K Math Unit 12: Identify and Describe Shapes

Content Area: Mathematics

Course(s):

Time Period: May
Length: 2 Weeks
Status: Published

Unit Overview

Topic 12 formally introduces many geometric ideas by asking students to:

- 1. identify shapes as two-dimensional (flat) or three-dimensional (solid)
- 2. name squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres regardless of orientation and size, and
- 3. use terms such as "above," "below," "beside," "next to," "in front of," and "behind" to describe the relative position of shapes in their environments.

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.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").
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.CC.A.1	Count to 100 by ones and by tens.

Materials

- EnVision Math
- 12.1 Two-Dimensional (2-D) and Three-Dimensional (3-D) Shapes
- 12.2 Circles and Triangles
- 12.3 Squares and Other Rectangles
- 12.4 Hexagons
- 12.5 Solid Figures
- 12.6 Describe Shapes in the Environment
- 12.7 Precision
- ST Math
- Happy Numbers
- 3 Act Lessons
- Building Fact Fluency Kit
- Brainingcamp Manipulatives
- Nearpod Lessons

- Brainpop Resources
- Math Diagnosis and Intervention System
- Online Resources

Technology

8.1.2.A.2,4,5,7 (word processing and spreadsheets)

8.1.2.E.1 (Internet to explore questions with support)

8.2.2.A.1,2,3,4,5 (design products, understand systems)

8.2.2.C.1.2.3 (design and improve products/systems)

Assessment

Formative Assessment

- Teacher Observation
- Daily Quick Checks
- Quizzes
- Exit Tickets

Summative Assessment

- Topic Tests
- Benchmark Tests
- Alternative Assessments: Performance Tasks & Projects

Accommodations & Modifications

Special Education

- Follow IEP Plan which may contain some of the following examples...
- In class/pull out support with special ed teacher
- Additional time during intervention time
- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers

- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Limit number of questions
- Scribe
- Manipulatives
- Calculators
- Reteach pages
- Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System
- Another look homework video
- Practice buddy

504

- In class/pull out support with special ed teacher Additional time during intervention time
- Preferred seating
- Questions read aloud
- Extended time for completing tasks Graphic organizers
- Vocabulary support Mnemonic devices
- Songs/videos to reinforce concepts Limit number of questions
- Scribe Manipulatives Calculators Reteach pages Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System Another look homework video
- Practice buddy

ELL

- Translation device/dictionary
- In class/pull out support with ESL teacher
- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives
- Math Diagnosis & Intervention System

At-risk of Failure

- Additional time during intervention time
- · Questions read aloud
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives
- Calculators
- Reteach pages

- Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System
- Another look homework video
- Practice buddy

Gifted & Talented

- Independent projects
- Enrichment pages
- Online games
- Leveled Homework
- Extension Activities
- Today's Challenge

Interdisciplinary Connections

Topic 1 Math and Science Project - Using different presentations tools, students will collect different types of paper. Talk about the uses of paper. Tell how strong each type of paper is. Tell how the paper feels. Tell if the paper can soak up water.

ELA:

RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.

Science:

K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

21st Century Life Literacies & Key Skills

Critical Thinking and Problem Solving:

Problem-solving activities starting with the lesson "Solve and Share" and ending with higher order thinking questions that utilize the mathematical practices

Communication and Collaboration:

Throughout the lesson, students are provided with opportunities to discuss their ideas as they investigate mathematical concepts.

Creativity:

Students have opportunities to express their creativity by solving problems their own way, participating in performance tasks, and group projects.

Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP12. Work productively in teams while using cultural global competence.