### **MOMENTUM MATH LEVEL G**



#### Unit 5—Three-Dimensional Geometry

<b>Lesson A:</b> Understanding Surface Area
Lesson B: Surface Area of a Pyramid
<b>Lesson C</b> : Surface Area of a Cylinder
<b>Lesson D</b> : Applications of Surface Area
Lesson E: Understanding Volume
<b>Lesson F</b> : Volume of a Rectangular Prism
<b>Lesson G</b> : Volume of a Triangular Prism
<b>Lesson H</b> : Volume of a Pyramid
<b>Lesson I</b> : Volume of a Cylinder
Lesson J: Applications of Volume
GlossaryA

## **UNDERSTANDING SURFACE AREA**

A

Today's Destination What is surface area?



#### Vocabulary — — — — —

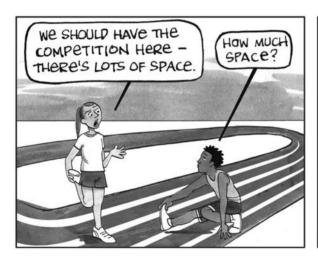
**Cube** A solid figure with 6 congruent square faces

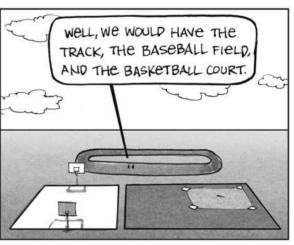
**Rectangular Prism** A solid figure in which all 6 faces are rectangles

**Surface Area** The sum of the areas of all the faces of a solid figure



#### Problem of the Day —





How can Matt find how much space there is in all?

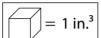


## IN THE DRIVER'S SEAT

Find the volume of each solid. Be sure to include the correct units.

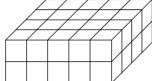
1)

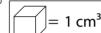




Compute It!

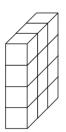
2)





Compute It!

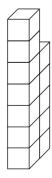
3)

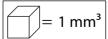




Compute It!

4)







# SIDE TRIPS

1) What is the volume of paper on the roll of paper towels to the nearest hundredth?

0.8 in.

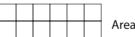


3 in.

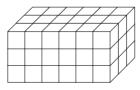
WriteIt!

Explain It!

2) Use the pictures below to explain why area is measured in *square* units and volume is measured in *cubic* units.



Area = 12 square units



Volume = 54 cubic units

Explain It!