

P.Cert.K Unit 12: Three Dimensional Shapes

Content Area: **Math**
Course(s):
Time Period: **June**
Length: **3 Weeks**
Status: **Published**

Unit Overview

Students will learn about three dimensional shapes, their proper names and attributes of each shape. Students will make connections with shapes to real world objects. Students will also be able to determine from attributes whether solid shapes will roll, slide or stack.

Enduring Understandings

Students will know:

How to identify cones.

How to compare solid shapes.

How to identify and describe solid shapes in the real world.

Essential Questions

How do I identify and compare three dimensional shapes?

Instructional Strategies & Learning Activities

My Math Kindergarten Chapter 12

- **Pacing Guide**
Suggested Pacing

Instruction	9 days
Review/Assessment	2 days
Total*	11 days

- *Includes additional time for remediation and differentiation.

Lesson	Objective	Material & Manipulatives	Vocabulary	Standard
Lesson 1 pp. 693-	Identify, name, and	• cube and sphere geometric solids	sphere	K.G.2

698	describe cubes and spheres.	<ul style="list-style-type: none"> • ball, globe • number cube, cube shaped box • round-ended toothpicks • clay • objects shaped like spheres and cubes 	cube	K.G.3 K.G.4
Spheres and Cubes				Major Cluster
				MP 2, 3, 4, 6, 7, 8
Lesson 2 pp. 699-704	Identify, name, and describe cylinders and cones.	<ul style="list-style-type: none"> • cube, sphere, cylinder, and cone geometric solids • objects shaped like cylinders and cones 	cylinder cone	K.G.2 K.G.3 K.G.4
Cylinders and Cones				Major Cluster
				MP 4, 5, 6, 7, 8
Lesson 3 pp. 705-710	Analyze and compare solid shapes.	<ul style="list-style-type: none"> • cube, sphere, cylinder, and cone geometric solids • objects shaped like cubes, spheres, cylinders, and cones • building blocks 	roll stack slide	K.G.4
Compare Solid Shapes				Major Cluster
				MP 3, 4, 5, 6, 7
Check My Progress				
Lesson 4 pp. 713-718	Act it out to solve problems.	<ul style="list-style-type: none"> • building blocks • geometric solid shapes 		K.G.2 K.G.4
Problem–Solving Strategy: Act It Out				Major Cluster
				MP 1, 4, 6, 7
Lesson 5 pp. 719-724	Identify, name, and describe solid shapes in the physical world.	<ul style="list-style-type: none"> • cube, sphere, cylinder, and cone geometric solids • classroom objects shaped like geometric solids • magazines • glue sticks • large paper 		K.G.1 K.G.2 K.G.3 K.G.4
Model Solid Shapes in Our World				Major Cluster
				MP 1, 6, 7, 8

Integration of 21st Century Themes and Career Exploration

CRP.K-12.CRP2

Apply appropriate academic and technical skills.

CRP.K-12.CRP5

Consider the environmental, social and economic impacts of decisions.

CRP.K-12.CRP4

Communicate clearly and effectively and with reason.

CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Technology Integration

Utilize programs on the iPad.

Use of Shutterfly Share Site.

Smartboard lessons and technology

Interdisciplinary Connections

LA.RF.K.1	Demonstrate understanding of the organization and basic features of print.
LA.RF.K.2	Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
LA.RI.K.1	With prompting and support, ask and answer questions about key details in a text.
LA.RF.K.3	Know and apply grade-level phonics and word analysis skills in decoding and encoding words.
LA.RI.K.2	With prompting and support, identify the main topic and retell key details of a text.
LA.RI.K.4	With prompting and support, ask and answer questions about unknown words in a text.
LA.RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).

Differentiation

Each chapter in My Math teacher manual contains differentiated instruction for Approaching level, On Level and Above level students.

Modifications & Accommodations

I&RS and 504 accommodations will be utilized in addition to the differentiated instruction in the Unit.

Benchmark Assessments

Formative Assessments

Teacher observation

Discussion

Worksheets

Summative Assessments

Assessments for chapters located in My Math Unit.

Instructional Materials

See above.

Standards

MA.K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
MA.K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
MA.K.G.A.2	Correctly name shapes regardless of their orientations or overall size.
MA.K.G.A.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).