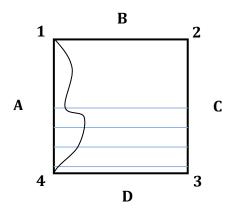


Activity Worksheet: Making Your Own Simple Translation Tessellation

See the process in action! "Making a Tessellation" video: <u>https://youtu.be/WBVzoaFi90E</u>

Materials: paper; black marker; scissors; tape; colored pencils, crayons, or pens

- Cut a lined index card to 3 in x 3 in. *If you do not have an index card, use the 3 in x 3 in square on page two of this worksheet (figure 1)*
- 2. Draw a squiggly or jagged line from corner 1 to corner 4.



3. Cut along the line that you drew. Slide the shape to the opposite side of the square, without flipping it over or rotating it and tape it down, lining up the flat edges. *The lines on the index card will show you if you've flipped or turned it—they should *align*: if you've flipped the shape over, there will be no lines; if you've rotated the shape, the lines will not run in the same direction as those on your card.*

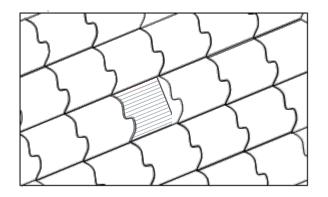


CHALLENGE: Repeat steps 2-3 on an adjacent side of the card.





- 4. Place your tile on the center of a sheet of paper and carefully trace around it with a pencil.
- 5. Pick up your tile and place it next to your traced design, as if it were a piece fitting into a jigsaw puzzle. There should not be any gaps or overlapping. Trace your tile again. Repeat until your whole paper is covered and there are no gaps or spaces.



- 6. Trace over your pencil lines with a black marker. You may wish to add details to each shape to help others recognize what you "saw" in it. For example: Does your tile look like an animal? Add these simple details to every shape.
- 7. Color your design with markers, colored pencils, or crayons.

FOLLOW-UP DISCUSSION QUESTION:

• Is your tessellation a *translation tessellation* or a *glide reflection tessellation*? Why?

