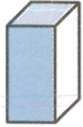


LESSON
11.2

Geometric Solids

Geometric shapes like these 3-dimensional ones are also called **geometric solids**.



Rectangular
Prism



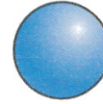
Cylinder



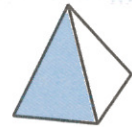
Triangular
Prism



Cone



Sphere



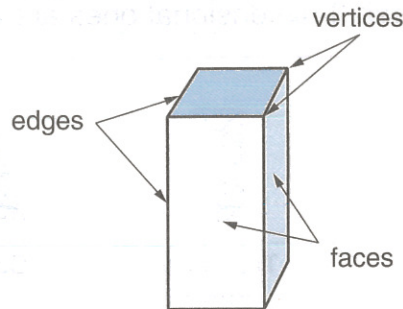
Square
Pyramid

Look around the classroom. Try to find examples of the geometric solids pictured above. Draw a picture of each. Then write its name (for example: book).

<p>Example of rectangular prism:</p> <p>Name of object:</p> <p>_____</p>	<p>Example of cylinder:</p> <p>Name of object:</p> <p>_____</p>	<p>Example of triangular prism:</p> <p>Name of object:</p> <p>_____</p>
<p>Example of cone:</p> <p>Name of object:</p> <p>_____</p>	<p>Example of sphere:</p> <p>Name of object:</p> <p>_____</p>	<p>Example of square pyramid:</p> <p>Name of object:</p> <p>_____</p>

LESSON
11·2**Modeling a Rectangular Prism**

After you construct a rectangular prism with straws and twist-ties, answer the questions below.



1. How many faces does your rectangular prism have? _____ face(s)
2. How many of these faces are formed by rectangles? _____ face(s)
3. How many of these faces are formed by squares? _____ face(s)
4. Pick one of the faces. How many other faces are parallel to it? _____ face(s)
5. How many edges does your rectangular prism have? _____ edge(s)
6. Pick an edge. How many other edges are parallel to it? _____ edge(s)
7. How many vertices does your rectangular prism have? _____ vertices
8. Write T (true) or F (false) for each of the following statements about the rectangular prism you made. Then write one true statement and one false statement of your own.
 - a. _____ It has no curved surfaces.
 - b. _____ All of the edges are parallel.
 - c. _____ All of the faces are polygons.
 - d. _____ All of the faces are congruent.
 - e. True _____
 - f. False _____

LESSON
11·2

Making a 1-Ounce Weight



1. Estimate how many of each coin you think it will take to make a 1-ounce weight. Then use a balance or scale to determine exactly how many of each coin are needed.

Coin	Estimated Number of Coins	Actual Number of Coins
penny		
nickel		
dime		
quarter		

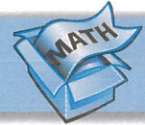
2. Describe how you estimated how many of each coin it might take to make a 1-ounce weight.

Try This

3. About what fraction of an ounce does each coin weigh?

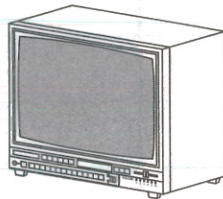
1 penny = _____ oz 1 nickel = _____ oz 1 dime = _____ oz 1 quarter = _____ oz

Explain how you found your answers.

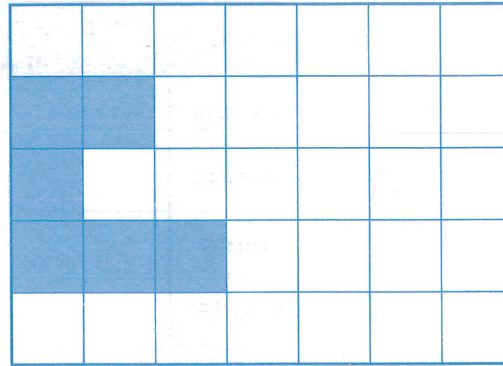
LESSON
11.2
Math Boxes


1. The object below has the shape of a geometric solid. What is the name of the solid? Circle the best answer.

- A. rectangular prism
 B. cone
 C. cylinder
 D. square pyramid



2. Draw the figure after it is rotated clockwise $\frac{1}{4}$ -turn.



3. Write a number model to estimate the answer. Then correctly place the decimal point.

a. $0.97 \times 4 = 388$

Number model: _____

b. $187 = 74.8 \div 4$

Number model: _____

4. Insert $<$, $>$, or $=$ to make a true number sentence.

a. -12 _____ -19

b. -44 _____ 26

c. -64 _____ -0.43

d. $-\frac{1}{2}$ _____ $-\frac{4}{8}$

e. -0.28 _____ -0.37



5. Round each number to the nearest tenth.

a. 2.34 _____

b. 0.68 _____

c. 14.35 _____

d. 1.62 _____

e. 5.99 _____



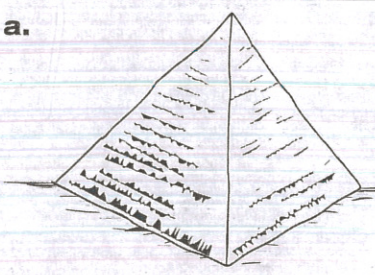

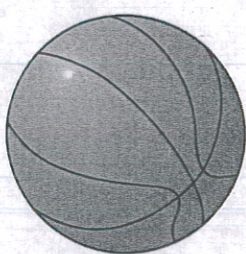


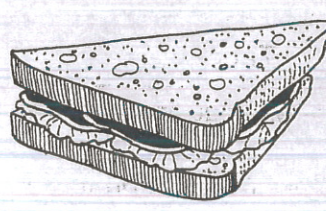
6. A cinnamon raisin bagel has about 230 calories. How many calories are in one dozen bagels?

About _____ calories

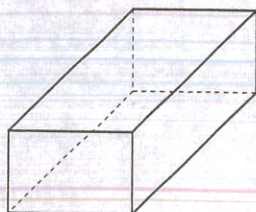


STUDY LINK
11•2
Solids

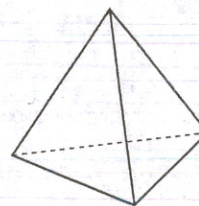

1. The pictures below show objects that are shaped approximately like geometric solids. Identify each object as one of the following: **cylinder**, **cone**, **sphere**, **triangular prism**, **square pyramid**, or **rectangular prism**.

<p>a.</p>  <p>Type: _____</p>	<p>b.</p>  <p>Type: _____</p>	<p>c.</p>  <p>Type: _____</p>
<p>d.</p>  <p>Type: _____</p>	<p>e.</p>  <p>Type: _____</p>	<p>f.</p>  <p>Type: _____</p>

2. Mark Xs on the vertices of the rectangular prism.



3. How many edges does the tetrahedron have? _____ edges


Practice

4. Circle the numbers that are multiples of 7. 132 7,000 63 560 834 91
5. Circle the numbers that are multiples of 12. 24 120 38 600 100 75