Careers in Action

Summer Teacher Internship/Lesson Plan Writing Project

This lesson has been endorsed by Adolfo Navarro, Fleet Manager, McAllen Construction Inc.

Alex Salinas	Geometry	Summer 2007
Teacher's Name	**Course/Subject**	**Date(s)/Time**

Content

Objective(s)

TLW estimate the volume of real world form in cubic yards of cement, given the height, length and width of the three dimensional figure with the sue of your calculator to the nearest tenth.

Career Concentration(s)

- ☐ Agricultural Science
- ☐ Art, Communications & Media
- ☐ Business & Marketing
- ☐ Health Science Technology
- ☐ Human Dev., Management & Services
- ☑ Industrial and Engineering
- ☐ Personal and Protective Services

TEKS Reference: G.8.D. Congruence and the geometry of size: find surface areas and volumes of prisms, pyramids, spheres, cones cylinders and composites

TAKS Reference: Obj 8

Process

Focus/Anticipatory Set

Show a video of a flood gate floor cement pour at Balboa Acers

Relevance/Connection to Workplace

At McAllen Construction Inc. potential customers call asking for estimates for floors and various cement forms, in order to give an estimate with the dimensions the volume is calculated and the cost is given for quantity of cement needed.

Bloom's Taxonomy in Lesson

- ☐ Knowledge
- ☐ Comprehension
- ☐ Application
- ☐ Analysis
- ☐ Synthesis
- ☑ Evaluation

Multiple Intelligences

- ☐ Linguistic
- ☑ Logical/Math
- ☐ Musical
- ☑ Spatial
- ☐ Bodily-Kinesthetic
- ☐ Intrapersonal
- ☐ Interpersonal
- ☐ Naturalist

SCANS

Foundation

	A	B	C	D	E	F
1	☐	☐	☑	☐	☐	
2	☐	☐	☑	☐	☐	☐
3	☐	☐	☐	☐	☐	

Competencies

	A	B	C	D	E	F
1	☐	☐	☐	☐		
2	☐	☐	☐	☐	☐	☐
3	☐	☐	☑	☐		
4	☐	☐	☐			
5	☑	☐	☐			

Instructional Methodology (Activities)

- ☐ Lecture
- ☐ Teacher Modeling
- ☐ Media Presentation
- ☐ Small Group
- ☐ Class/Group Discussion
- ☐ Question/Answer
- ☐ Guided Practice
- ☐ Independent Practice

Instructional Material(s)

Cement pour video, Teachers notes, Holt Geometry materials, Quiz

Detail(s) of Instructional Methodology (Activities)

Review the volume formula for a prism and cylinder $V=l \cdot w \cdot h$ and $V=\pi \cdot r^2 \cdot h$. Model labeling the sides of the figure and solving for the volume. Work examples on Section 10-6 pg. 701 #1-5. Have students work as a class to solve problem. Guided practice problems 1-12. Feed back for students at various point of the instruction will be ensured.

Materials/Resources

TAKS Formula Sheet, Holt Geometry book, Internet

Use of Technology

Eiki projector, Document Camera, TI-83 Calculator, Classroom computer

Accommodations

Modifications for the special education and LEP students. Spanish resources and peer tutoring for the ESL students.

Product

Assessment

- ☑ Teacher Evaluation
- ☐ Employer Evaluation
- ☑ Test/Quiz
- ☑ Peer/Self Evaluation
- ☐ Written/Oral Presentation
- ☐ Others; _____

Bloom's Taxonomy in Assessment

- ☐ Knowledge
- ☐ Comprehension
- ☑ Application
- ☑ Analysis
- ☐ Synthesis
- ☐ Evaluation

Reteach Activity/Homework

Ask students to work in pairs solve problems

Lesson Closure

Ask the students to identify the volume formulas for a prism and

P	on pg 702 #13-23 show all work and calculations	cylinder, and the meaning of each variable.