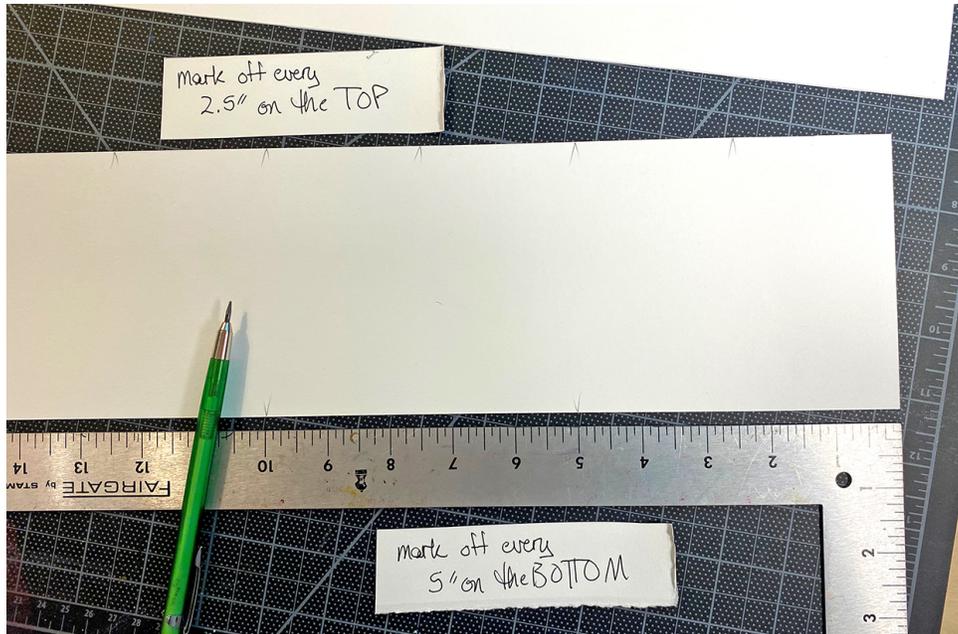
I cut my three strips from one sheet of heavier paper (a 22" X 30" sheet of Rives BFK). I would suggest using a heavier paper, perhaps 90 lb. or 140 lb. watercolor paper or 90 lb. Bristol board, although any paper will do in a pinch. You just want to make sure that your interior book paper is strong enough to take continued folding without tearing, and strong enough that it will "stand on its own" once the book is completed and opened out to display the full accordion.

Once you have your three long strips, you will measure them out for folding. This folding process will create the accordion on the inside of your book.

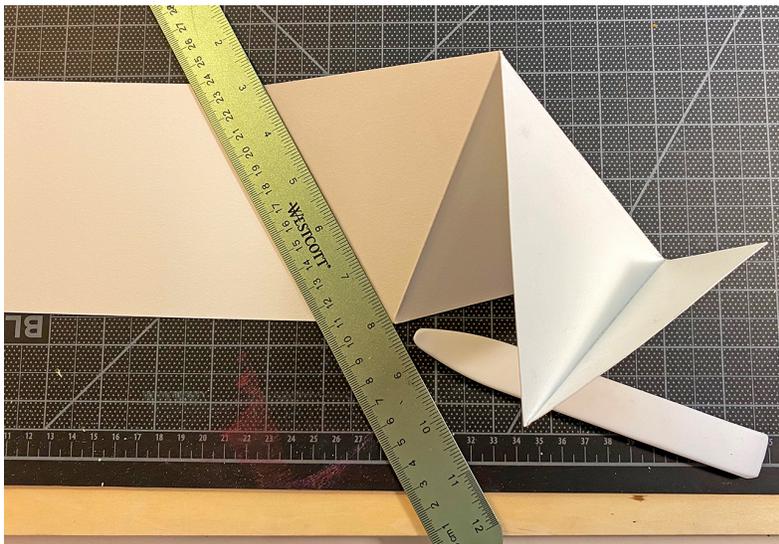
Work with one strip at a time. Start by deciding which side of the strip will be the "top" and which will be the "bottom".

Measure, and mark lightly with a pencil every 5" at the bottom of your strip.

Measure and mark lightly with a pencil every 2 1/2" at the top of your strip.



Now we will make the accordion fold as a zig-zag, running the length of the paper strip. You can keep these folds crisp by folding against the edge of a ruler. I use a bone folder to do this, but if you don't have one, you can use the handle end of a spoon, the handle end of a paintbrush, or your thumb.



To make a fold, line up your ruler from the first 5" mark at the bottom of the strip to the first 2 ½" mark at the top of your strip. This will create a fold at a diagonal.

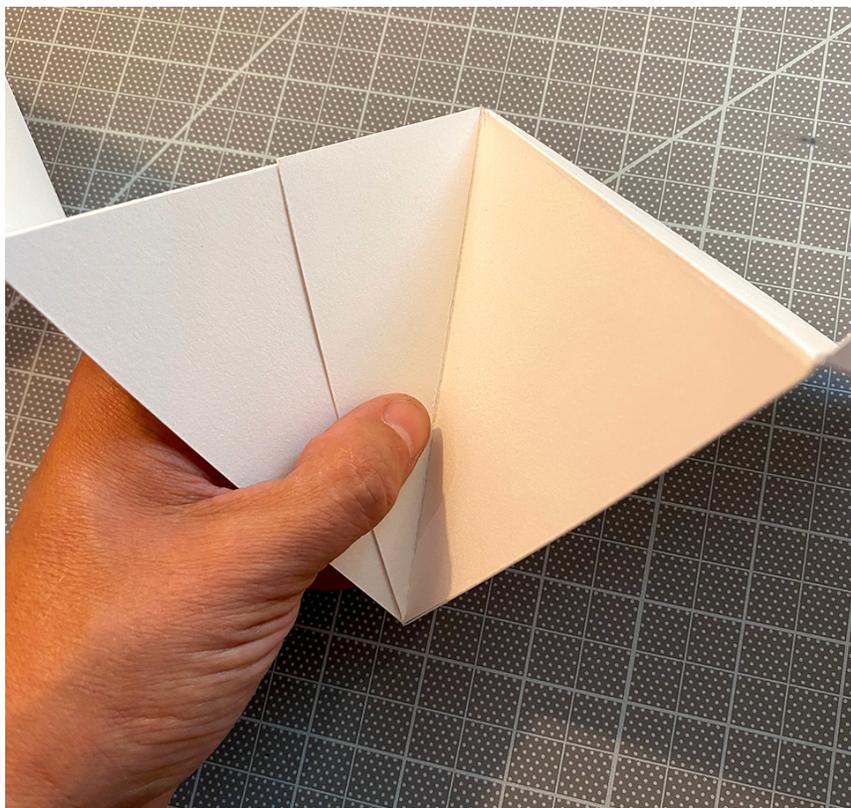
Continue to fold the paper strip back and forth, always lining up the next 5" mark with the next 2 ½" mark. Flip the strip over and switch sides of the paper as you go, so that the creases create a triangle shape that folds back on itself. If you are unsure about this folding step, practice first on a smaller sheet of scrap paper.

When you have completed folding the first strip you will have a pleat made up of a series of triangles that neatly stack together. At each end of your folded strip, you will have a smaller "half-triangle" leftover. Don't trim this off yet! You will need it as a tab to hinge your three different strips together.

Now fold the second and third strips just as you did the first one.

Take a moment to congratulate yourself, you have completed all the folding!

It's time to join the three folded strips into one long strip of accordion paper. To do this, line up the short "half-triangle" at the end of one strip with the half-triangle at the end of another strip. Set them up so that one fold nests in the other fold.



Now choose one of the strips of paper and trim off that half-triangle part with scissors or an exacto knife. Line up the half-triangle from the other strip so that it meets exactly at the cut edge. (This will be your glue tab to connect the two sheets of paper.) Carefully apply glue to the half-triangle and attach it to the other strip. I recommend pausing for a moment here and setting the glue tab to dry under weight, perhaps under a small stack of books.

Repeat this gluing process and attach the third strip to the other two. You should now have one super long triangle accordion fold of paper with a half-triangle tab on each end. (Don't trim these off yet, as you will need them in the next step.)

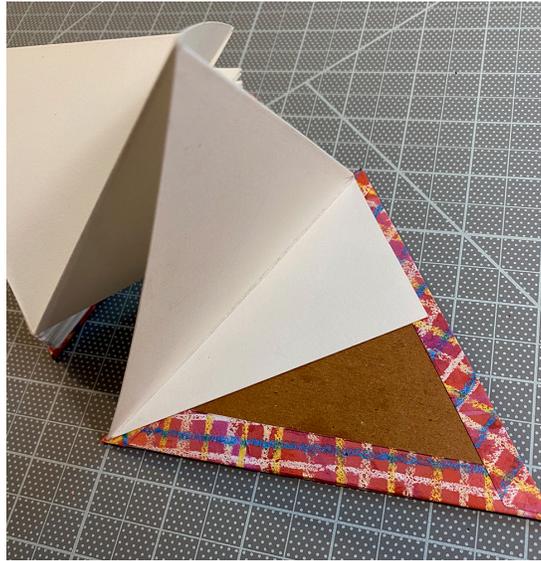
- #4: Glue your pages into your bookboards.

The final part of book assembly involves gluing your interior, super-long accordion fold paper to your front and back covers.

Start with the front cover. You will simply apply glue to the half-triangle tab at one end of your accordion stack, line it up with one side edge of the bookboard and press to set in place. (Because we are working with an equilateral triangle, all sides are the same and the orientation of the cover to the bookboard doesn't matter!)

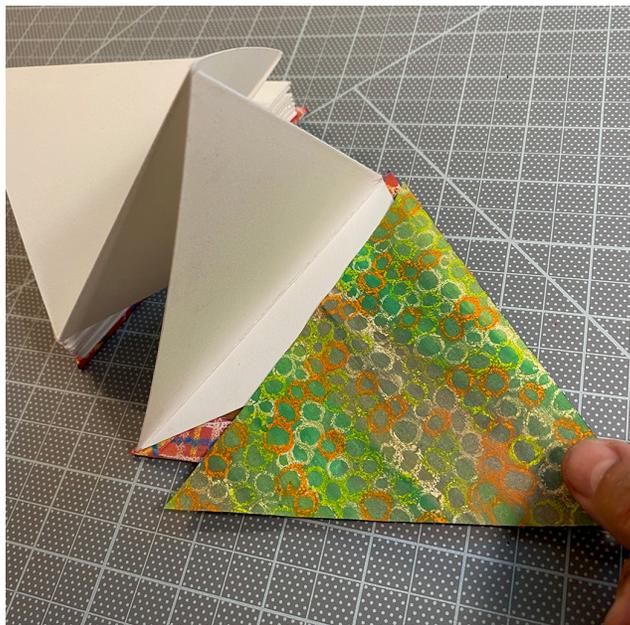


Now do this same step with the back cover, attaching the other end of the accordion fold to the bookboard by applying glue to the half-triangle on that end. When you are done, the inner part of the bookboard will be partially covered as in the photo below:



The last part of this step is to glue in your end papers. These will go over the half-triangle tab and help secure the accordion fold to the bookboards.

Simply apply glue to the unpainted side of your painted paper and then slide it in place, using pressure or weight to set it. I decided to go ahead and cut my end papers into the approximate sized triangle shape to match up with the bookboards. Then after the glue has dried, I can trim any excess endpaper right to the edges of the front and back covers and get a neat, clean finish.



Congratulations!!! You have completed the most difficult part of this project! If things aren't lining up perfectly, don't fret. You still have a little time to adjust the front or back bookboard covers before the glue dries completely. Keep in mind, these are artist books and are not meant to be machine perfect. Celebrate the process and don't mind the small imperfections in the product!