

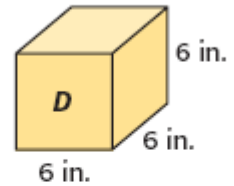
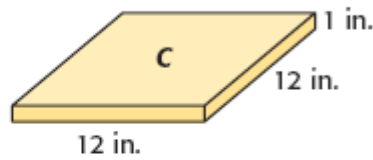
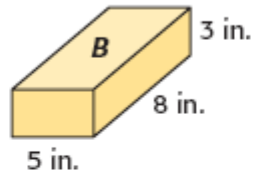
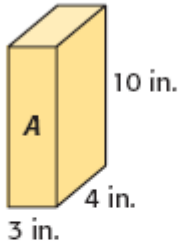
2006 ISAT Grade 6  
Mathematics  
Short Response Item #1

**State Goal 7:** Measurement

**Standards 7A, 7B, 7C:** Units, Tools, Estimation, and Applications

**Assessment Objective 7.6.04:** Determine the volume of a right rectangular prism using an appropriate formula or strategy.

1



Which rectangular prism has the greatest volume?

Volume of a rectangular prism = length  $\times$  width  $\times$  height

Show your work.

2006 ISAT Grade 6  
Mathematics  
Short Response Item #2






**State Goal 8:** Algebra

**Standard 8A:** Representations, Patterns, and Expressions

**Assessment Objective 8.6.01:** Determine a missing term in a sequence, extend a sequence, and construct and identify a rule that can generate the terms of a given sequence (e.g., 3, 6, 9, . . . is explained by the rule  $3n$ , for  $n \geq 1$ ).

2

Using toothpicks, Julio made a pattern of equilateral triangles. He recorded the number of triangles made and the number of toothpicks used in a chart.

					
Number of Triangles Made	1	2	3	4	5
Number of Toothpicks Used	3	5	7	9	11

Using this chart, how many toothpicks would Julio use to make a figure with 10 equilateral triangles?

Show your work.

**2006 ISAT Grade 6  
Mathematics  
Extended Response Item**

**State Goal 7: Measurement**

**Standards 7A, 7B, 7C: Units, Tools, Estimation, and Applications**

**Assessment Objective 7.6.06: Solve problems involving scale drawings and maps.**

**1**

Use your centimeter ruler to help you solve this problem.

Make a scale drawing of a straight bike path that is 24 miles long. Use the scale 1 centimeter represents 3 miles.

You must include:

- A beginning point.
- An ending point.
- A drinking fountain that is 6 miles from the ending point of the path.

Label all parts of the path.

Show all your work. Explain in words how you found your answer. Tell why you took the steps you did to solve the problem.