

1. Discovering the Polyominoes

2. Tetris (1st and 2nd Class)

Resources: Squares (p.1)-20 per two pupils. Print the tetrominoes template on the 160 gsm paper and cut out the pieces. Glue corresponding pieces from page 3 and 4, so kids can play a complete game.

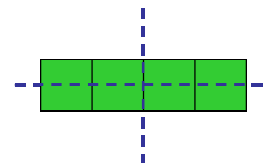
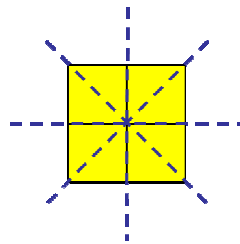
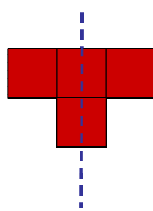
Strands: Symmetry, spatial awareness;

Time: 60 minutes

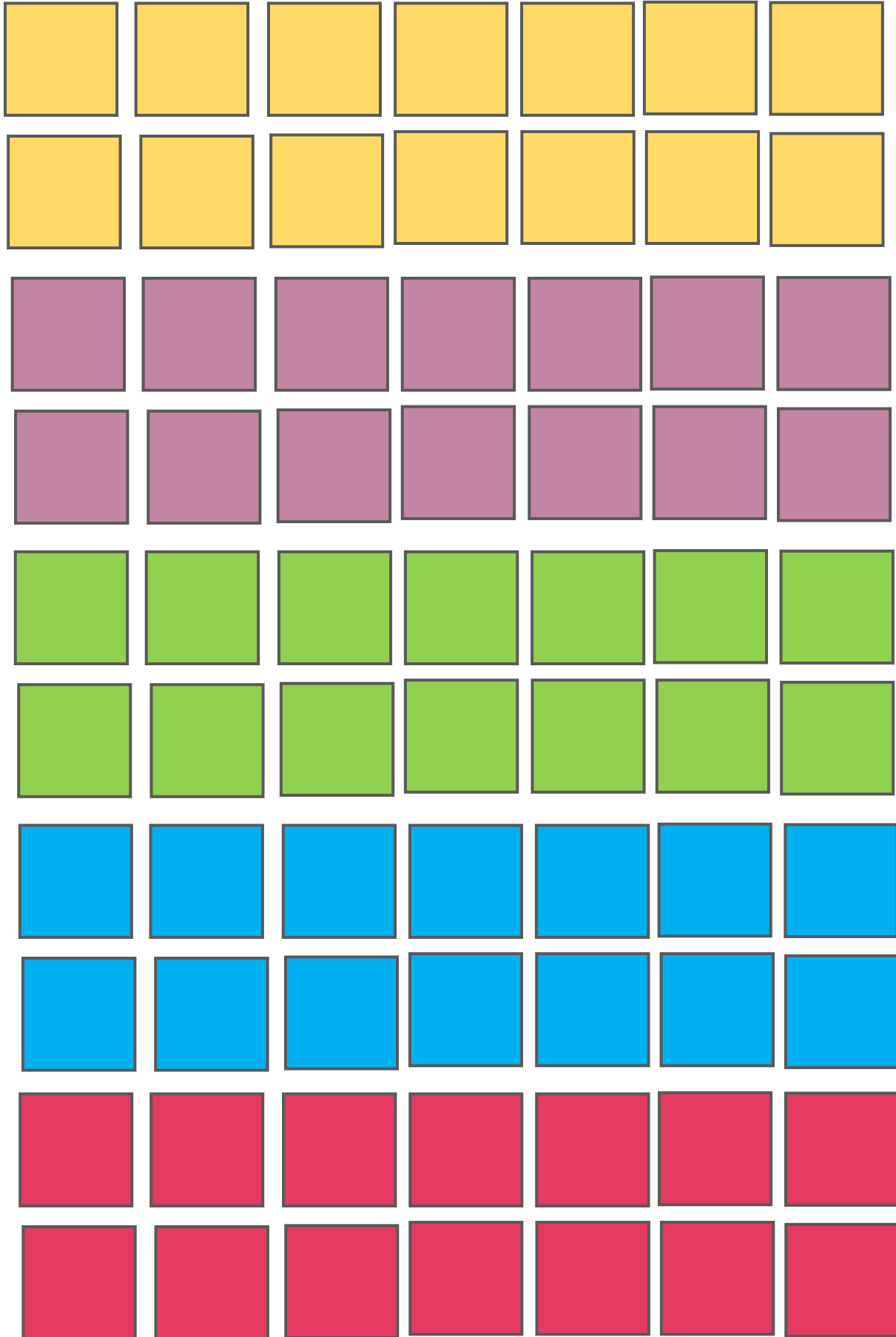
Teacher's note: A polyomino is a plane geometric figure formed by joining one or more equal squares edge to edge. Polyominoes have connections with various themes in geometry- symmetry, tiling, perimeter, and area.

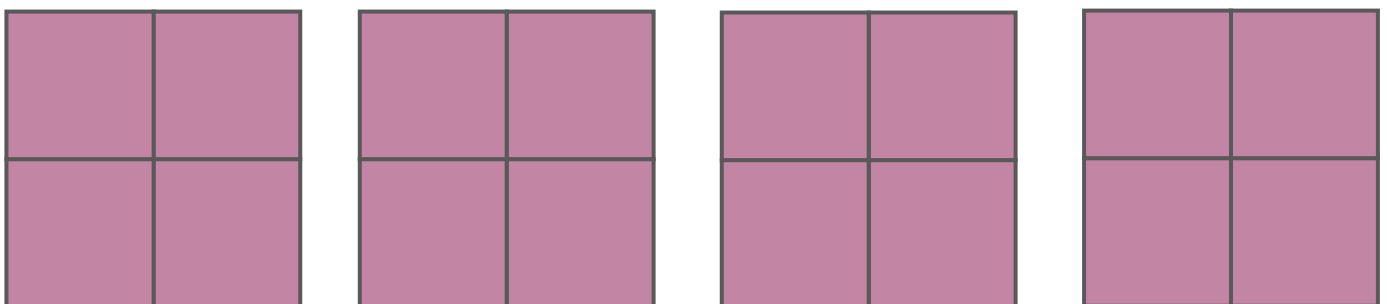
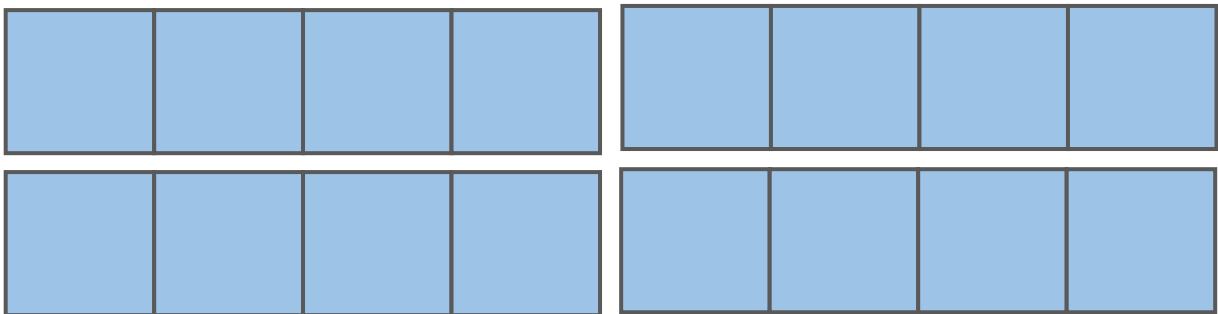
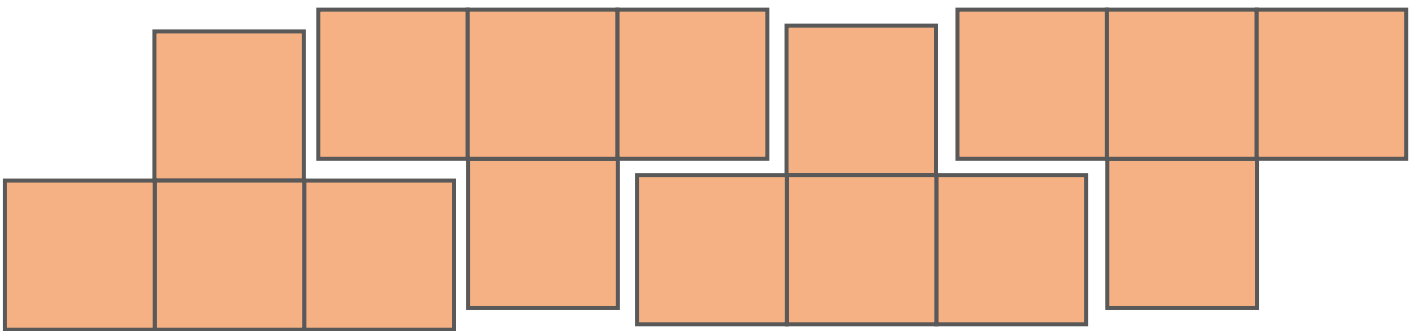
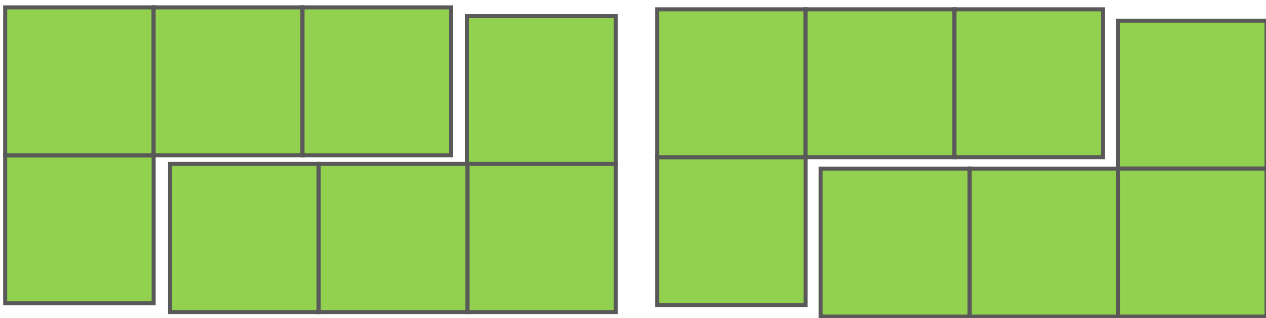
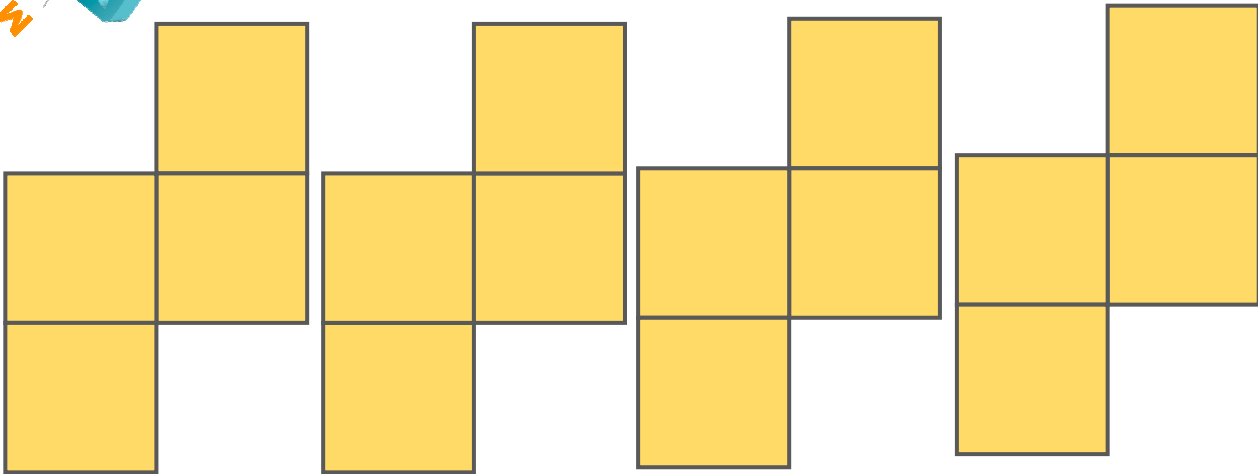
Activity I: Discuss how many shapes can be made with one (MONOMINO- just one shape) or two (DOMINO- one shape) squares. How many with three merged squares (TROMINOES- two shapes)? The real fun begins when pupils have four squares to work with. The five shapes, that can be created by merging squares, are called TETROMINOES. Give the pupils loose squares so they can create shapes themselves. Then replace them with the ones cut out of the template.

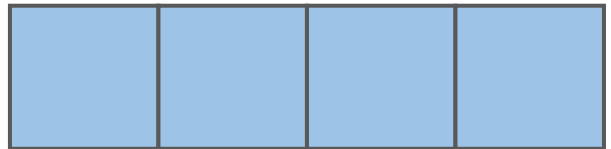
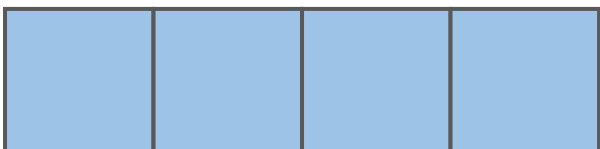
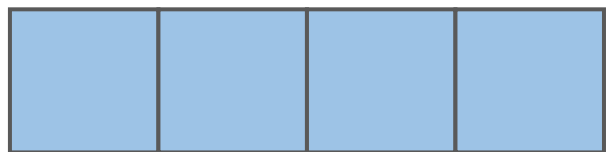
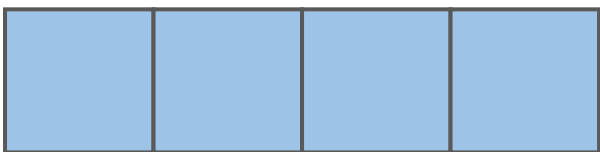
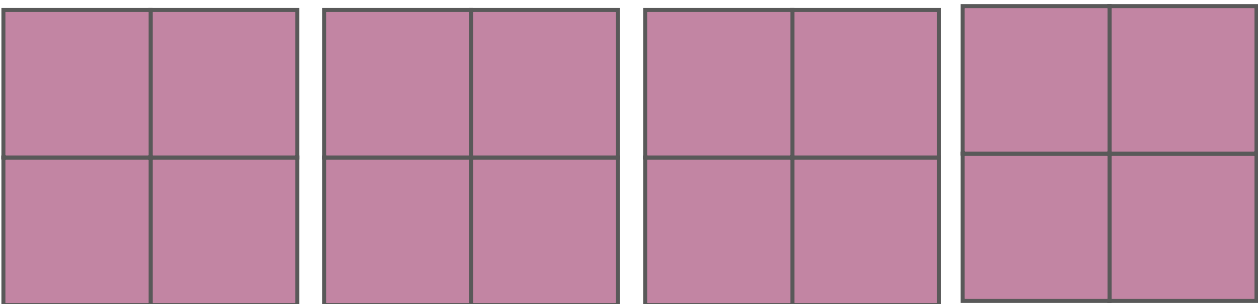
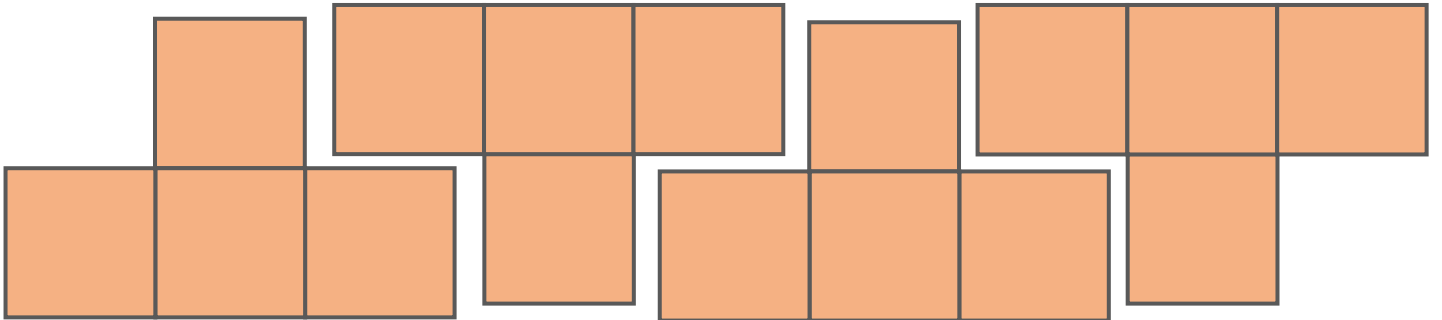
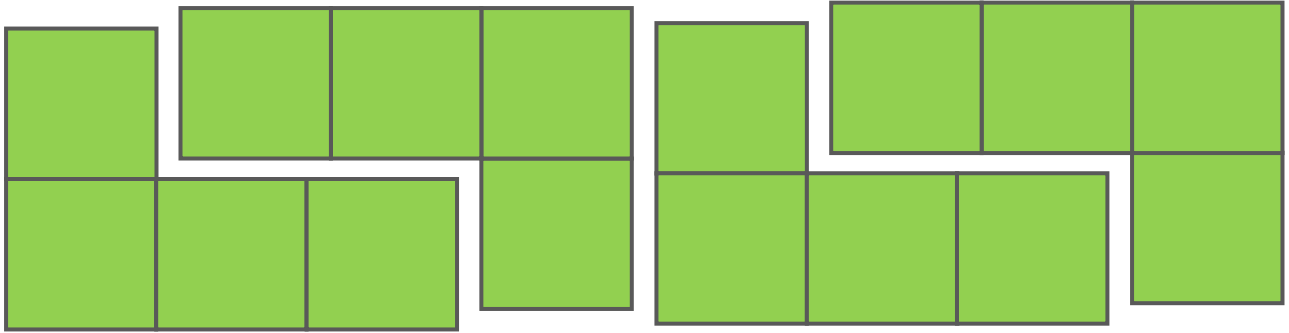
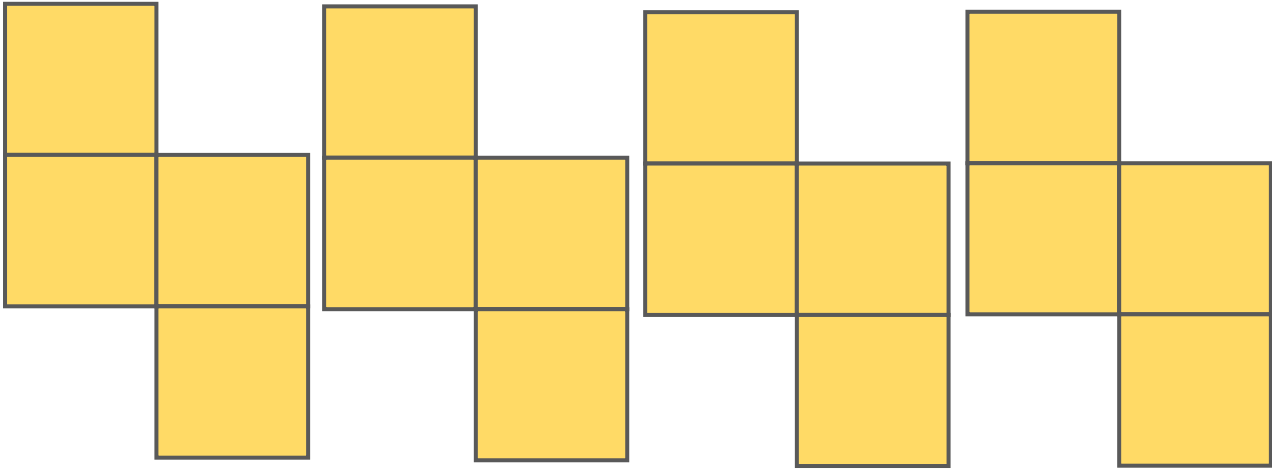
Questions: Do the shapes look like any of the letters? (T, O, I, L, N, Z)
What form of symmetry can you find and in which shapes? (axial, line symmetry)



Activity II: Place the tetromino pieces in the pouch and give one pouch per pair of students along with the TETRIS GAME template. Pupils, in turns, take out one piece and place it on the bottom of the board. At a certain point, there won't be enough room for the tetromino pieces- this means the game is over. Every time, the player is not able to cover the plane without gaps, gets minus points, the amount of points is equal to the number of not covered squares.









TETRIS

