

Transformational Geometry Using Pentominoes Lesson Plan or The Blokus Game:

1. “Students today we are going to make a math game, called the Pentominoes game”
2. Put kids in groups of 4 , if you have to put 5 kids in a group and have one student partner with any of the four players.
3. Pass out materials to the students.
4. The teacher leads the whole class.
5. Students have 5 tiles, grid paper (that matches the tiles). Each student has a different color grid paper.
6. Start with a single tile. Show students that only one shape is possible. Students cut it out.
7. Continue the process (including the cutting) with 2 tiles (1 configuration). Then continue with three (2) and four tiles (5) and Five tiles (12). Explain to students the concepts of flips (reflections), slides (translations) and turns (rotations). Lead as much as you feel necessary, but consider turning it over to the kids after you do 3-tiles with the group.
8. Each team makes 1 20 x 20 grid game board out of 6 white grid sheets, construct by trimming and taping to make the 20 x 20 grid.
9. Each player has 21 game pieces and each table has 1 game board. Now you are ready to play.

10. HOW TO PLAY BLOKUS GOES HERE

Materials: Scissors, 4 different colored grid paper (2 each), 6 pieces of white grid paper, 5 tiles for each student or use Starburst candies.

Objective: Each student should make 21 patterns with 5 tiles.

Vocabulary: Reflection, congruent, pentominoes, slide, rotate, vertices, edges, Area and perimeter

I CAN: I can DEMONSTRATE flips (reflections), slides (translations) and turns (rotations)

I can identify the edges and vertices of each shape.