Before This Module

TK Module 2

Students explore defining attributes of two-dimensional shapes, such as the number of straight sides and corners. They build a conceptual understanding of circles, triangles, squares, and square rectangles. Students also begin to name some familiar three-dimensional shapes such as a sphere, cube, and cylinder. They explore the attributes of three-dimensional shapes by stacking, rolling, and sliding the shapes.

TK Module 6 Project B

Students use math concepts to plan a community celebration. They combine shapes to create gifts for the group being celebrated. As students flip and turn shapes to make a picture, they develop spatial reasoning.

Kindergarten 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 to count and keep track of their count.

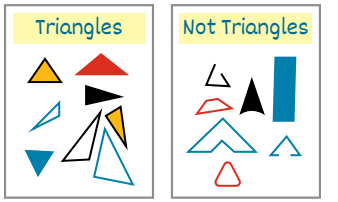
Overview

Two- and Three-Dimensional Shapes

Topic A

Analyze and Name Two-Dimensional Shapes

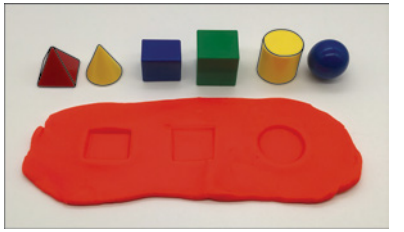
Most kindergarten students come to school with some knowledge about shapes. Those ideas may be based on visual examples or real-world experience: "That is a rectangle because it looks like a door." They may be able to name some shapes based on the general look or feel of the shape. The goal of this topic is to turn their attention to the specific qualities that are used to classify shapes, such as number of sides and corners, known as defining attributes. This process helps students build a conceptual understanding of two-dimensional, or flat, shapes.



Topic B

Analyze and Name Three-Dimensional Shapes

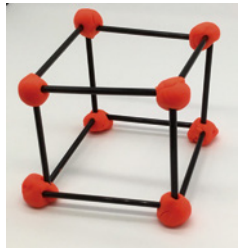
Students continue to focus on defining attributes and extend the list to include features of three-dimensional, or solid, shapes: faces and edges. Through sorting, they discover that some attributes are common to both flat and solid shapes, such as corners. Their spatial thinking evolves as they consider how geometric attributes affect the way a solid shape can be moved or the type of imprint it leaves.



Topic C

Construct Shapes

Prior experience with attributes paves the way for building, drawing, and composing shapes. To manipulate materials and successfully construct a shape, students draw from the mental images built in the first two topics. Experiences constructing and composing shapes provide students opportunities to observe how shapes look from multiple perspectives, how parts fit together to make a whole, and how shapes relate to one another.



After This Module

Kindergarten Module 3

The ability to focus on a specific set of attributes sets the stage for comparison. The measurable attributes of length, weight, quantity, volume, and area are the focus as students use and fine-tune the spatial reasoning skills developed in module 2. They communicate their observations about objects with structured comparison statements by using precise mathematical language. The module culminates with a return to counting and cardinality when students compare sets and numbers.