Dividing Whole Numbers: 2-Digit Divisors

Performance Task Objectives

- Divide by 2-digit divisors
- Use a formula to find volume

Sunshine State Standards

- MA.A.3.2.2
- MA.A.3.2.3
- MA.B.1.2.2

Materials

- Student recording sheet
- Paper and pencil
- Calculator
- 48 centimeter cubes per student or group

Student arrangement

- Individual or small group

Task

Present the problem on the student Recording Sheet to your students.

Performance Criteria

- Does the student understand how to divide by a two-digit number?
- Does the student show his or her work and exhibit the ability to rearrange the digits to achieve the desired quotients?
- Is the student able to construct the figure and determine its volume?
- Do the student's drawings correspond to the dimensions and volume of the solids created with the cubes?

Name _____

Solve this problem.

1. Two number cubes were rolled and the numbers **6** and **9** were displayed.

   The cubes were each rolled two more times with the numbers **8**, **3**, **7**, and **5** being displayed.

   Using the digits **6** and **9** as the divisor and the **8**, **3**, **7**, and **5** as the dividend, arrange the digits to give the **least** possible quotient. **Show your work to prove your answer.** You may check your work with a calculator.

2. Rearrange the digits to find the **greatest** possible quotient. **Show your work to prove your answer.** You may check your work with a calculator.

3. A. Using 48 centimeter cubes, construct a rectangular solid.

   B. Determine the length, width, height, and volume of the solid.

C. Draw a diagram of the solid showing its dimensions and volume.

D. Using a different number of cubes, construct another solid and determine its volume.

E. Draw a diagram of the solid made in **D**. Show its dimensions and volume.