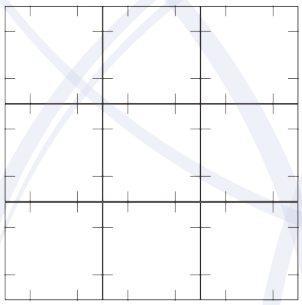
Truchet Tiles

Create a Tessellation-based Puzzle with Squares with marked intervals.

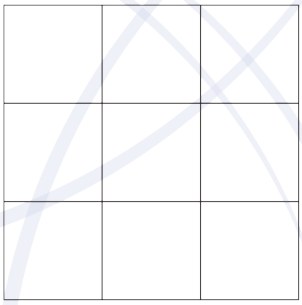
Sebastian Truchet paved the way to encoding visual patterns. Cyril Stanley Smith worked from Truchet's ideas and introduced alternatives to the basic Truchet Tile.

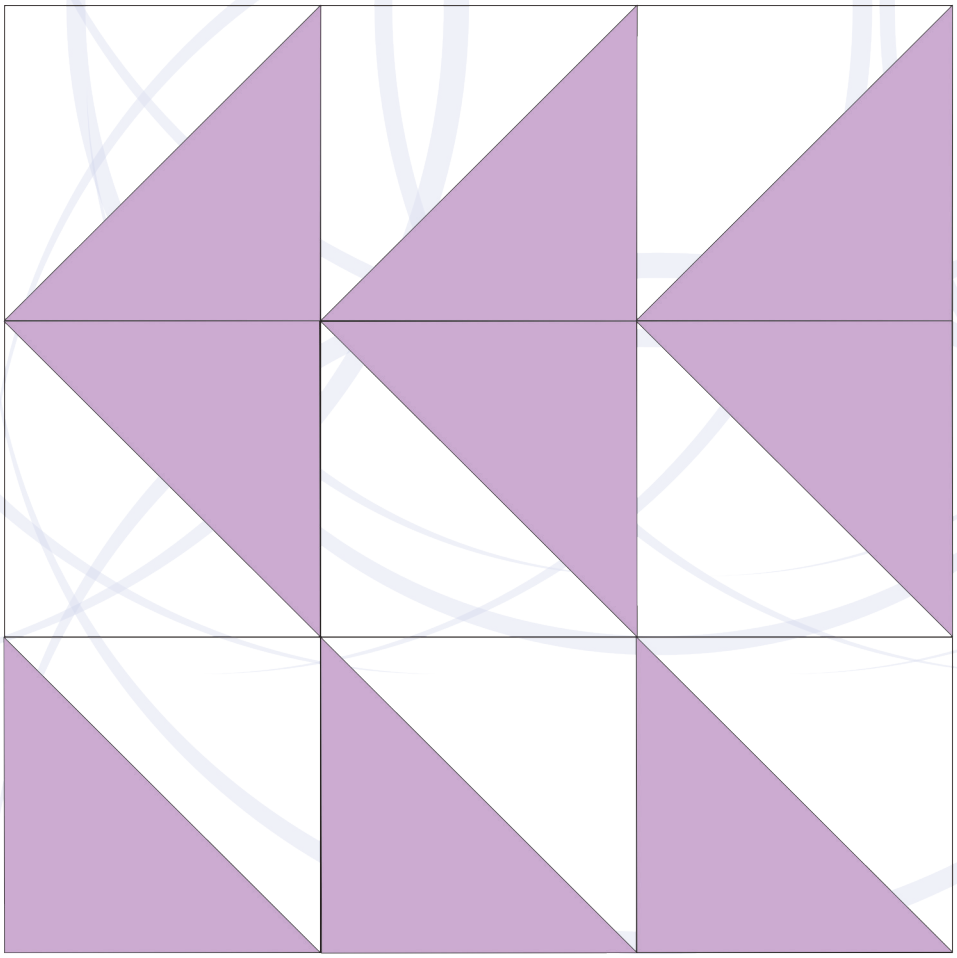
The Square on the template works for Smith's ideas as the intervals can be marked from the template as shown below.
These alternatives are discussed in the series of Teacher's Manuals.



Shape 23

The concept that Truchet had can be easily reproduced using the Square on the template. No intervals need to be marked off for this type of tiling.





Each square should have a diagonal running through it.

Let the students experiment with curved lines to connect opposite vertices.

Cut the squares loose and pack different patterns.

There will be many various ways to tile a pattern.

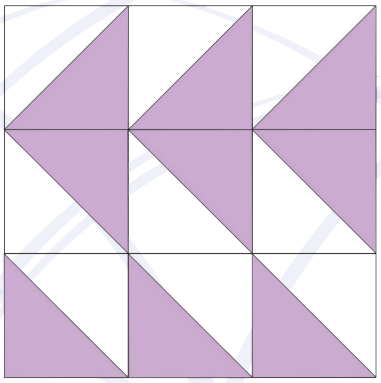
See the series of Teacher's Manuals for more ideas on developing spatial skills with our other examples on these tiles.

Truchet Tiles

Create a Tessellation-based Puzzle with Squares

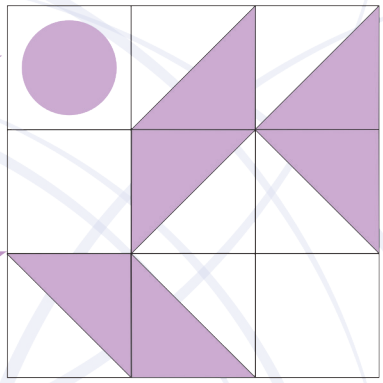
Add Circles, curves and blank Squares to the tile for a variety of puzzles.

Shape 23

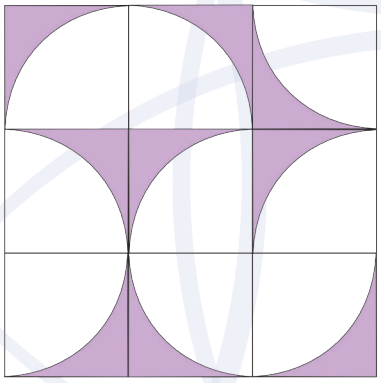


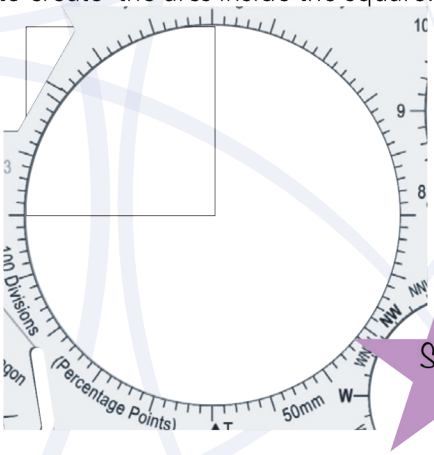
Shape 23

Shape 12



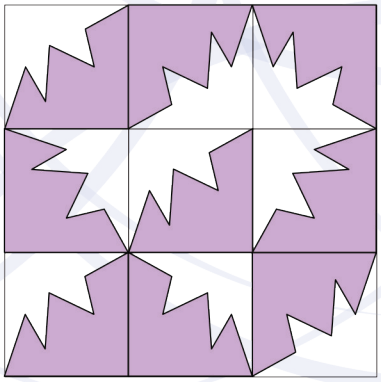
Use the Circle and position it as shown to create the arcs inside the square.





Shape 3

Shape 23



This game serves as an early introduction to rigid transformations. It will be a good idea to incorporate this into all of the transformation - lessons as well. A complete lesson plan was developed for these tiles to be used with transformations in the series of Teacher's Manuals.

Add some circles and curved diagonals to the squares for more challenging puzzles.

Let each student draw their tile on paper with their template. Keep these as cards and hand them out around the class.
They can now build each other's drawings.

Increase the difficulty by having them study a card pattern, put it face down and see how far they can build from memory. This is a very good visual memory recall exercise.