

Teacher/School: Marie Lambert/ Kim Davis/ Susan Moye

Unit Title: What's My Shape

Grade Level: 6th, 7th, 8th grades

Subject/Topics: Mathematics/ Polygons

Time Needed: 3 to 5 days

Learning Objectives: What will students learn?

- The students will be classifying triangles/quadrilaterals

Students should be able to classify an angle as acute, right, obtuse, or straight. Students should be able to classify triangles as acute, obtuse, right, equilateral, isosceles, or scalene. Students should be able to classify quadrilaterals as parallelogram, trapezoid, rhombus, rectangle and square. **The most important concept that the students should carry away with them is that, quadrilaterals/triangles are polygons that are classified by specific attributes.**



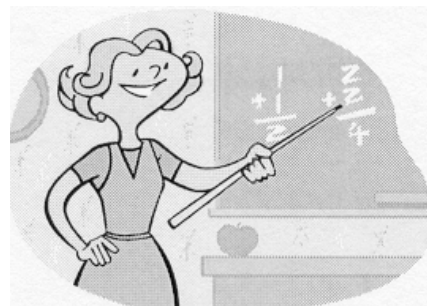
Sunshine State Standards:



MA.B.1.3.2, MA.C.1.3.1, MA.C.3.3.1

Materials/Supplies:

Paper, pencil, shape blocks, SIMS content enhancement-concept diagram worksheets, 8B reading comprehension, 8C reading and writing math symbols, 8D vocabulary; 8-4/8-5 reteaching worksheet; reading literacy puzzle # 8, technology activity #14, #45, *teacher page 391 & h grade*; 8-4/8-5 practice worksheet; textbooks chapter 8 lessons, 4/5; (optional: additional teacher-made worksheets *for vocabulary development*, overhead projector, computer, textbook CD, interwrite pad, graphic calculator TI-73, IRespond units). (*Prentice Hall Mathematics* for: 88, 8C, 8D resource work pages; also 8-5 reteaching/ practice/enhancement pages.)



Prerequisite Skills:

All closed-in shapes with angles and sides and no curves are polygons. The smallest polygon is a triangle and a closed-in shape with 4-sides and 4-angles is a quadrilateral. Identify the parts that make a polygon. Identify an angle of a polygon. Identify a side of a polygon.

Instructional Procedures: What will the teacher be doing? What will the students be doing?

Day 1: Introduction

*KWL to access prior knowledge for lesson vocabulary and content. *Key concept, (polygons identified) will go on a "word-wall"

*Play: "Find a Shape".



*Algebra readiness-puzzle #8 "Geometry in Art".

Day 2: Grade 6/7/8 (*varied difficulty according to grade-level/abilities*)

*Reinforcement-hands-on activity to prove every triangle is equal to 180 degrees.

*Small group (2 to 3 students) activity: students create 5 different triangles with one missing angle which includes examples of acute, right, and obtuse triangles. Students then trade triangles to determine the missing angle.

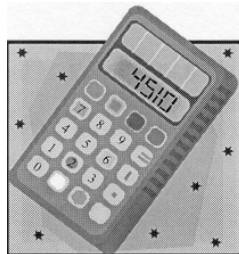
*Think-Pair-Share

*IRespond-quiz to check individual students' understanding.

*Teacher-made worksheet

Day 3: All grade levels

*Mini-lesson on "*Sides of a triangle: Scalene. Isosceles. Equilateral*" using the graphic *Calculator T1-83*.



*Use Reteaching 8-4(6th)/8-5(th/8th) in small groups for students not mastering content evidenced from the IRespond quiz. (with teacher)

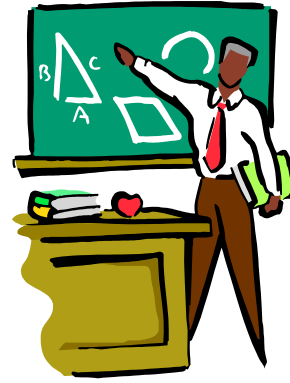
Day 4: All grade levels

*Using Practice 8-4(6th)/8-5(th/8th) extend learning for students passing the IRespond quiz, then continue with the lower students after passing the reteaching work. Some students working independently, others working with peer-tutor. (These students will be applying their understanding of triangles to quadrilaterals.)

*Students, as needed in small groups of 2 to 3, students will use the SIMS content-diagram worksheets on content and vocabulary for review.

Day 5: All grade levels

*IRespond test for content and vocabulary.



*Geometry scavenger hunt for extension and reward.

Differentiated Instruction:

The following refers to multileveled groups including ESE, ESOL, and Gifted: Based on abilities, interest, and content; students will be working on appropriate content leveled skills applicable to demonstrating mastery.

Assessment:

We will assess our students' performance through their abilities to participate in whole-group instruction; grades on each independently worked practice worksheet, and additional skills puzzles. We will also build a test into the IRespond units that includes identifying polygons qualifying as quadrilaterals and triangles. Students will be able to use correct names for the polygons using qualifying symbols to show angles and sides that reflect definitions.