

# STRING THEORY 3 WAYS

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# Q: What is string theory in physics?

ANSWER:

- String theory is the idea that the fundamental particles we observe are not point-like dots, but rather tiny strings. String theory is one of the most famous ideas in modern physics, but it is also one of the most confusing.
- String theory describes  $10^{500}$  separate universes (or, one hundred cenquinsexagintillion), with different constants of nature and even different laws of physics.

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# Q: What does this have to do with quilting?

ANSWER:

- Not much really, except there are probably one hundred cenquinsexagintillion ways to make string quilts!

# What IS String Piecing?

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- A method of foundation piecing that uses strips of fabric, called strings, that otherwise might be thrown away.
- Sewn on a paper or fabric foundation, these strings can be turned into new fabric that could be cut and sewn into quilts.
- Sew strips diagonally across a foundation, trim and the resulting piece can be cut into quilt blocks or block segments.
- String piecing is the perfect solution of using up those smallest scraps of beloved fabric you can't bear to throw away.



# String Quilts: A Classic

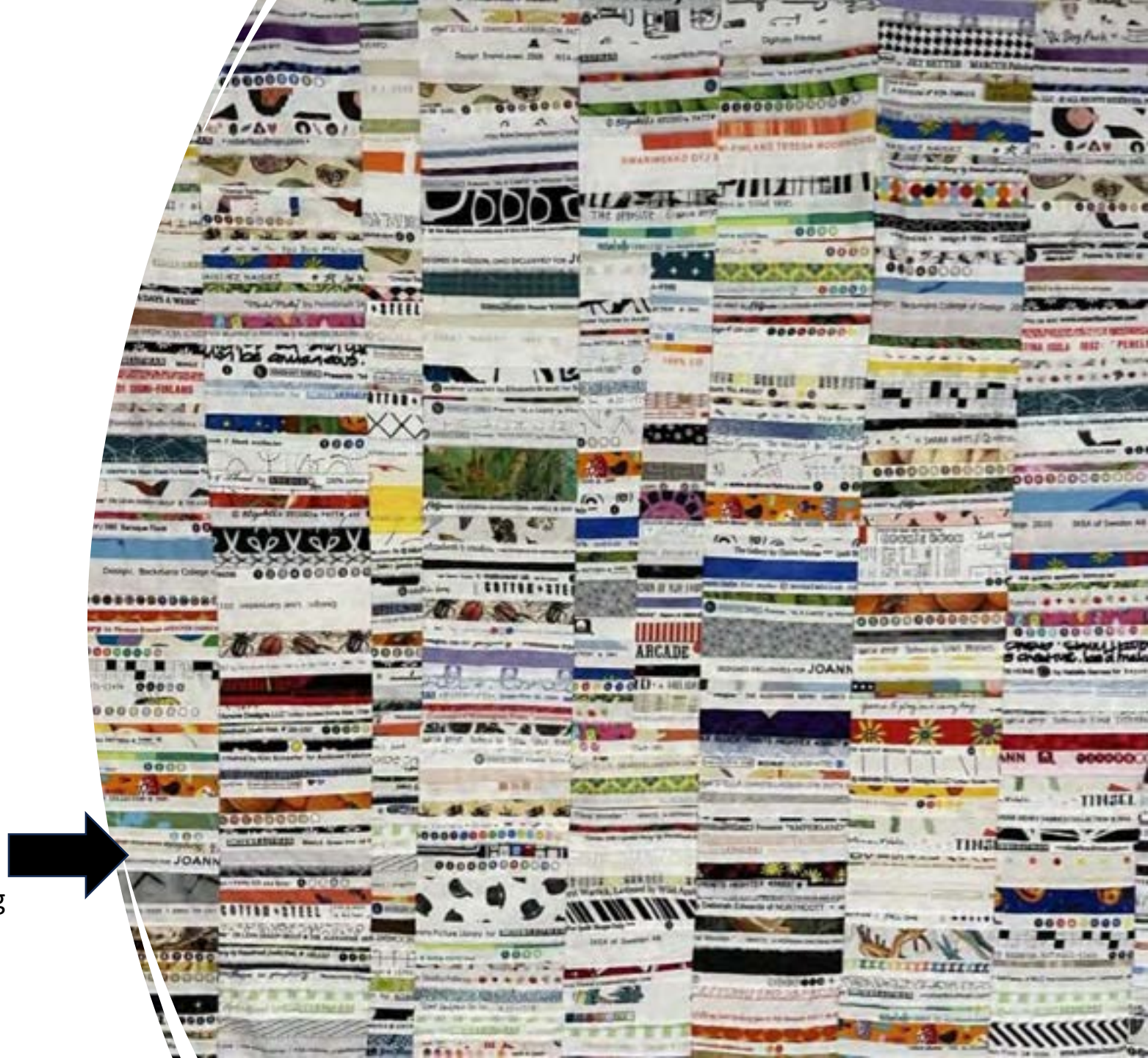
- String block quilts thrived during early 20<sup>th</sup> century and depression.



# String Quilts: A Classic

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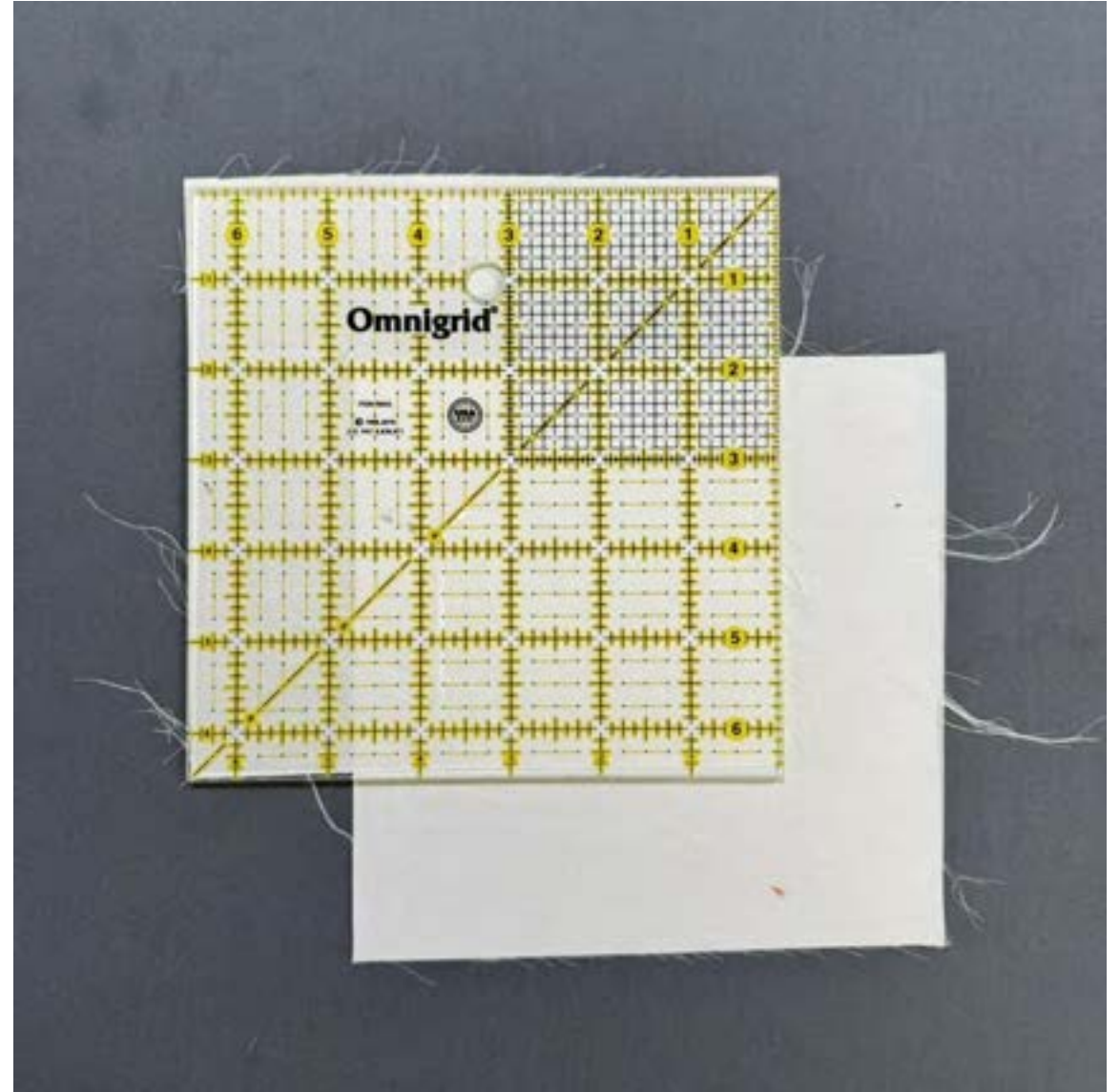
- Women made strips from used, old and new fabrics – all fibers were candidates.
- Often a flour sack or old newspaper/phone book page served as the foundation fabric for sewing string pieces onto, in the flip and sew fashion, until the foundation was covered.
- [From String Quilts Match the Economic Times, Past and Present](#)  
*by Kimberly Wulfert, PhD*
- Current takes on the string quilt: Selvedge edge quilts using fabric from the edges of cotton fabric. Quilt by Lorraine Woodruff-Long



# Benefits of String Piecing

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- A great way to use up all the scraps that accumulate through trimming and cutting.
  - Foundations can be made from fabric - many quilters use sheets or muslin as an inexpensive choice.
  - Fabric foundations are not removed.
- The additional fabric foundation can make for a sturdy block that resists wear and tear.
- Drawback:
  - The additional layer of fabric on the quilt top can result in a heavy quilt (especially once you add batting and a backing). However, it makes it easy to sew and keep a defined shape before you trim it vs. just trying to “wing it” by sewing a bunch of strips together.





# Fabric Foundation

Sheets or lightweight muslin,  
leftover yardage are all good  
foundations.

From "Unconventional & Unexpected: American  
Quilts Blow the Radar 1950-2000  
by Roderick Kiracofe





From "Unconventional & Unexpected: American Quilts Blow the Radar 1950-2000" by Roderick Kiracofe





# Paper Foundations

- Paper is an alternative choice - many people use old telephone book pages, junk mail, and other papers normally thrown away or recycled.
- Paper foundations are removed after trimming or when the quilt has been assembled.
- Drawback:
  - To be honest - THIS CAN BE A PAIN! Picking out the paper can take forever and you must be careful not to take out the stitching while you do it.

From "Unconventional & Unexpected: American Quilts Blow the Radar 1950-2000" by Roderick Kiracofe





## String Piecing without Foundations

- String blocks/quilts can also be long strips of fabric sewn together without any fabric/paper foundation.
- These are easiest to create when piecing long strips together that you can cut to the size needed.

Catherine Sparacino @catlucia



Let's get  
started:  
Basic String  
Block





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Important information  
and tips - pay attention  
to these pages to get  
good results!



# BEFORE YOU SEW: IMPORTANT QUILTING SEWING TIPS!

- **Start by pressing any/all your scraps and strips with an iron before you cut and begin to sew with them.**
- **Use the dial on your machine to adjust your stitch length and make smaller than you may usually use when sewing a garment.**
  - If you have a dial, move it to between 1.7 (15 stitches per inch) and 2.0 (12 stitches per inch.)
  - This is smaller than what you'd use to sew a garment.
  - It's short enough that the stitches won't come undone with handling - and there's no need to do a backstitch to "lock" the sewing - but big enough for the seam ripper when needed.
- **Be sure to use AT LEAST a ¼" seam allowance when you sew.**
  - You can make seams bigger (3/8" - 1/2"), but not less.
  - Small seams will risk your piece pulling apart at the seams.
  - Know your machine and feet – measure from where the needle goes into the fabric to the edge of the foot. Often you can find a point/edge on your foot to use as a guide
- **Once you've sewn a strip, be sure to use an iron to press your seam open, and make sure the string/strip lays completely flat before you move onto sewing down the next string/strip.**
  - Your choice of a steam or dry iron – just make sure it's nice and flat before you sew.

# Cut out foundation blocks

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- Cut several squares from your sheet or foundation fabric.
- I suggest starting with a 6.5" square before you go smaller or too much bigger.

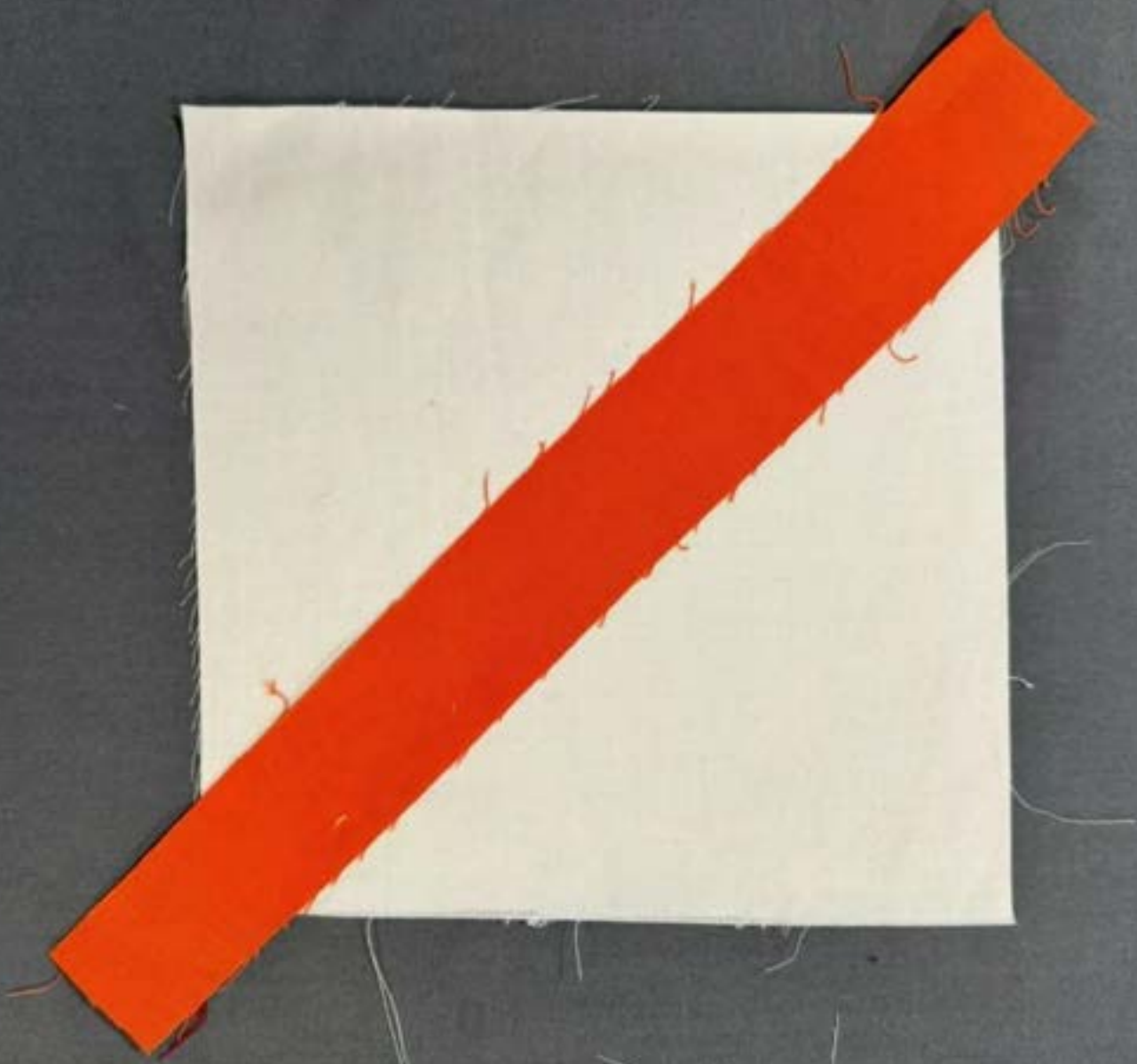


# Make strips

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- Cut (or rip) a variety of strips that are about 1.5"-3" wide and however long you can from the fabric you have.
- Include a variety of values (light, medium and dark fabrics).





- For your first strip, select one that fits diagonally across the foundation from corner to corner





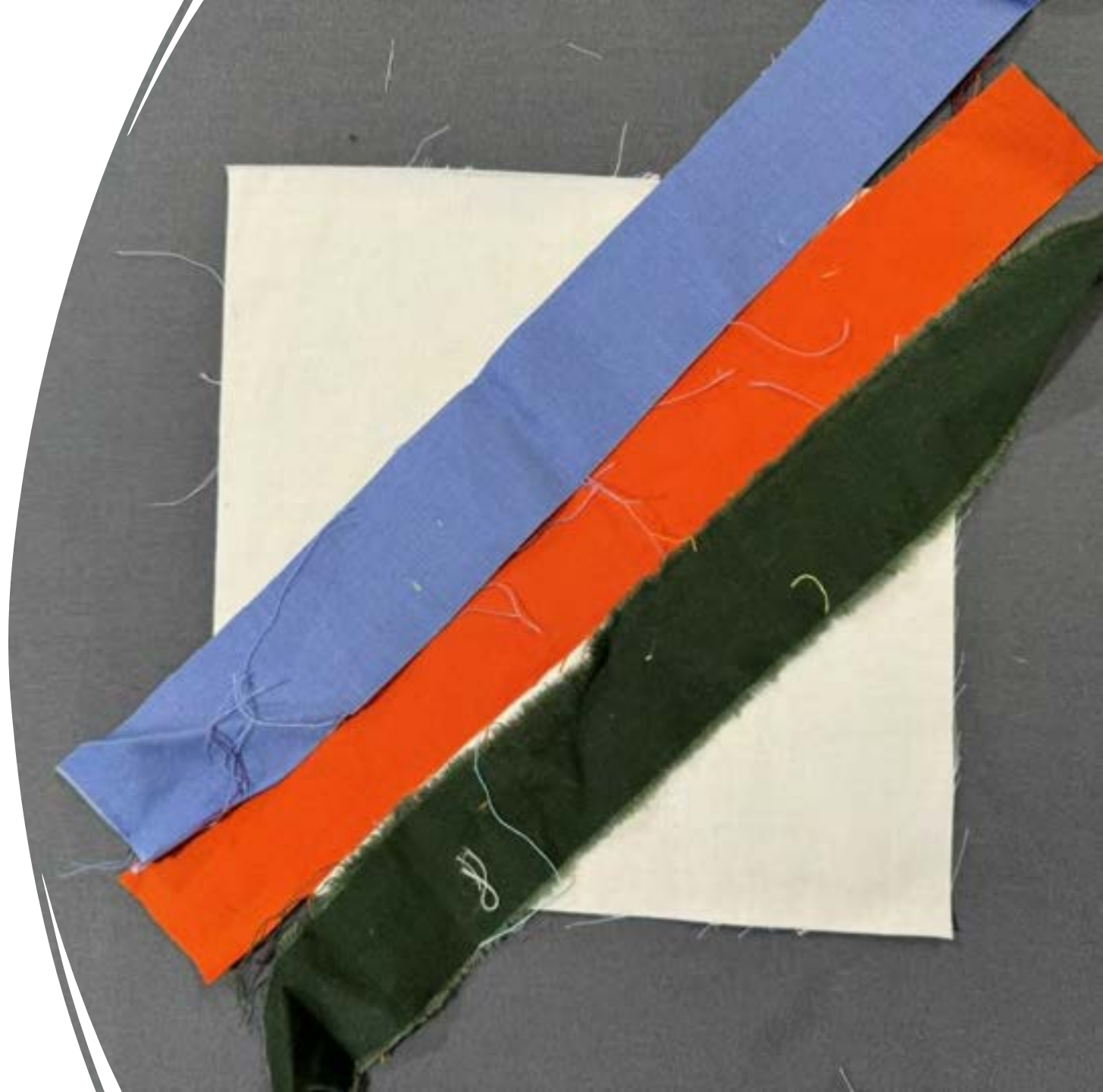
- Make sure the strip “straddles” the corner of the foundation block in the middle.
- Consider using a glue stick to “tack” the strip down at the corners and press.
- ...or you can pin or just eyeball it.

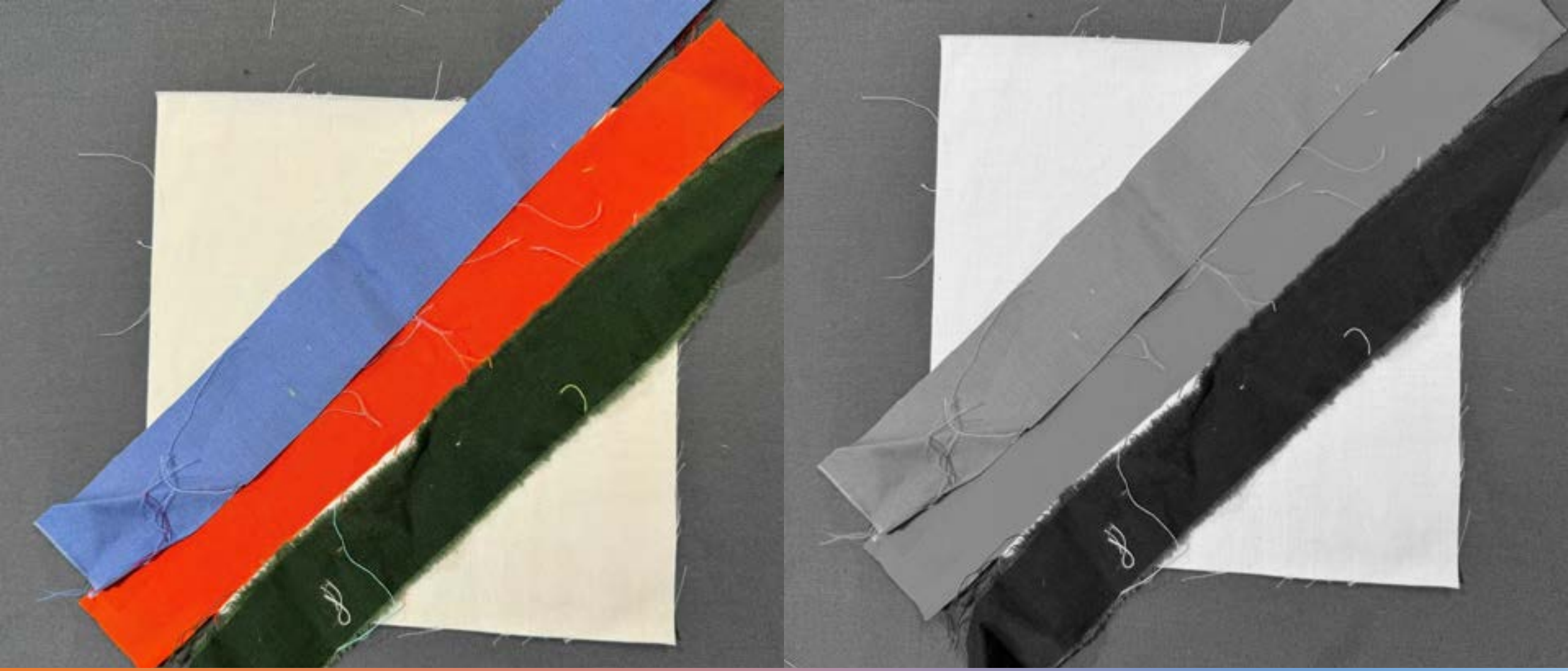
Select the strips that will go on either side of the first, center strip.

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Design thoughts:

- When selecting strips, try to add those that differ from each other and contrast light vs. dark
  - A medium fabric will look dark next to a light but light next to a dark.
  - As you go, just try to create contrast from one strip to the next and play with the values.
- ★ Helpful tip: Use the mono filter on your phone camera to see lights/darks/mediums in fabric.





Looking through my phone filter using just black & white, I saw that there wasn't much contrast with the right/blue strip next to the orange.



I inserted a darker green between the blue and orange to get more contrast.



Sew the strips together onto the fabric base.



Sew a strip to the other side of the center

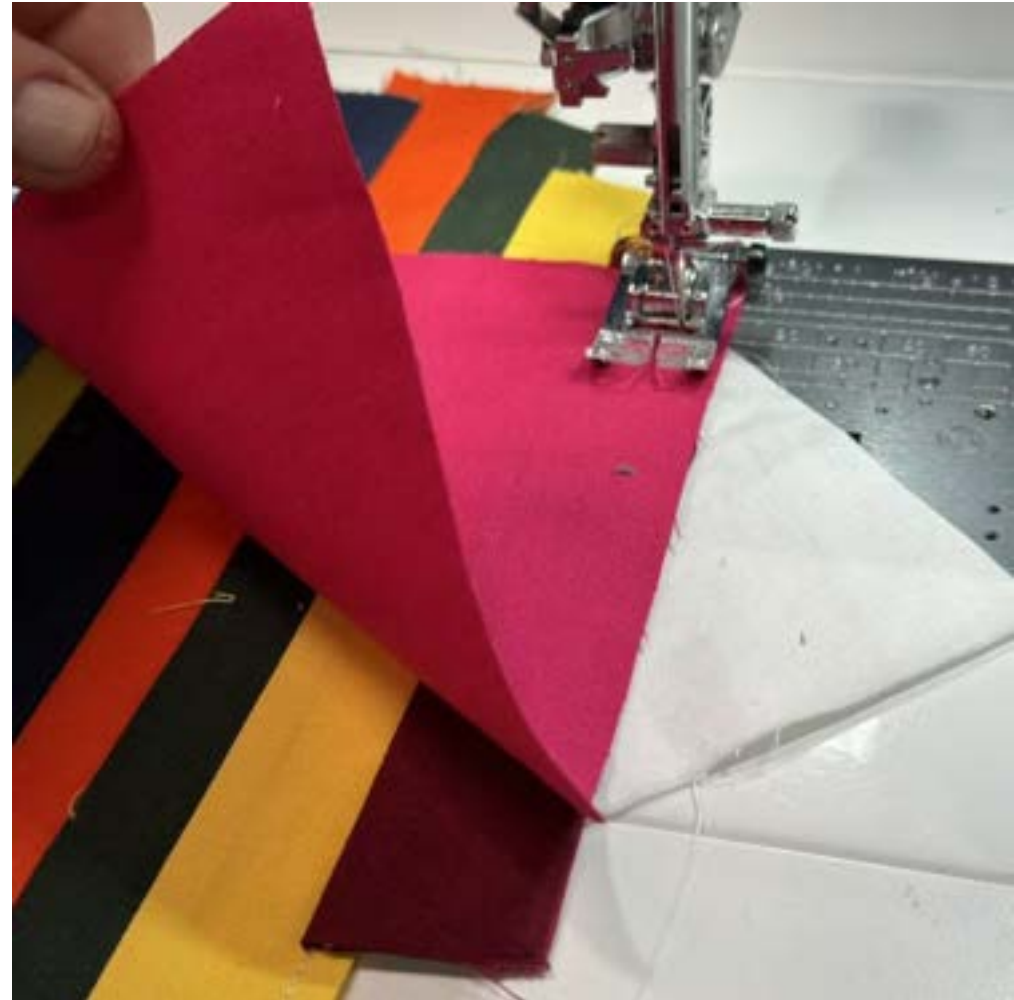
- IMPORTANT TIP!
- Press your strips flat
- Always press/iron a sewn strip before you move on to adding another.
- I typically alternate sewing a strip on one side, then the other. I'll then press both down flat before moving on to adding the next strips to each side.





Continue sewing & pressing more strips on each side until you have just small corners left of the foundation uncovered at each end.

Select bigger pieces or triangles to finish the block

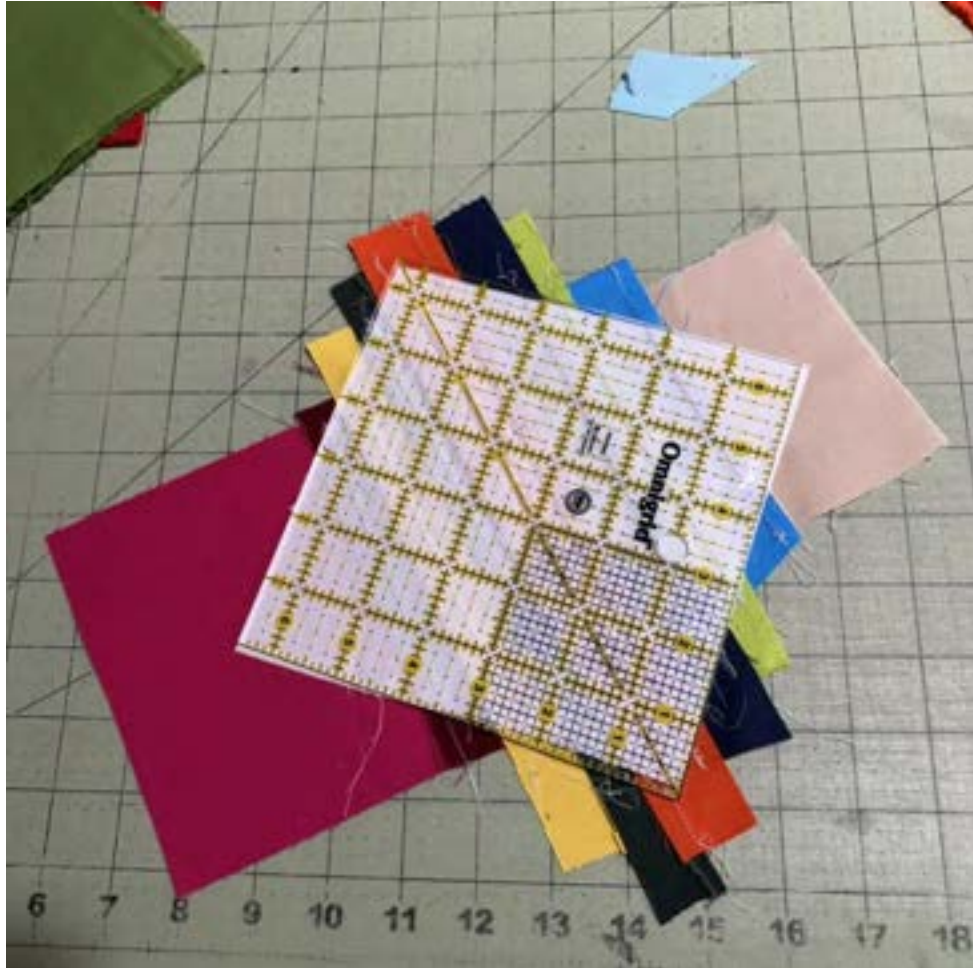




Sew corner strips/scrap so that the entire base block is covered when viewed from the back.



Use your acrylic ruler and rotary cutter to trim the block (in this case to 6.5" square)





## What about the scrappy leftovers?

- Save longer strips/pieces to use on other blocks.
  - These can be sewn together into scrappy strips or used as corners for other blocks.
- Discard the tiny cut pieces (unless you love teeny tiny pieces for scrap reuse.)

Make a bunch!

How will you  
arrange them?

Play around  
with it!





# SEWING BLOCKS TOGETHER: IMPORTANT SEWING TIPS

- **Once you finalize your design, take a photo for reference.**
  - It'll help guide you as you sew your blocks together if you get confused along the way.
- **Be sure to ALWAYS use AT LEAST a ¼" seam to sew your blocks together.**
  - Like with sewing down strips make sure you sew at least a ¼" seam or your risk your quilt coming apart at the seams over time.
  - Whatever size seam you choose (if larger, for example) just **be consistent across all the blocks in your quilt.** This will ensure that your seams match up.
- **When you line up two blocks, make sure match the corners, edge to edge, on the side you are sewing.**
  - Pin if necessary, to keep the edges aligned and straight as you sew the blocks together.
  - You may need to pull out the pins as you sew - or risk breaking your sewing machine needle!

# Scrappy Diamond String Blocks

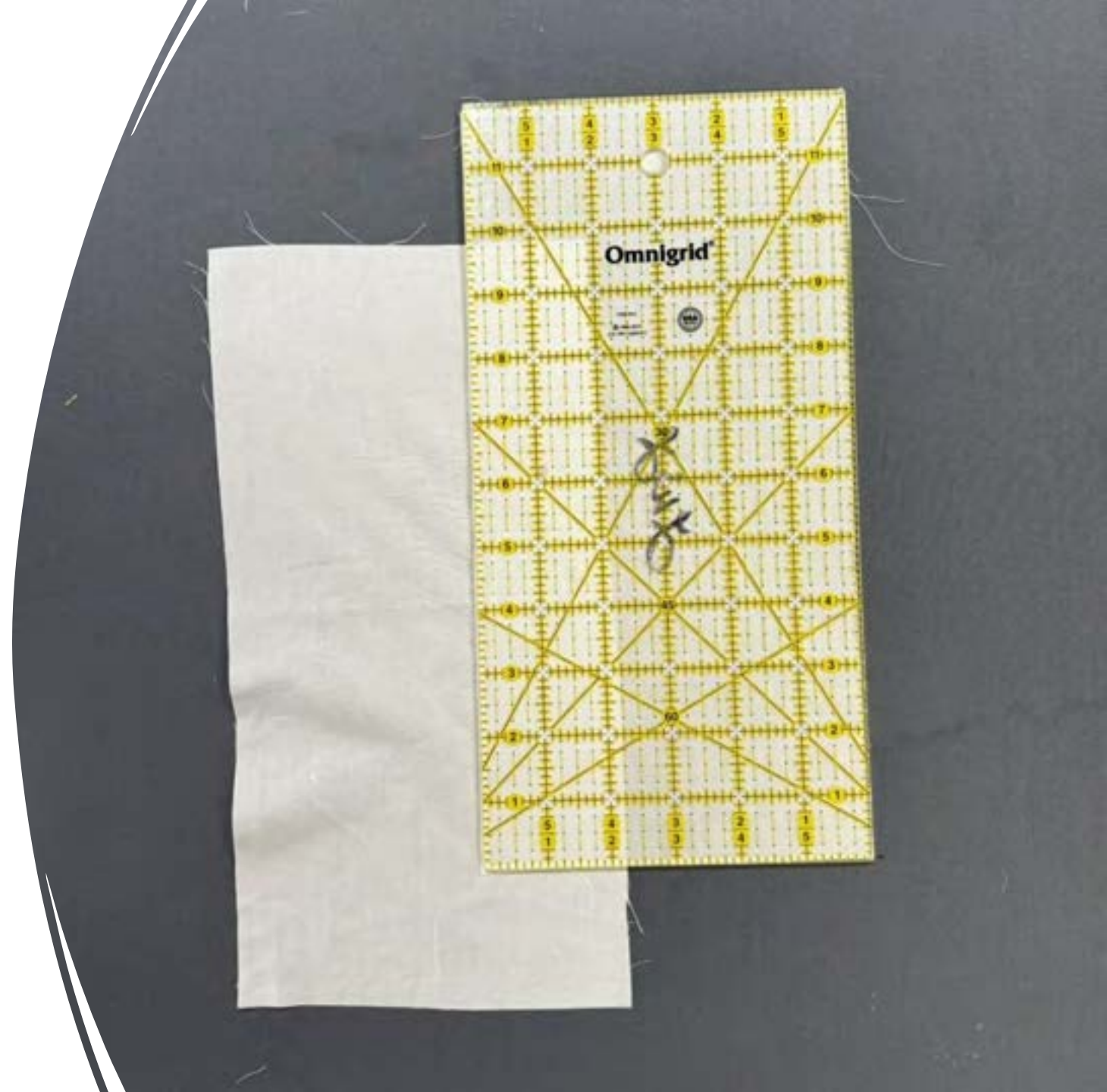




# Measure oblong rectangle base blocks

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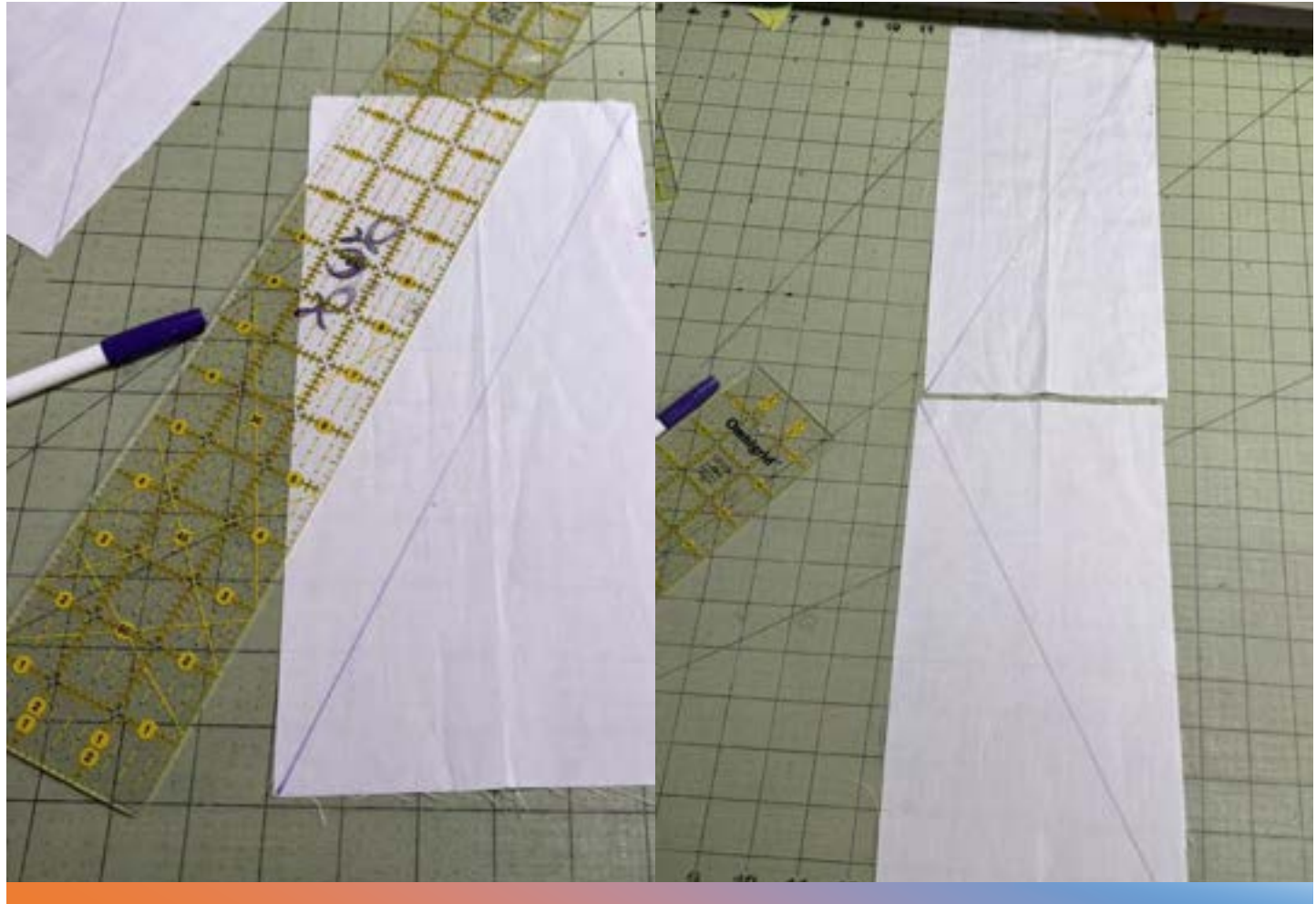
- I chose to use blocks that were 6"x12" (just because I happened to have a tool that size! You can pick whatever you like)





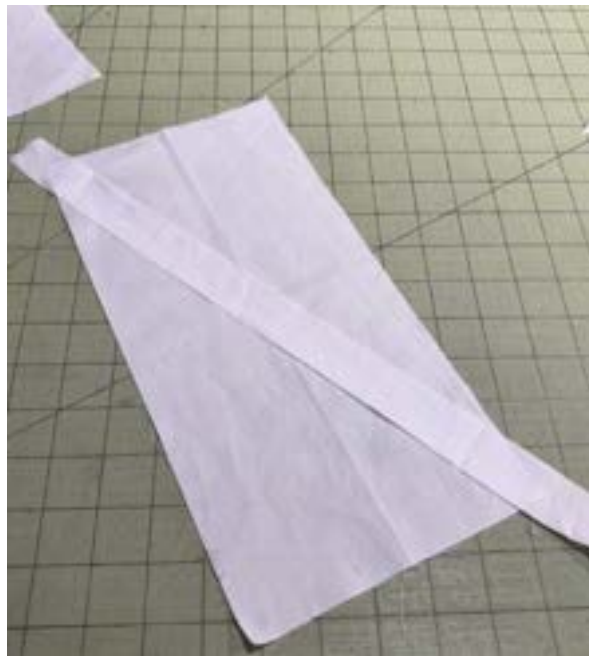
Mark edge to edge (pencil or disappearing ink)

- One from top right to bottom left
- Another from top left to bottom right



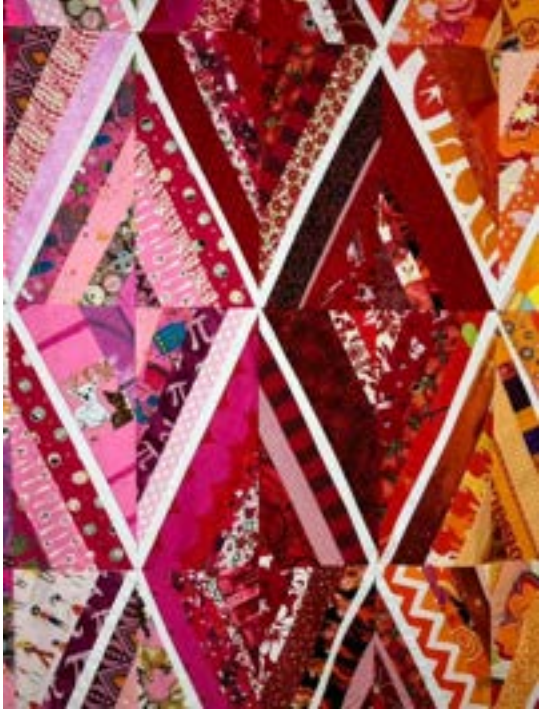


- I find it harder to lay down and keep the center strip in place so I use a glue stick to keep it in place.
- Lightly use glue stick along the marked area then lay a 1" (or wider) strip along the glue area.
- Press with steam iron to ensure it stays down.
- This center strip will serve as your first center strip.
- Sew colored strips along each side.



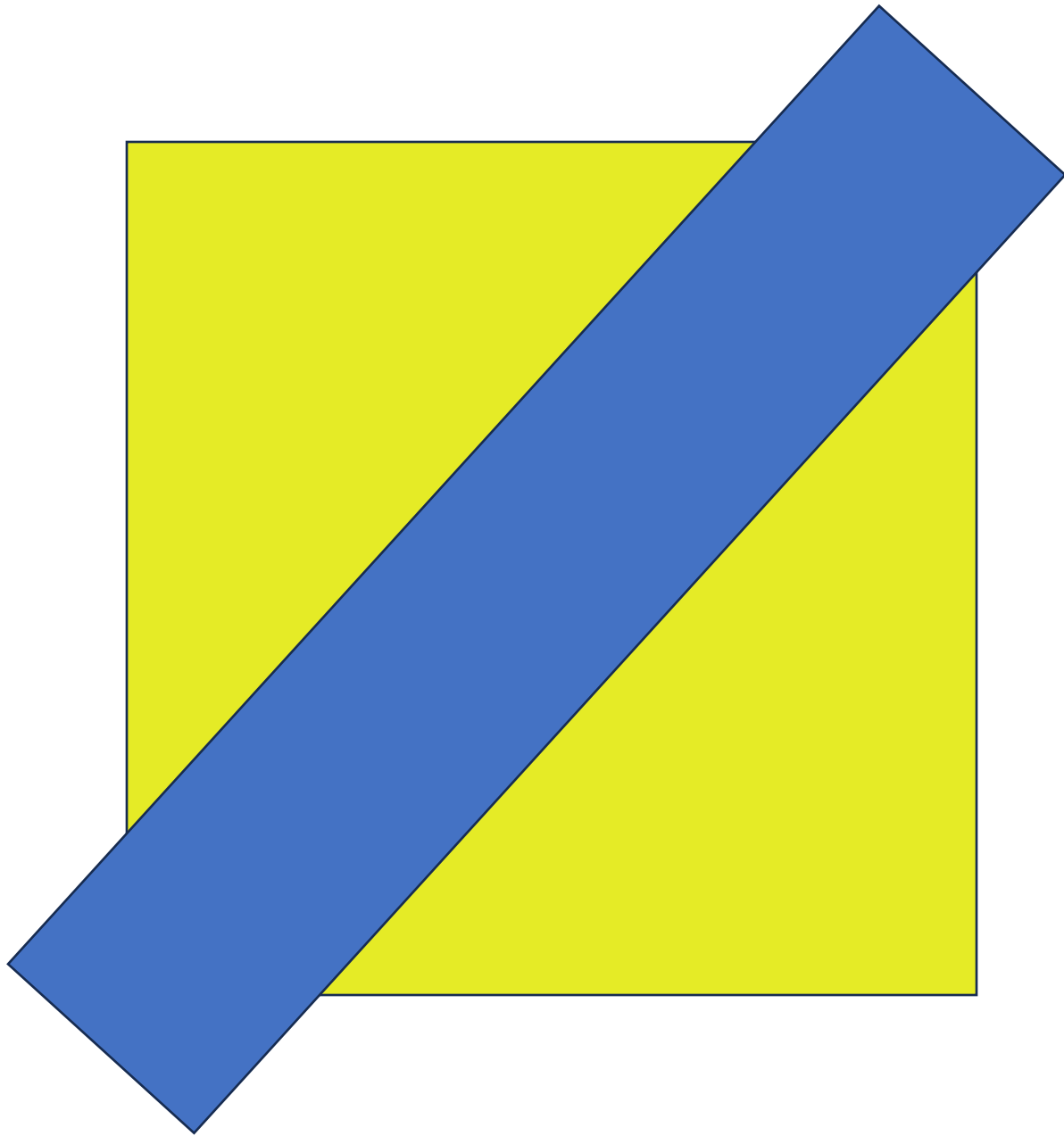
Proceed to add strips, sew, press & trim as before



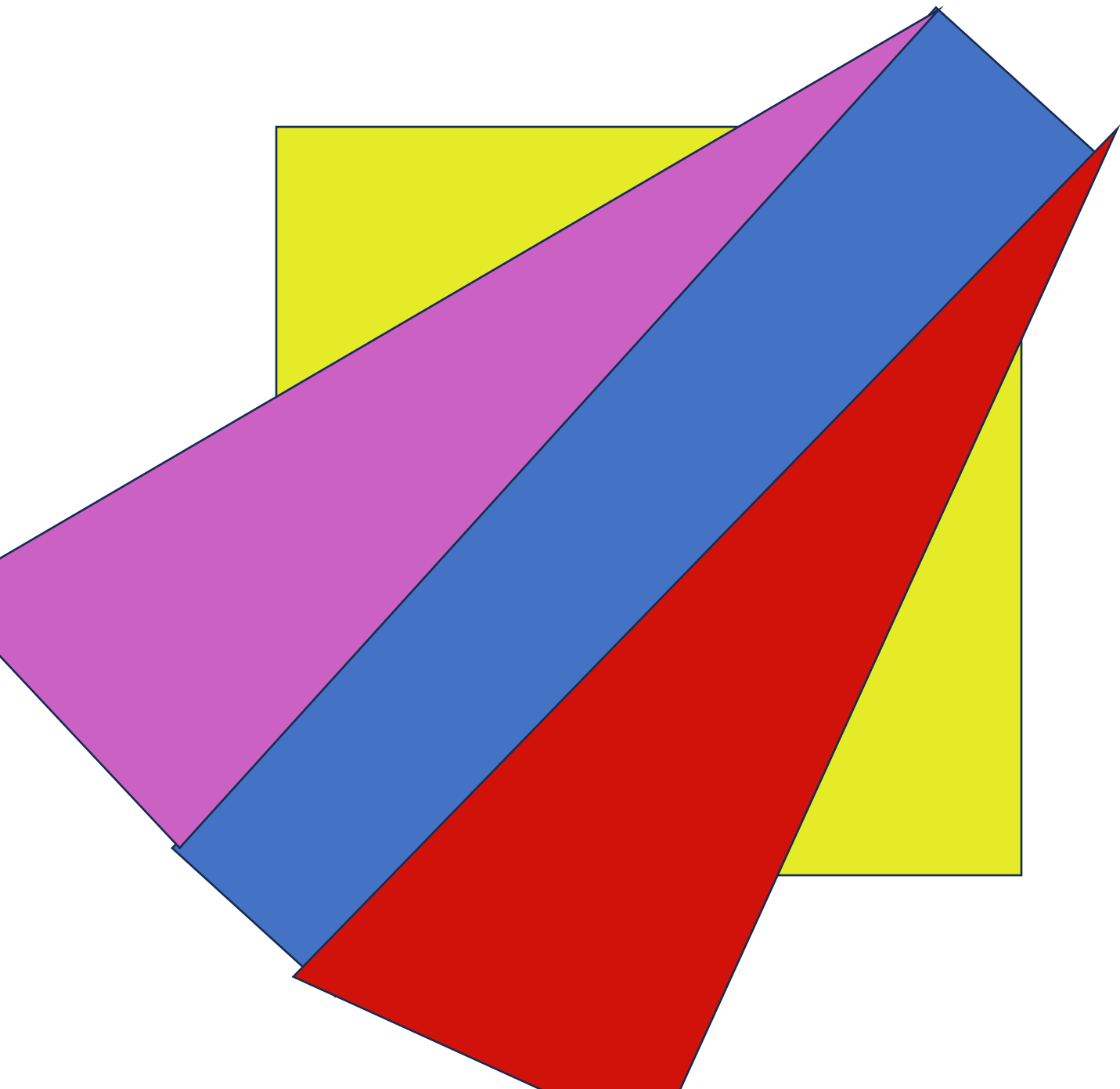




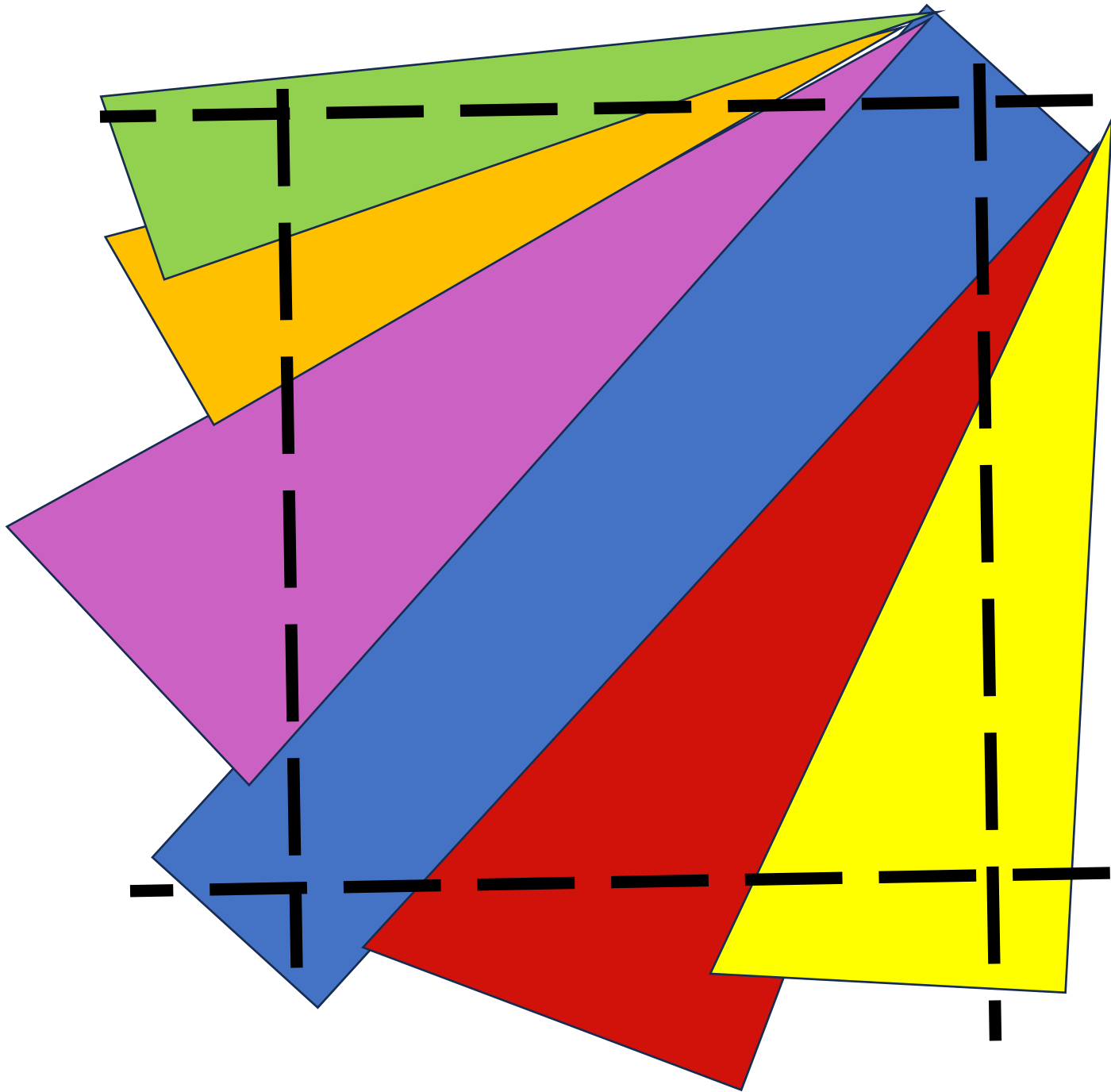
# Fireworks String Block



- Cut a foundation block at whatever size you choose.
- Cut a straight strip and tack it with a glue stick on each each.
- Be sure each end covers & “straddles” the foundation corner.



- Proceed with adding similarly shaped wedge shaped strips on each side, all pointing in the same direction.
- Once you've covered the foundation, trim block to size.



- **Trim your block once all pieces are sewn down:**
  - Trim so that your first strip neatly straddles the corner.





Four string blocks I finished and glued/mounted on a painted black canvas.



"Fireworks" by Lorraine  
Woodruff-Long



# Let's see what you can do!

Resources/Links:

[QuiltingintheFog.com](http://QuiltingintheFog.com)

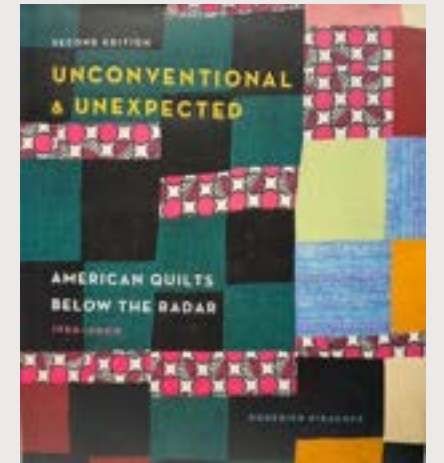
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Feel free to email me with questions or to show me your work-in-progress or finished work - I'd love to see it!

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[Purchase Unconventional & Unexpected by Roderick Kiracofe](#)