

Core Skills Analysis

Mathematics

- The student demonstrated an understanding of spatial awareness by manipulating the tangram shapes to fit them into various configurations and puzzles.
- The activity enhanced the student's ability to recognize and differentiate between various geometric shapes such as triangles, squares, and parallelograms.
- Through the act of combining and arranging shapes, the student engaged with basic principles of symmetry and congruence.
- The student began to grasp concepts of comparison and measurement by evaluating the sizes of the different shapes and how they fit into a designated area.

Art Education

- The student explored creativity by designing unique patterns and figures using the tangram shapes, showing personal expression through art.
- Color recognition and usage were enhanced as the student had the opportunity to identify and select different colored tangrams for their designs.
- The creation of shapes fostered fine motor skills through the precise placement of the tangram pieces, improving hand-eye coordination.
- The student learned about composition and balance as they arranged shapes to create visually appealing designs.

Cognitive Development

- The student engaged in problem-solving as they figured out how to fit the pieces together to create specific shapes or images.
- The activity encouraged critical thinking skills as the student had to strategize and experiment with different arrangements of the tangram pieces.
- Memory skills were exercised by recalling shapes and their arrangements to replicate or innovate new figures.
- The tangram activity promoted concentration as the student focused on task completion while being guided through the processes.

Tips

To further enhance the learning experience, parents and teachers can introduce more complex tangram puzzles to encourage advanced problem-solving skills and cognitive growth. Creating a story around each shape could also help integrate language development while exploring shapes. Consider activities such as drawing outlines of figures before assembling them with tangrams, linking art with learning. Other suggestions include organizing group activities where children create collaborative artwork using tangram shapes to promote teamwork and social skills.

Book Recommendations

- [The Tangram Book](#) by Lynn B. W. Leite: An engaging book introducing tangram shapes through colorful illustrations and interactive puzzles for young children.
- [The Shape of Things](#) by Dayle Ann Dodds: This book teaches children about shapes while exploring their presence in everyday life, making connections to tangrams.
- [Mouse Shapes](#) by Ellen Stoll Walsh: A delightful story about mice using shapes to create different forms, fostering creativity and recognition of shapes, similar to tangrams.

Learning Standards

- CCSS.MATH.CONTENT.K.G.A.2 - Correctly name shapes regardless of their orientations or

overall size.

- CCSS.MATH.CONTENT.K.G.B.5 - Model shapes in the world by building shapes from components.
- CCSS.ELA-LITERACY.L.K.5 - With guidance and support from adults, explore word relationships and nuances in word meanings.