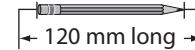
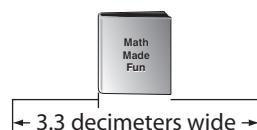


Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Complete each sentence using the words **millimeters**, **centimeters**, **decimeters**, **meters**, or **kilometers**.



- 1 If we multiply the length of the house by 1,000, the new unit of length will be _____.
- 2 If we divide the width of the book by 10,000, the new unit of length will be _____.
- 3 If we multiply the length of the car by 100, the new unit of length will be _____.
- 4 If we divide the length of the pencil by 100, the new unit of length will be _____.

Definition Review

Match each unit of length with its abbreviation.

- | | | |
|---|------------|----|
| 5 | decimeter | mm |
| 6 | kilometer | cm |
| 7 | millimeter | dm |
| 8 | centimeter | m |
| 9 | meter | km |

Application

Follow the directions for the activity.

- Each student needs a metric ruler.
- Students should measure the height of a door, the width of their desk, the length of a pencil, and the width of a number cube.
- Students record their measurements in meters, decimeters, centimeters, and millimeters.
- The teacher then discusses the students' findings and which unit of measurement would be most appropriate for each item measured.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

List three examples of when you use the customary system of measurements for length, height, width, or distance in your daily life.

1 _____

2 _____

3 _____

Definition Review

Complete each sentence using the words **multiply** or **divide**.

4 To convert a larger unit to a smaller unit, you should _____.

5 To convert a smaller unit to a larger unit, you should _____.

Complete each sentence using the words **larger** or **smaller**.

6 A foot is _____ than an inch.

7 A mile is _____ than a yard.

8 An inch is _____ than a foot.

9 A yard is _____ than a mile.

Application

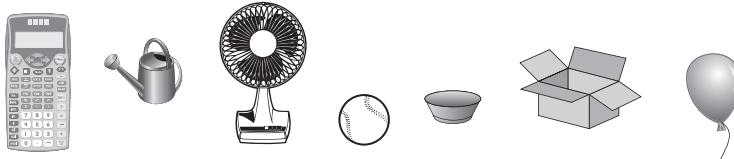
Follow the directions for the activity.

- Students each try to find items around the classroom that can be used as a benchmark for an inch, foot, and yard.
- Students should check the measurement of their benchmark items to see if they are appropriate.
- Students share their items with the rest of the class.
- Students discuss how many different items were found and which items are closest to their designated unit of measurement.
- Teachers discuss with students the reasons why we might need to use benchmarks. Also discuss as to when approximate measurements are acceptable to use, versus when we need to use exact measurements.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

- 1 Circle each item for which you could find the capacity. Put a square around the items for which you could only find the mass.



Definition Review

The **metric system** is a measurement system that includes units such as meter, gram, liter, and degrees Celsius.

Complete each sentence using the words **multiply** or **divide**.

- 2 To convert a smaller unit to a larger unit, you should _____ .
3 To convert a larger unit to a smaller unit, you should _____ .

Complete each sentence using the words **multiply** or **smaller**.

- 4 A liter is _____ than a kiloliter.
5 A kilogram is _____ than a milligram.
6 A liter is _____ than a milliliter.
7 A gram is _____ smaller than a kilogram.

Application

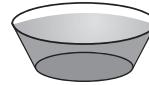
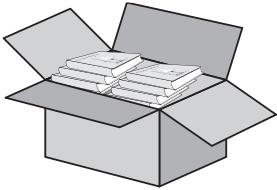
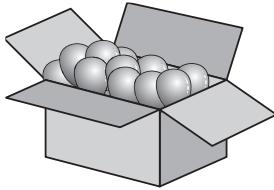
Follow the directions for the activity.

- Students work in groups of 4.
- Each student finds, in the classroom, a container and a solid object.
- Each group orders the containers from that which can hold the most capacity to that which can hold the least capacity.
- Each group orders the solid objects from that which has the greatest mass to that which has the least mass.
- Groups then look at the other groups' ordered items and decide if they agree or disagree with the order.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Complete each sentence using the words **greater than**, **less than**, or **the same as**.



- 1 The weight of the box of balloons is _____ the weight of the box of books.
- 2 The capacity of the box of books is _____ the capacity of the box of balloons.
- 3 The weight of Bowl B is _____ the weight of Bowl A.
- 4 The capacity of Bowl A is _____ less than the capacity of Bowl B.

Definition Review

Weight is a measurement that tells how heavy or light an object is.

Capacity is the amount of dry or liquid material a container can hold.

Complete each sentence using the words **capacity** or **weight**.

- 5 A pint is a unit for measuring _____.
- 6 A ton is a unit for measuring _____.
- 7 A gallon is a unit for measuring _____.
- 8 An ounce is a unit for measuring _____.

Application

Follow the directions for the activity.

- Students work in groups of 3 or 4.
- Each student brings from home a variety of containers such as empty juice bottles and milk jugs. Each group of students needs a plastic measuring cup.
- Students experiment to see if the bottles and jugs hold as much water as their label claims.
- Students then test conversion amounts:
 - Do 2 cups equal 1 pint?
 - Do 4 quarts equal 1 gallon?
- Students discuss their findings with the class.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Answer.

- 1 List 5 units used to measure time. _____
- 2 List the customary unit and the metric unit used to measure temperature.

- 3 If it is 4:00 P.M. now and Silvia needs to leave at 5:30 P.M., how many seconds does she have to get ready? _____

Definition Review

Celsius is a metric unit for measuring **temperature**.

Fahrenheit is a customary unit for measuring **temperature**.

- 4 Circle the formula used to convert degrees **Fahrenheit** to **degrees Celsius**.
Put a box around the formula used to convert degrees **Celsius** to **degrees Fahrenheit**.

$$F = \frac{9}{5}C + 32$$

$$C = \frac{5}{9}(F - 32)$$

Match each unit of length with its abbreviation.

- | | | |
|---|--------|-----|
| 5 | hour | s |
| 6 | week | min |
| 7 | second | h |
| 8 | day | d |
| 9 | minute | wk |

Application

Follow the directions for the activity.

- Each student keeps a log of his/her schedule for a day.
- Student logs should include start and finish times for getting ready in the morning, going to school, participating in after-school activities, doing homework, eating dinner, sleeping, and any other activities.
- Students determine how much of their time was spent on each entry and convert those times so they are available in seconds, minutes, and hours.
- Students should examine whether or not the times add up to 24 hours. How much time is not accounted for during the day?

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

List three examples of when you use unit rates in your daily life.

- 1 _____
- 2 _____
- 3 _____

Definition Review

Determine which is greater in each situation.

- 4 Which is faster, a car that goes 90 miles in 2 hours, or a car that goes 150 miles in 3 hours? _____
- 5 Which is heavier per foot, a 3 feet of wood that weighs 45 pounds, or 5 feet of wood that weighs 60 pounds? _____
- 6 Which is more expensive, 10 oranges for \$5.00, or 15 apples for \$7.00? _____

Match each unit rate with its abbreviation.

- | | | |
|----|---------------------|-------|
| 7 | grams per meter | lb/wk |
| 8 | meters per minute | in./h |
| 9 | pounds per week | mm/d |
| 10 | millimeters per day | m/min |
| 11 | tons per kilometer | g/m |
| 12 | inch per hour | T/km |

Application

Follow the directions for the activity.

- Students work in pairs. Each pair needs a stopwatch, or access to a clock.
- Have one student start writing consecutive whole numbers, starting with zero.
- When the first student starts writing, the second student begins timing for 2 minutes.
- Each student takes a turn writing and timing.
- Students then calculate and compare their unit rates for writing numbers.
- Repeat activity by drawing squares, or a different shape.

2-1

Practice: Vocabulary and English Language Development

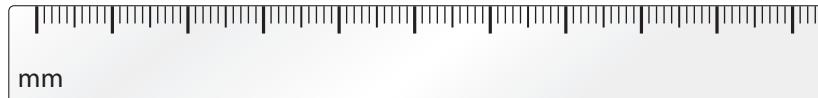
Activate Prior Knowledge

Label the ruler as indicated.

- 1 Label the ruler in $\frac{1}{4}$ -inch increments.



- 2 Label the ruler in 5 mm increments.



Definition Review

An **inch** is a customary unit for measuring length and height.

A **centimeter** is a metric unit for measuring length and height.

Fill in the blanks.

- 3 A horizontal line segment has endpoints with equal _____ -coordinates. Its length is the difference in the _____ -coordinates.
- 4 A vertical line segment has endpoints with equal _____ -coordinates. Its length is the difference in the _____ -coordinates.
- 5 A centimeter ruler is divided into smaller units called _____ .
- 6 A _____ is a measuring tool that uses inches or centimeters to find _____ .

Application

Follow the directions for the activity.

- Work in pairs.
- Compare the customary and metric rulers.
- Discuss the relationship between inches and centimeters.
- Use the rulers to complete the table below.



| | | | | |
|--------------------------------------|---|---|---|----|
| inches (nearest $\frac{1}{4}$ -inch) | | 2 | 4 | |
| centimeters | 3 | | | 11 |

2-2

Practice: Vocabulary and English Language Development

Measure the sides. Find the perimeter of each.

- 1 Find the length and width of a classroom window in inches. _____
Calculate to find the perimeter of the window. _____
Measure to find the perimeter of the window in inches. _____

- 2 Find the length and width of your desk in centimeters. _____
Calculate to find the perimeter of your desk. _____
Measure to find the perimeter of your desk in centimeters. _____

▶ Definition Review

To find the perimeter of any polygon, add the lengths of all the sides of the polygon.

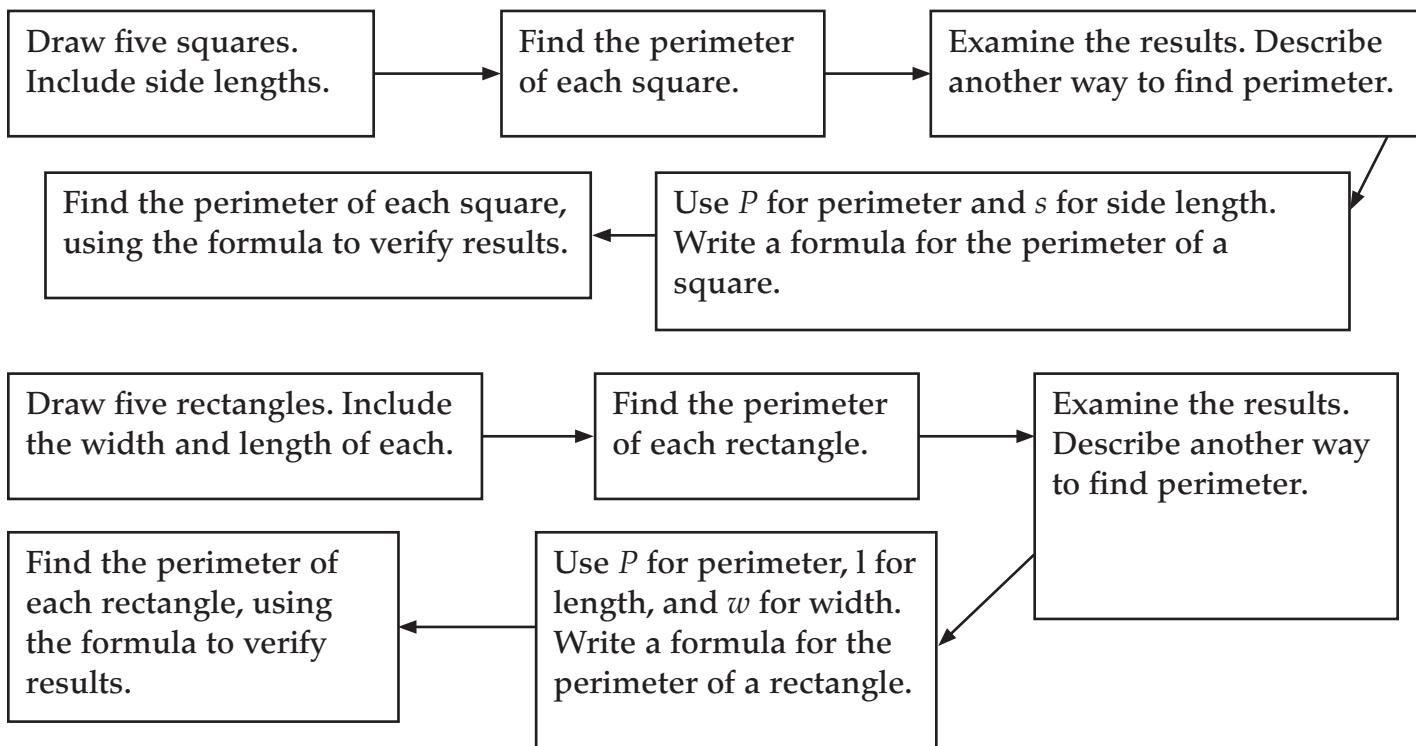
Fill in the blanks. Refer to the square.

- 3 The length of each side of this square is _____ centimeters.
- 4 The length is found using a _____.
- 5 A measure of 20 centimeters is the _____ of this square.



▶ Application

Follow the directions to create perimeter formulas for squares and rectangles.

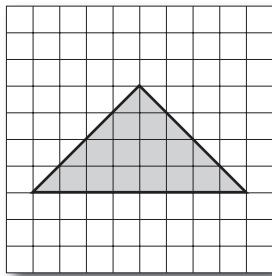


2-3

Practice: Vocabulary and English Language Development

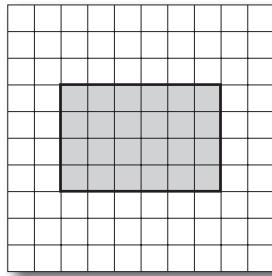
Activate Prior Knowledge

Find the area of each shape.

1

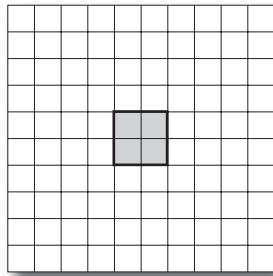
$$\text{Area} = \underline{\hspace{2cm}}$$

square units

2

$$\text{Area} = \underline{\hspace{2cm}}$$

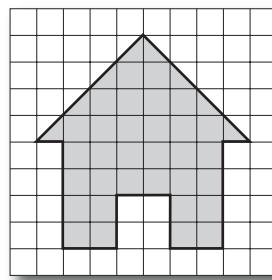
square units

3

$$\text{Area} = \underline{\hspace{2cm}}$$

square units

- 4** Write an expression, using the areas above, to find the area of this figure. _____



- 5** What is the area of this figure?
Area = _____ square units

Definition Review

Fill in the blanks.

- 6** _____ is the number of _____ units needed to cover the surface of a figure.

- 7** _____ is the number of units needed to go around the edge of a figure.

Application

Follow the directions to create an area formula for squares.

Draw five squares on grid paper. Include side lengths.

Find the area of each square by counting the units.

Describe another way to find the areas.

Find the area of each square using the formula to verify results.

Use A for area and s for side length. Write a formula for the area of a square.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Create rectangular prisms with the given volume.

- Measure, draw and label 3 different rectangular prisms each with a volume of 48 cubic inches.

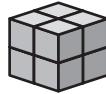
Definition Review

The amount of space inside a three-dimensional figure is the **volume** of the figure. Volume is measured in **cubic units**.

To find the volume of a solid figure, count the number of cubic units the solid figure contains.

Refer to figures A-E to answer the questions.

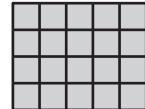
A



B



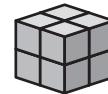
C



D



E



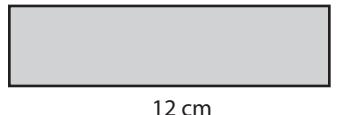
- Which figures are three-dimensional? _____
- Which figures are cubes? _____
- Which figures are rectangular prisms? _____
- What is the volume of figure D? _____
- What is the volume of figure A? _____
- What is the volume of figure E? _____

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Find the perimeter and area of each of the following. Then fill complete each sentence using the words **square**, **area**, and **perimeter**.

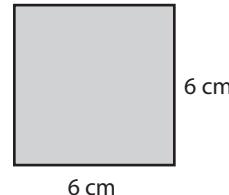
1



2



3



Area = _____

Area = _____

Area = _____

Perimeter = _____

Perimeter = _____

Perimeter = _____

- 4 When comparing each of the rectangles, the _____ is the same but the _____ is different.
- 5 The figure with the smallest perimeter is the _____.

Definition Review

Complete each sentence by filling in the blanks.

- 6 A _____ is a quadrilateral with four right angles and opposite sides equal.
- 7 A _____ is a quadrilateral with four right angles and all sides equal.
- 8 The number of **square units** necessary to cover a **rectangle or square** is the _____ of that quadrilateral.
- 9 The units for measuring the **area** of a **rectangle or square** are _____.
- 10 The formula for the **area** of a **rectangle** is $A =$ _____.

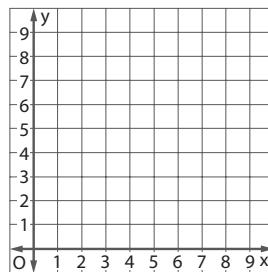
Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Graph the points and find the area of the polygon.

- 1 Graph and label the points A: (1, 2), B: (3, 10), C: (8, 10), and D: (6, 2).

- 2 Draw line segments connecting points A and B, B and C, C and D, and D and A.
What shape do the points form?



- 3 What is the length of this polygon's base? _____
- 4 What is the length of this polygon's height? _____
- 5 What is the area of this polygon? _____

Definition Review

Complete the sentences by filling in the blanks.

- 6 The _____ of a shape is the number of **square units** needed to cover the shape. For a **parallelogram**, this is found using the formula, $A =$ _____.

Application

Follow the directions for the activity. **4MG1.1**

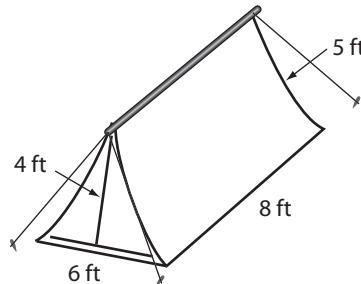
- Students work in pairs. Each student uses paper, a pencil, and a ruler to draw a parallelogram.
- Students trade drawings.
- Students measure the parallelograms and find their areas. Write down the areas.
- Students then cut out the parallelograms. Using scissors and tape, students cut a triangle from one end of a parallelogram, and tape it to the other end, to form a rectangle.
- Students check one another's shapes to assure they form rectangles. (If rectangles are formed, all four angles must be right angles.)
- Students measure and find the area of the rectangles.
- Students then discuss the relationship between the formula for the area of a rectangle and formula for the area of a parallelogram.
- Repeat activity three times.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Find the total area.

- 1 What is the area of the triangular front of the tent? _____
- 2 What is the area of one rectangular side of the tent? _____

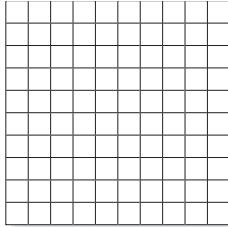


Definition Review

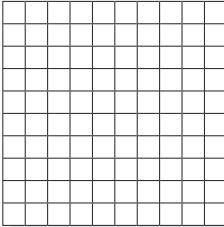
The formula for finding the area of a triangle is $A = \frac{1}{2}b \times h$.

Draw and label triangles with bases 4 units and heights 3 units.

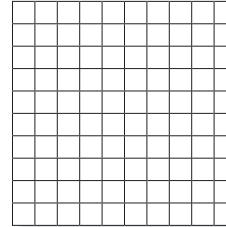
- 3 A right triangle



- 4 A triangle whose height is drawn perpendicular to the base on the interior of the triangle.



- 5 A triangle whose height is drawn perpendicular to the base on the exterior of the triangle.



- 6 What is the area of each of these triangles? _____

Application

Follow the directions for the activity.

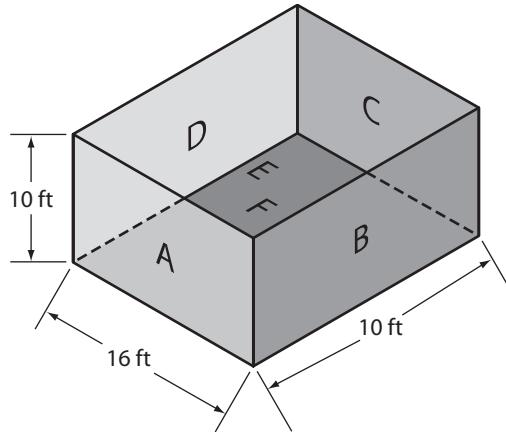
- Students work individually. Each student takes a 3×5 note card.
- Draw a triangle on the note card, using one side of the card as the base and touching the other as the height. (See the 2nd card shown below)
- Cut out the drawn triangle, making sure to preserve the cut pieces.
- Tape together the pieces remaining from the rectangle to form another triangle. This triangle should be congruent to the one that was cut out.
- Compare their triangles and discuss how the area formula for a triangle relates to the area of a rectangle.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Find the surface area.

- 1 Find the area of wall A. _____
- 2 Which wall has an area equal to wall A? _____
- 3 Find the area of wall B. _____
- 4 Which wall has an area equal to wall B? _____
- 5 Find the area of the ceiling. _____
- 6 Aurelia is redecorating this room. She is going to paint all four walls and the ceiling. What is the surface area of the room, *not* including the floor? _____



Definition Review

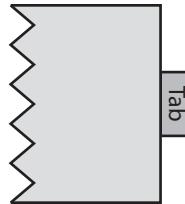
The _____ can be folded to make a rectangular prism.

The _____ of a rectangular prism is the sum of the areas of all the faces of the figure. Surface area is measured in _____.

Application

Follow the directions to create a cube.

- Students work individually. Each student needs a piece of thick, colored paper.
- Using a pencil and a ruler, draw the net of a cube with sides of length 10 centimeters.
- For each exterior side of the net, draw a tab which can be used to connect the sides of the cube. Example:



- Using a pair of scissors, cut out the net along exterior sides and tabs.
- Fold along all lines for sides and tabs.
- Using tape, connect tabs to form the cube.

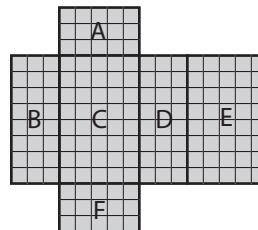
Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Find the surface area and volume of the rectangular prism using correct units.

- 1 What shape can be formed from the net?

What is the surface area of the figure?



What is the volume of the figure?

Definition Review

Match each vocabulary word to the description that best fits it.

- | | |
|---------------------------|--|
| 2 cube _____ | A. flat, four-sided polygon with opposite sides equal and parallel |
| 3 face _____ | C. total of areas of all flat surfaces of a solid figure |
| 4 net _____ | D. flat surface of a solid figure |
| 5 parallelogram _____ | F. flat pattern that can be folded to make a solid figure |
| 6 rectangular prism _____ | G. solid figure with six rectangular sides |
| 7 surface area _____ | H. solid figure with six square sides |

Application

Follow the directions to play the game.

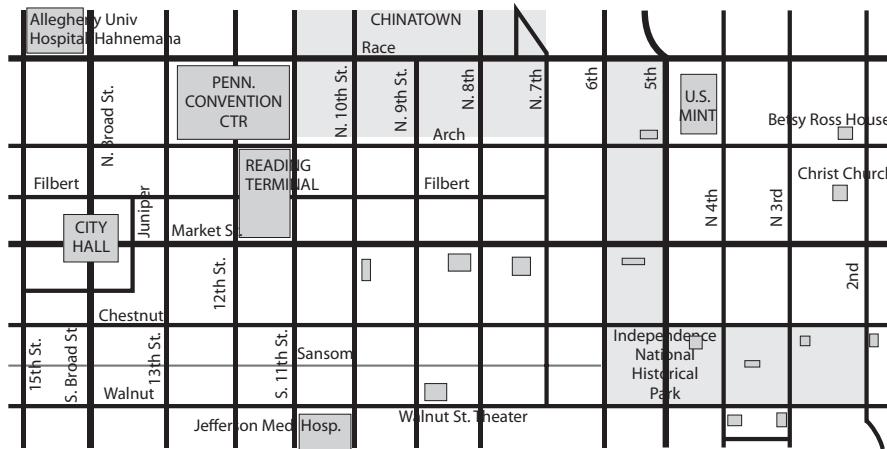
- Students play in groups of 3 or 4.
- The first student chooses a rectangular prism in the room, for which the volume can be found. (For example: room itself, a drawer, or a box.)
- Each student examines the prism and estimates its volume. Students write their estimated volumes.
- The first student then uses a ruler, or yard stick, to determine the actual volume of the prism
- The student with the closest estimate wins the game.
- Repeat the game until all students choose and measure a prism.

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Find parallel and perpendicular streets.

The city of Philadelphia is laid out in a grid pattern. Use the map to answer the following questions.



- 1 Name a street that is parallel to Market Street. _____
- 2 Name a street that is perpendicular to Market Street. _____
- 3 Name a street that is parallel to 5th Street. _____
- 4 Name a street that is perpendicular to 5th Street. _____

Definition Review

Match the word to its definition.

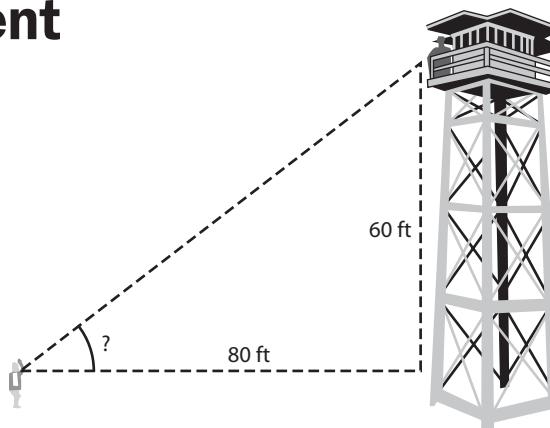
- 5 angle _____
A. a set of **points** that goes straight in one direction without ending
- 6 point _____
B. two **rays** with a common endpoint
- 7 ray _____
C. part of a **line** containing two endpoints and all **points** in between
- 8 line segment _____
D. an exact location in space

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Use a scale drawing to find an angle.

Stanley is waving at his brother in the fire tower. He is 80 feet away from the tower and his brother is standing 60 feet above him. Find the angle Stanley must look upward to see his brother.



- 1 Make a scale drawing. Let 10 feet in the problem equal 1 inch in the drawing. Use a ruler to draw a line segment 8 inches long. At the right endpoint of the segment, use a protractor to draw a right angle. Extend the vertical part of the right angle 6 inches. Use the ruler to connect the endpoints and form a triangle. This triangle is similar to the one in the problem and will have the same angle measures.

- 2 Use a protractor to measure the angle indicated. At what angle must Stanley look upward to see his brother in the fire tower? _____

Definition Review

Complete each sentence by filling in the blanks.

- 3 An angle is formed by two _____ with the same _____.
- 4 Angles are measured in _____, and a _____ can be used to make this measurement.

Application

Follow the directions to estimate angle measures.

- Students play in groups of 3 or 4. Each student needs a piece of paper, a ruler, a pencil, and a protractor.
- The first student says an angle measure between 0° and 180° .
- Each student draws an angle estimated to have the given measure (No protractors).
- Then students measure their angles with protractors.
- The student whose drawing is closest to the actual angle measure wins the round.
- Play repeats until all students have had a chance to say an angle measure.

4-3

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Determine if each of the following triangles can be drawn. If it can, draw an example. If it can not, explain.

- 1 An isosceles, right triangle.

- 2 An equilateral, obtuse triangle.

Definition Review

Determine if each statement is *true* or *false*.

- 3 A rhombus is a parallelogram. _____

- 4 An isosceles triangle has two congruent sides and two congruent angles. _____

- 5 An equilateral triangle has three congruent sides. _____

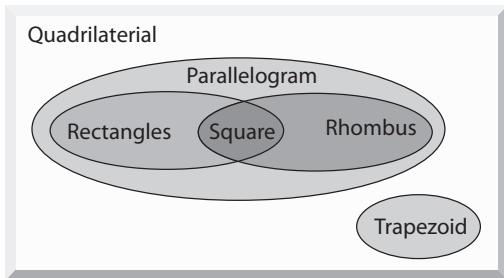
- 6 A trapezoid has two pairs of congruent sides. _____

- 7 A parallelogram has no sides of equal length. _____

Application

Create a Venn diagram for quadrilaterals.

- Work in discussion groups of 2 or 3.
- Draw a large rectangle and label it *quadrilaterals*.
- Within the rectangle, draw a circle and label it *trapezoids*.
- Draw a circle and label it *parallelograms*. Use the definitions of different quadrilaterals to determine if the circles should overlap or not, and whether one circle should be contained within the other.
- Repeat the previous step for rectangles, then rhombi.
- Squares will be contained in an overlapping section of two circles in the diagram shown below. Label it. Use this as your example.



Practice: Vocabulary and English Language Development

Activate Prior Knowledge

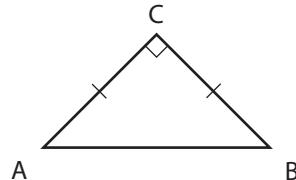
Find the angle measure.

- 1 Measure each angle of the right, isosceles triangle.

$m\angle A = \underline{\hspace{2cm}}$

$m\angle B = \underline{\hspace{2cm}}$

$m\angle C = \underline{\hspace{2cm}}$



- 2 Explain how the angle measures in problem 1 could be found without using a protractor to measure the angles.

Definition Review

Fill in the blanks with 90° , 180° , or 360° .

- 3 The measures of two **supplementary angles** have a sum of $\underline{\hspace{2cm}}$.
- 4 The measures of two **complementary angles** have a sum of $\underline{\hspace{2cm}}$.
- 5 The measures of the four angles of a quadrilateral have a sum of $\underline{\hspace{2cm}}$.

Application

Follow the directions for the activity.

- Work in pairs.
- One student draws an acute triangle on paper and cuts it out.
- The other student tears off all three corners of the triangle.
- Place the corners together to form a line. Tape the corners in place.
- Discuss the number of degrees in a straight line, and how this relates to a triangle.
- Repeat the steps with an obtuse triangle and a right triangle.

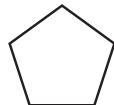
4-5

Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Connect the congruent shapes.

1



2



Definition Review

Corresponding parts of congruent figures have the same size.

Complete each sentence using the words **angles** or **sides**.

- 3 Corresponding sides of congruent figures have _____ that are the same size.
- 4 Corresponding angles of congruent figures have _____ that are the same size.

Determine if each pair of items is congruent.

- 5 a basketball and a baseball _____
- 6 a CD and a DVD _____

Match each symbol with its meaning.

- 7 \cong congruent to
- 8 $\triangle OPQ$ triangle with points O, P, and Q

Application

Draw a congruent figure and a non-congruent figure for the figure shown below. You may need to use measuring tools.



Practice: Vocabulary and English Language Development

Activate Prior Knowledge

Find the square number or square root for each.

1 $\sqrt{49} = \underline{\hspace{2cm}}$

2 $6^2 = \underline{\hspace{2cm}}$

3 $9^2 = \underline{\hspace{2cm}}$

4 $\sqrt{16} = \underline{\hspace{2cm}}$

Definition Review

The **square root** of a number is one of two equal factors of the number.
A **square number** is the product of any number multiplied by itself.

Complete each sentence using the words **root** or **number**.

5 8 is the square _____ of 64.

6 25 is the square _____ of 5.

Determine whether or not the triangles are right triangles.

7 _____

8 _____

9 _____

10 _____

Application

Follow the directions for the activity.

- Cut out a rectangle with a height of 3 inches and a width of 4 inches.
- Then cut the rectangles in half on the diagonal.
- Use the Pythagorean Theorem to find the length of the hypotenuse.
- Measure the hypotenuse of their triangle.
- Does the measurement match the calculation?
- Repeat the activity 3 times, using different leg lengths each time.

Practice: Vocabulary and English Language Development



Activate Prior Knowledge

List 2 examples of circles you may need to measure in your daily life.
Estimate the diameter of each using appropriate units.

- 1 _____

- 2 _____



Definition Review

Pi (π) is an irrational number. It is not possible to write the exact value of π . To calculate using π , we use approximate values.

Determine the appropriate value for π .

- 3 The approximate value of π in fraction form. _____
- 4 The approximate value of π in decimal form. _____

Match to complete each formula.

- | | | |
|---|-------------|-----------|
| 5 | $d =$ _____ | πr^2 |
| 6 | $C =$ _____ | $2r$ |
| 7 | $A =$ _____ | πd |



Application

Follow the directions for the activity.

- Make your own compass using a string, a pencil and a ruler.
- Select a measurement for the radius of a circle.
- Calculate the circle's diameter, circumference, and area using this radius.
- Make a circle with your compass using the radius length.
- Measure the diameter of your circle with a ruler and the circumference with a string and a ruler.
- Find an approximate area by making a square around the circle and then finding the area of the square.
- Discuss your findings.

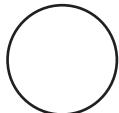
4-8

Practice: Vocabulary and English Language Development

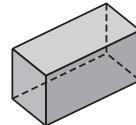
Activate Prior Knowledge

Determine whether each figure is two-dimensional or three-dimensional.

1



2



Definition Review

A **triangular prism** is a three-dimensional figure whose bases are triangular with parallelograms for sides.

A **cylinder** is a three-dimensional figure having two parallel, congruent circular bases and a curved surface connecting the two bases.

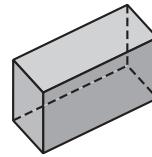
A **rectangular prism** is a three-dimensional figure having six rectangular faces.

Name each solid figure.

3



4



Application

Follow the directions for the activity.

- Bring in a cylinder from home. (Example: soda can, soup can, and so on)
- Measure the height and diameter of the cylinder and calculate the volume.
- Trace the circular base of the cylinder to form a circle.
- Lay each cylinder on its side, place a pencil vertically against one base, and rotate the can one full rotation, drawing a straight line.
- Trace the height of the can, drawing this line perpendicular to the other line.
- Complete a rectangle using the two lines as 2 of the 4 legs.
- Discuss the relationships between cylinders, circles, and squares.