

GEOOMETRY

6. Transformational Reflection-Symmetry

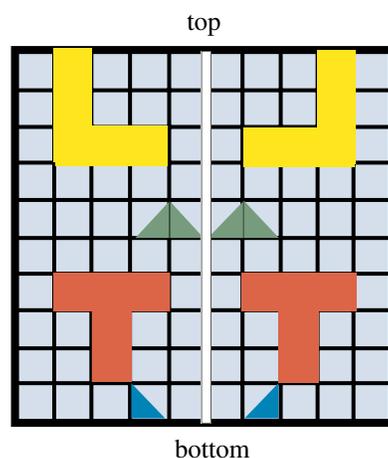
(manipulating objects to experience and demonstrate reflection)

Materials Required:

- The Learning Carpet-TLC®
- assorted large pentomino shapes (2 of each shape and colour)
- triangles (2 of each colour)
- TLC symmetry line (or column separator)

Activity:

- The teacher places a symmetry line down the middle of TLC, dividing it in half.
- The teacher begins the demonstration of reflection by placing one shape on the left of the line of symmetry. (Looking at it from the bottom!)
- A child picks up an identical shape, places it on the teacher's shape, walks through the "mirror" to the right side of the carpet, flips their shape and places it in the mirrored or symmetrical position.
- The child must then stand back at the line of symmetry to view the two shapes, and adjust as necessary to make them symmetrical. (THIS IS A VERY IMPORTANT STEP! The child MUST have the opportunity to fix their work without interference from the teacher or their peers.)
- The teacher (or a child) places a new shape on the left side of the line of symmetry and another child mirrors this on the right side.
- Continue until there are several symmetrical shapes on TLC.



Variation:

- Children are given a large paper grid, (template #2), draw in a line of symmetry and copy the shapes from TLC onto their paper.
- Children draw shapes on the right half of their paper and trade it with a classmate's, each drawing in the symmetrical shapes on the left side of the paper.

Class Challenge!

- A child places shapes off the grid lines of TLC on the left side of the line of symmetry and another child tries to mirror the matching shapes on the right side.
- This can be very challenging as the children must look for reference points other than the grid lines to make their shapes symmetrical!
- Children can draw shapes off the grid lines on the left side of a large paper grid, (template #2), and trade theirs with a classmate's, each drawing in the symmetrical shapes on the right side.

