

Module 2 Overview

Shapes

Coherence: Before This Module

Some students come to school able to distinguish between two shapes that are the same (two rectangles) and two shapes that are different (a rectangle and a circle). Most, however, do not yet have the mathematical language and geometric understanding to tell what features make shapes alike or different.

Young children’s ideas about shapes may be based on typical examples from books and media or real-world experience: “That is a rectangle. It looks like a door.” Students may also use informal words such as *box* or *ball* to talk about shapes. Students’ prior knowledge and experiences are built upon in Transitional Kindergarten as students learn how to communicate about two- and three-dimensional shapes and space.

TK Module 1

In the previous module, students identified the attributes of an object, used attributes to sort objects, and discussed sorting strategies and rules. Students also learned strategies for counting and for keeping track of their count.

Coherence: After This Module

TK Module 3

In the next module, students explore how both shapes and numbers can be composed and decomposed. They start noticing part–whole relationships. As they count to 10, students see that each number in the counting sequence increases by 1 more. Students use objects, sounds, and movement to identify, duplicate, and extend patterns.

Topic A

Spatial Relations

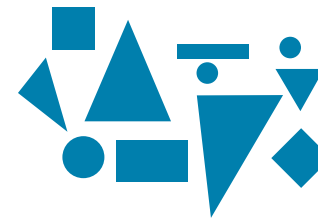
Students use position words such as *beside*, *between*, *next to*, *in front of*, and *behind* to describe the relationships between objects in space (e.g., “The toy truck is *in front of* the window”). Through treasure hunts and mapmaking, students begin to develop a sense of spatial orientation.



Topic B

Analyze and Name Two-Dimensional Shapes

Students apply their counting and sorting skills as they explore two-dimensional shapes. As they are exposed to a shape’s defining attributes, such as the number of straight sides and corners, students begin to build a conceptual understanding of circles, triangles, squares, and square rectangles. These shapes are presented in various sizes and orientations to promote flexible thinking.



Topic C

Build and Compose Two-Dimensional Shapes

Drawing upon their mental images of two-dimensional shapes from topics A and B, students manipulate materials to build and compose shapes with straight sides, corners, or curves. As students fill simple puzzles and build shapes, they learn to attend to a shape’s attributes.



Topic D

Analyze Three-Dimensional Shapes

Students explore the attributes of three-dimensional shapes by stacking, rolling, and sliding them. Students think about how faces or curves affect the way a solid shape moves or the type of imprint it leaves. They analyze why certain three-dimensional shapes are good for stacking, and together students build a pyramid with blocks.

