

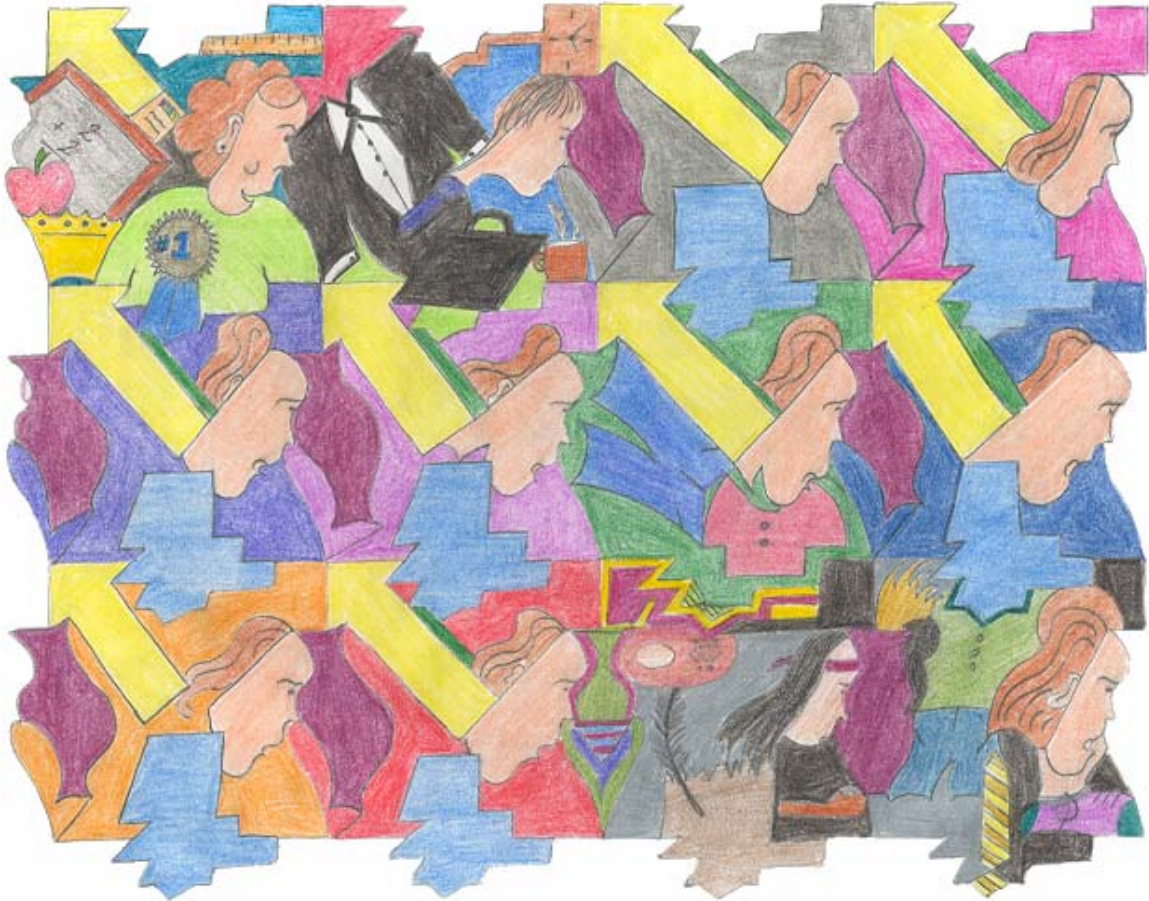
Tessellations

Math 3403 - Sections 2 and 3

Scanned copies of some of the tessellations projects created by students in Math 3403 - Geometric Structures - are reproduced in this document. Please enjoy!

Fall 1999

Shawna Brown



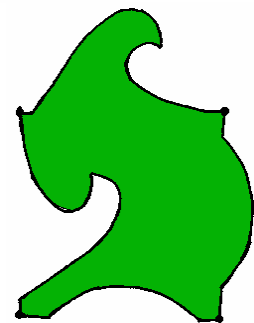
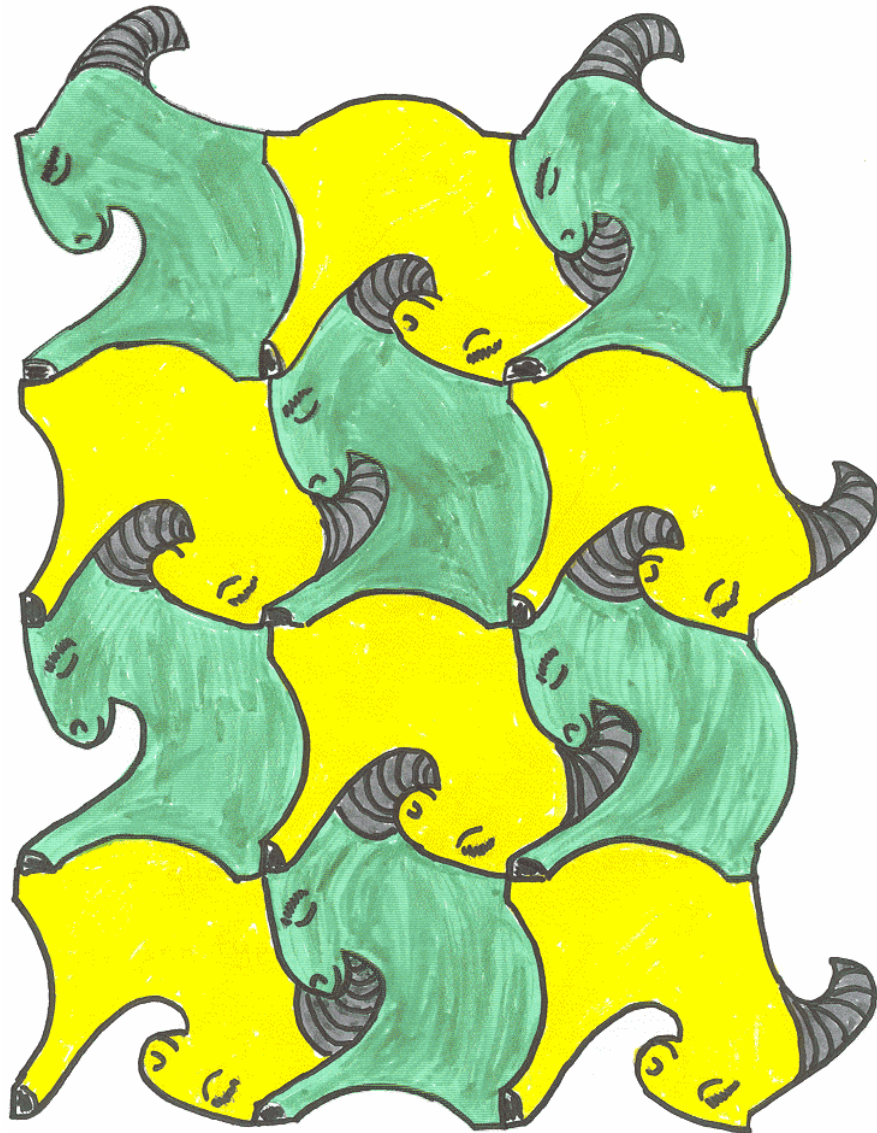


Type TTTT Tessellation

- 1.) Cut out a square from the model in the worksheet.
- 2.) To make a Type TTTT tessellation, cut out a design on ^{the right} one side and place it on the ^{left} ~~opposite~~ side and tape it down at same place.
- 3.) On the ^{bottom} ~~top~~ side cut out another design and tape it to the top side at the same place.
- 4.) place the tessellation in the middle of the page and trace it.
- 5.) Next, repeat the pattern by placing it inside of the cut out portion until it matches up and trace it. (It is kind-of like a puzzle).
- 6.) Repeat this design until desired number is acquired.
- 7.) Design inside the tessellation as I did creating a different design in each box.

Carolyn Marshall

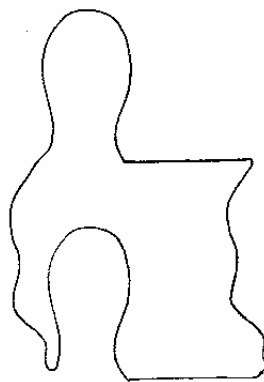
High Hopes



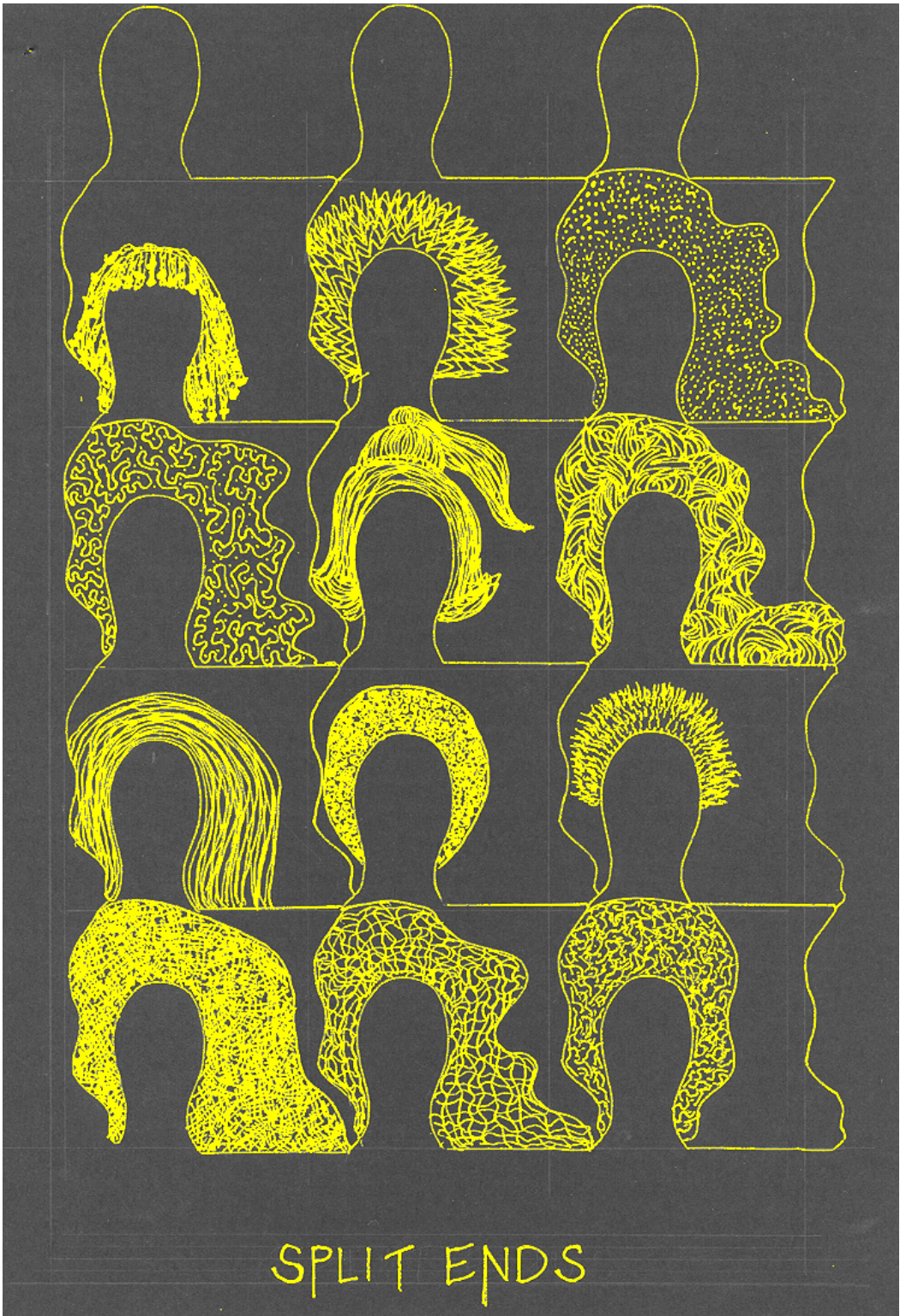
Type G'G'G'G'

Kelly Orta

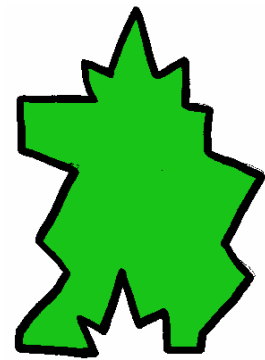
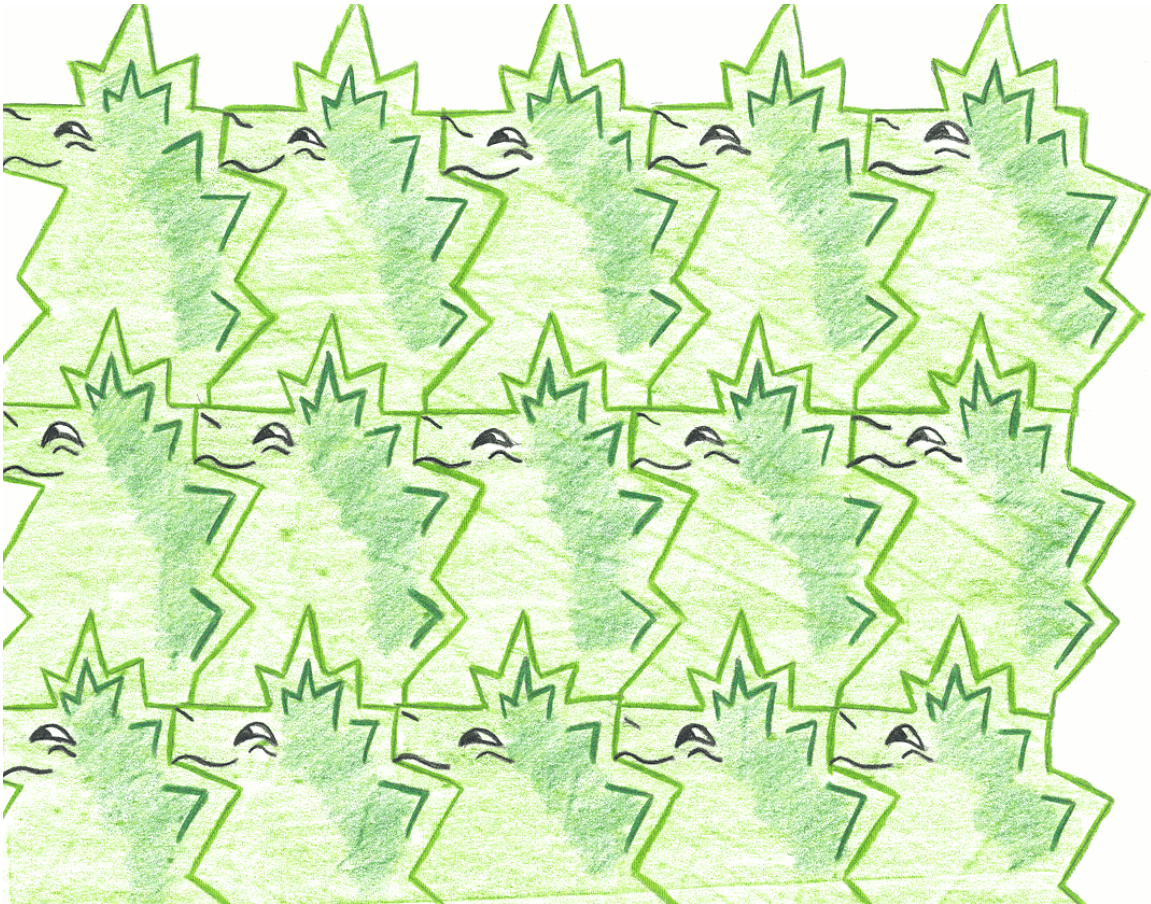
A lengthy design consultation was conducted with the King and Queen of the Geometry Palace and it found that the clients were interested in a tile constructed of onyx and gold inlay. The Queen was particularly interested in a tile design that would inspire her choice of hair dressing for the day. A detailed inspection of the Queen's wig collection was conducted and the styles were sketched. The resulting tile is one that reflects the requested materials and the satisfies the Queen's needs as well. Skilled artisans will be recruited to produce the custom tile installation.....



Type TTTT

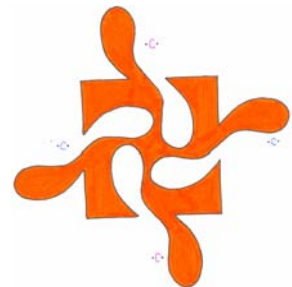


Emily Taylor



Type TTTT

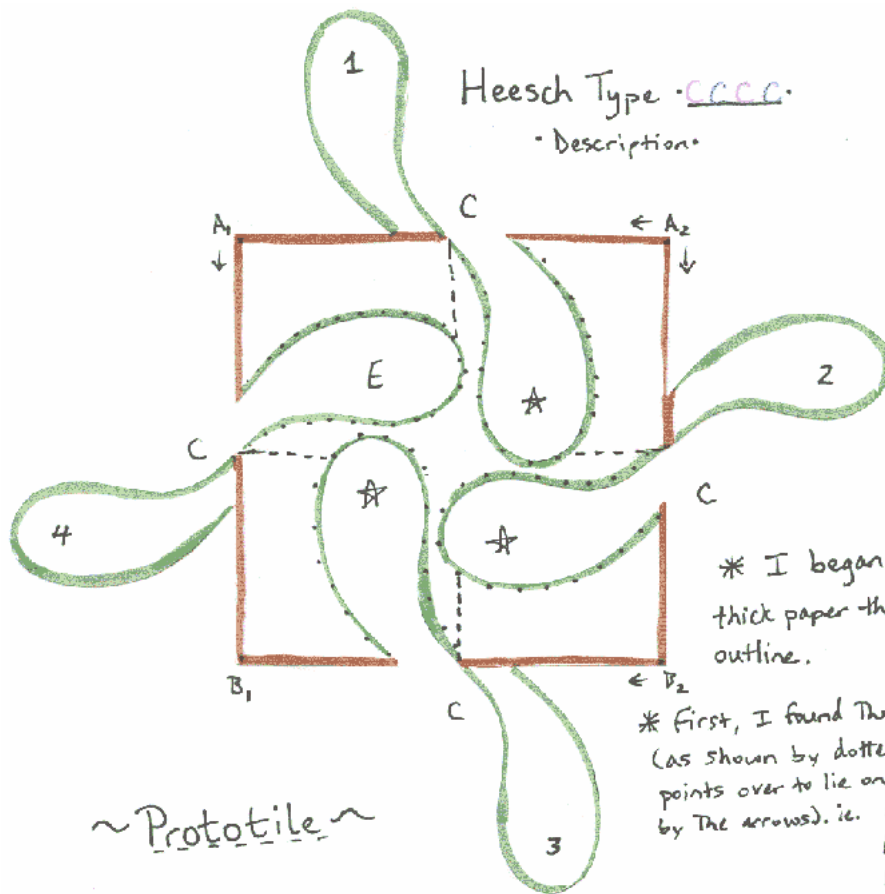
Keri Ann Jenkins



Type CCCC

Heesch Type CCCC

• Description •



* I began with a sheet of thick paper the size of the orange outline.

* First, I found the midpoint of each side (as shown by dotted lines) by folding the points over to lie on top of each other (as shown by the arrows). i.e. A_1 to B_1 , A_2 to A_1 , A_2 to B_2 , B_2 to B_1 .

* After finding the midpoint, I then cut out shape E, beginning on one side of the midpoint. I used it to make the other 3 shapes that have stars.

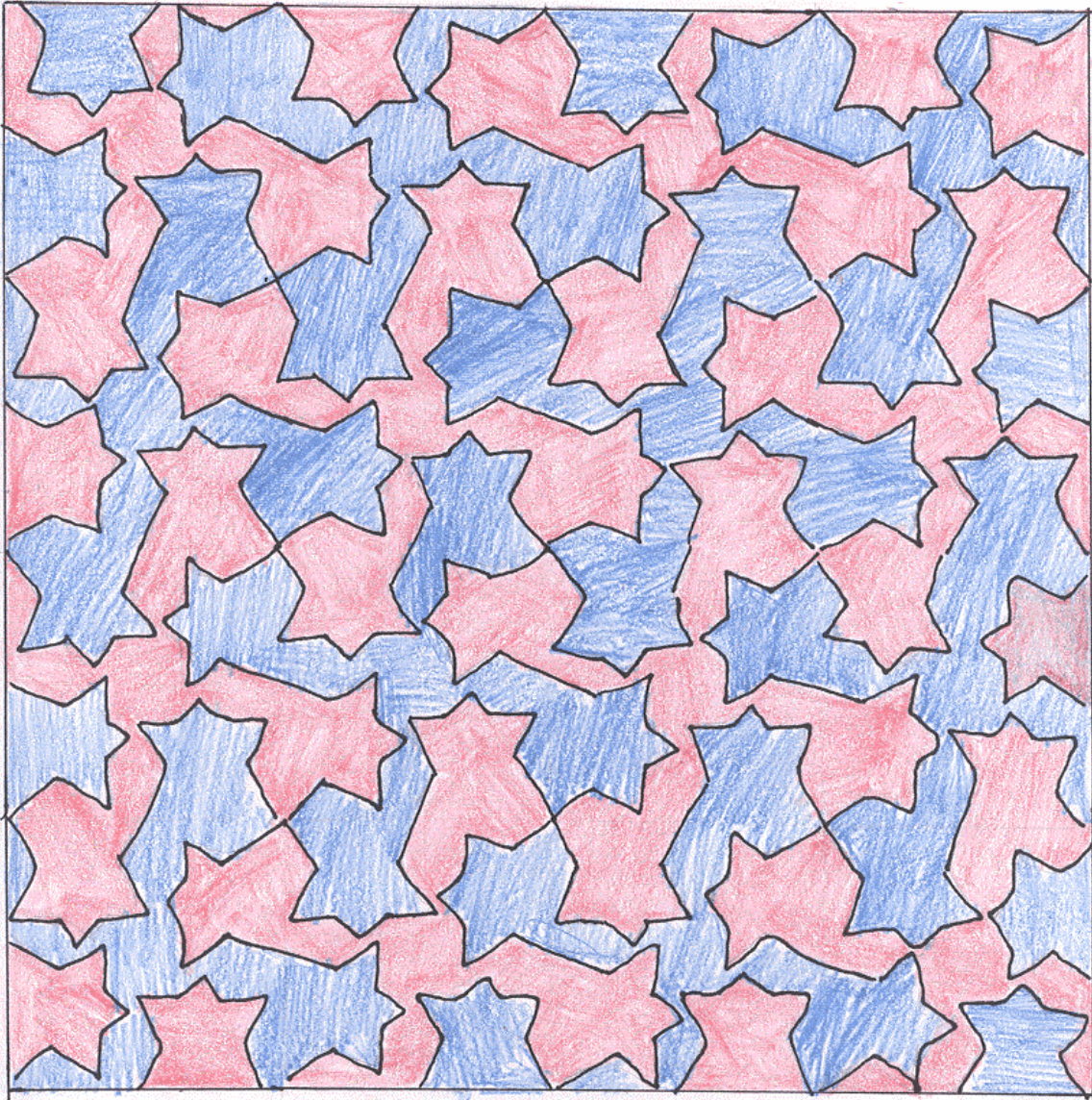
* I then rotated E around the midpoint, positioning it as number-4. I did the same with the other three shapes I cut out.

* I taped them to my square and used it as my prototile.

Hint: Before I even tried this on thick paper, I tried it on a scratch sheet of thin paper to see if it would work.

Stacey Hill

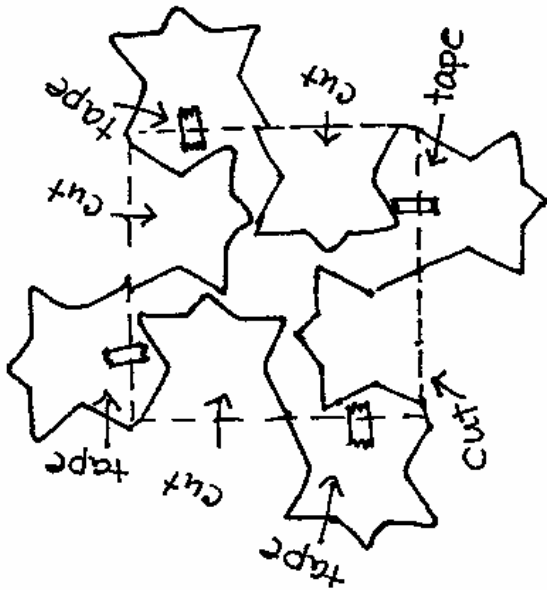
"Seeing Starz"



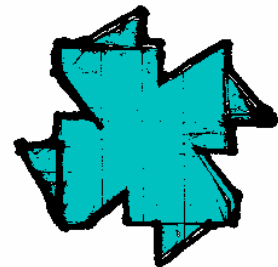
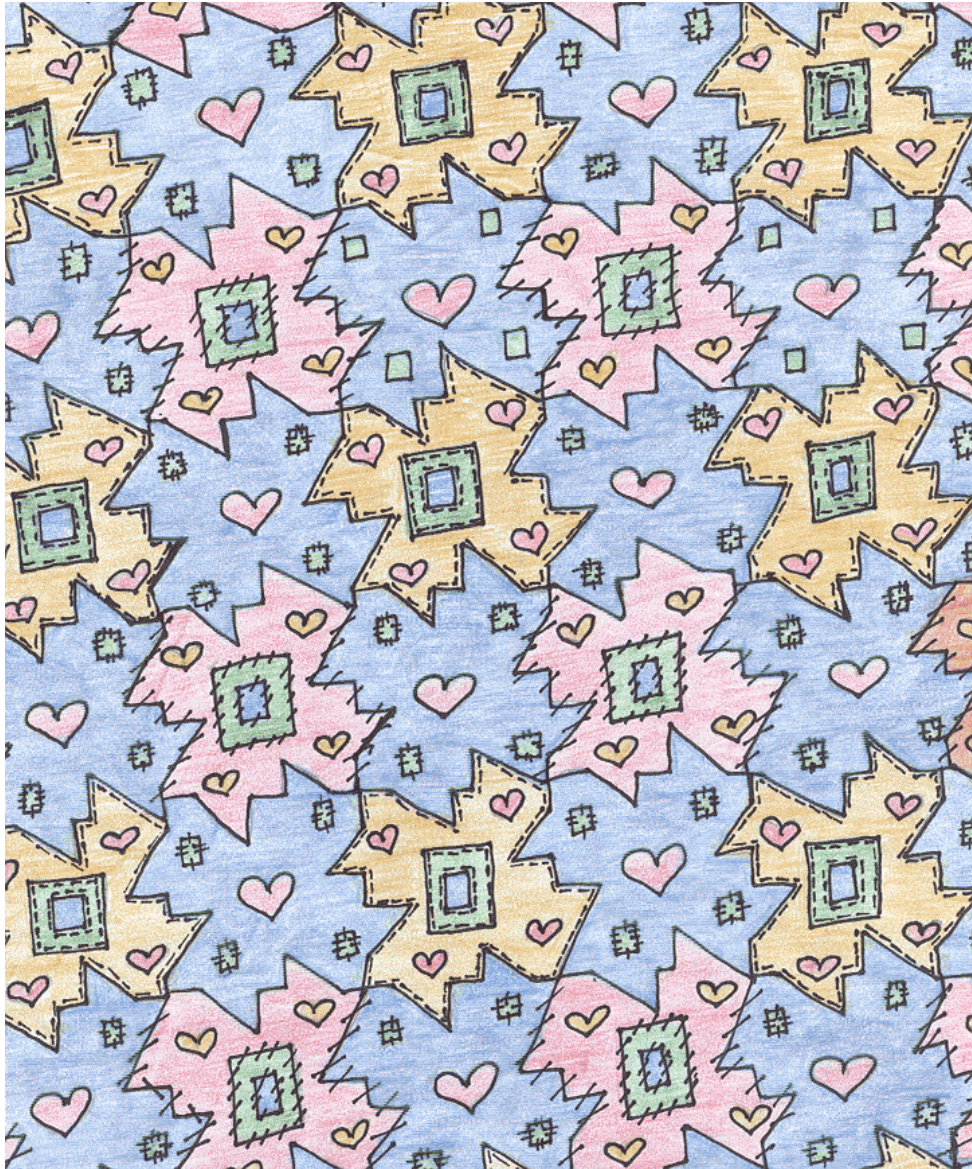
Type $C_4 C_4 C_4 C_4$

"Seeing Starz"

My protile is a type CCCC. I first cut out a 2" x 2" square using heavy paper. Next, I drew a star on the edge of one side then I taped it on the same side along the area that had not been cut. I repeated this all the way around. I chose red and blue to color them because stars represent America.



Beth Teague



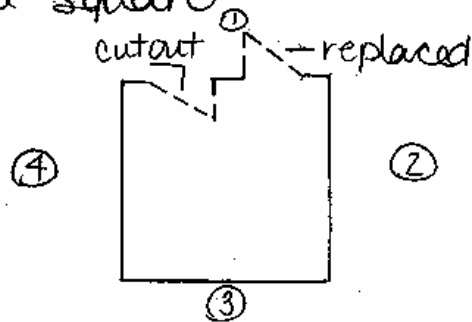
Type CCCC

Description of The quilt

CCCC

To make the piece:

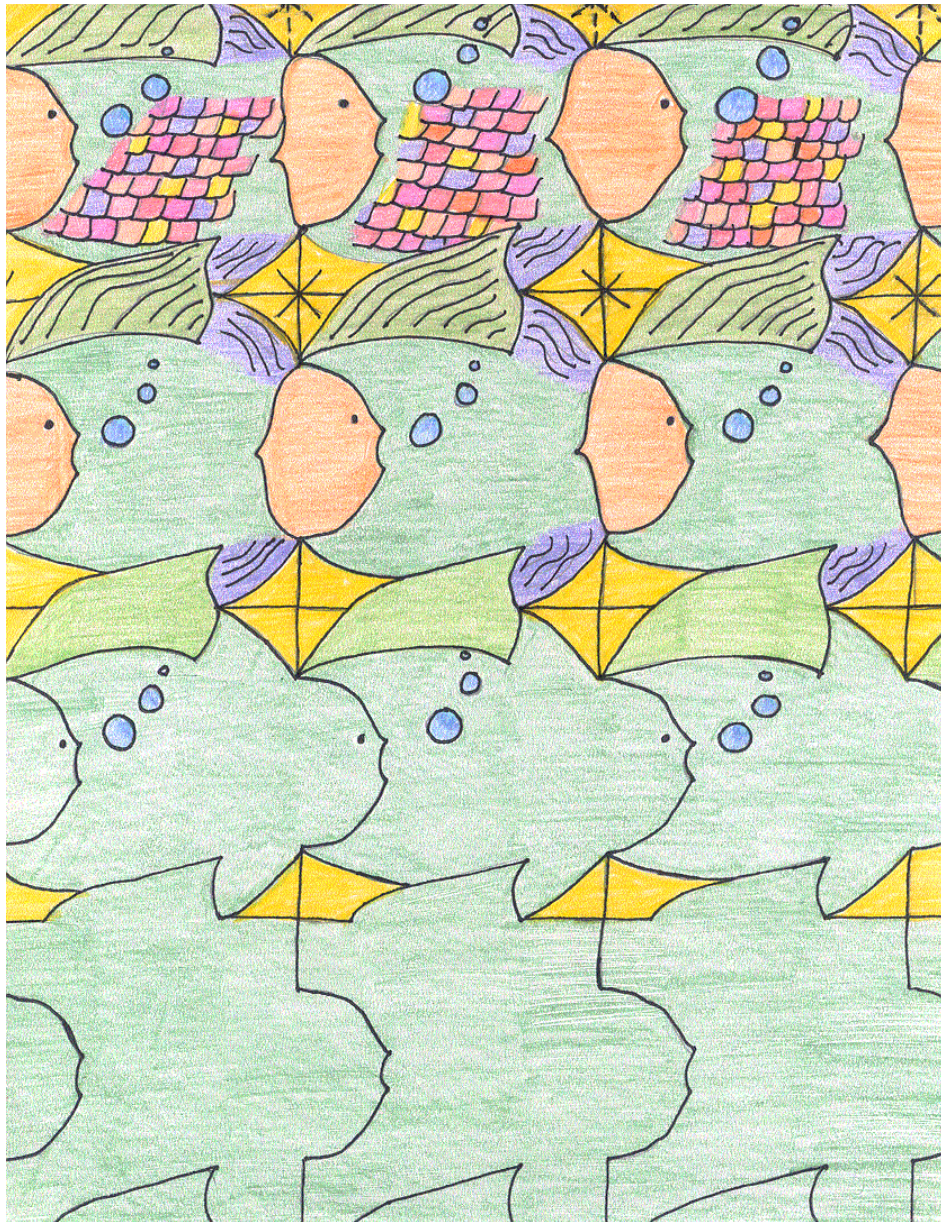
1. Start with a square piece of any size.
(I started with $3\frac{1}{2}$ cm²)
2. Cut out a Δ on one side
3. rotate this Δ around to the outside
of the square



4. do this to all 4 sides
5. When making the tessellation you rotate the
figure to join each figure together.
6. decorate as you please! ☺

Have fun

Beth Teague



Type TTTT