6Richmond Public Schools

Department of Curriculum and Instruction
Curriculum Pacing And Resource Guide – Unit Plan

Course Title/ Course #: Pre-Algebra Math 8

Unit Title/ Marking Period # (MP): Pythagorean Theorem/MP 2

Start day: 69

Meetings (Length of Unit): 6 Days

Desired Results ~ What will students be learning?

Standards of Learning/ Standards

8.9 The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:
a) Construct three-dimensional models, given the top or bottom, side, and front views.
b) identify three-dimensional models given a two-dimensional perspective.

Essential Understandings/ Big Ideas

How does knowledge of two-dimensional figures inform work with three-dimensional objects?
It is important to know that a three-dimensional object can be represented as a two-dimensional model with views of the object from different perspectives.

Key Essential Skills and Knowledge

- Construct three-dimensional models, given the top or bottom, side, and front views.
- Identify three-dimensional models given a two-dimensional perspective

Vocabulary

3-dimensional Face vertex	2-dimensional	

Assessment Evidence ~ What is evidence of mastery? What did the students master & what are they missing?

Assessment/ Evidence

Mulligan Checkpoint 8.9
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Interactive Achievement
HCPS Mini Quizzes
Students should be able to match the correct top, front and side view to a given image.

Math Task Assessment: http://map.mathshell.org/download.php?fileid=810

Learning Plan ~ What are the strategies and activities you plan to use?

Learning Experiences/ Best Practice

Math Science Innovation Center Lesson- Cube-n-ometry. All materials and slide available using the following link.

http://mathinscience.info/teach/612_math/math68/cube-n-ometry/cube-n-ometry.html

Have students use wooden blocks to build the 3-dimensional shapes.

Technology Integrations

Gizmo
Educational Games-under resources
Compass Learning
Allen Teachers
Brain Pop
Khan Academy

Resources

Text:
Glencoe Pre-Algebra pages:
705 (Drawing Three Dimensional Figures)

Mulligan Math in Minutes 8.9
SOL Coach Book Va Edition: pages 108-112

Technology:
Gizmo-3D and Orthographic Views Activity B- Interactive Instructional Resource
WisWeb Applet-Building Applets- Interactive Lessons/Activities

Virginia Department of Education
VDOE-3D Figures-Lesson Plan

Other Sites
HCPS - Three Dimensional Model - Instructional materials, practice page, assessments
Math Science Innovation Center-Cubenometry-Lesson Plan

Cross Curricular Connection

English-have students use a venn diagram to compare and contrast the views of the three dimensional vs. the two dimensional shapes.

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