Name _____

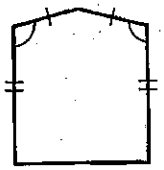
Polygons

A **polygon** is a closed plane figure formed by three or more line segments that meet at points called vertices. You can classify a polygon by the number of sides and the number of angles that it has.

Congruent figures have the same size and shape. In a **regular polygon,** all sides are congruent and all angles are congruent.

Polygon	Sides	Angles	Vertices
Triangle	3	3	3
Quadrilateral	4	4	4
Pentagon	5	5	5
Hexagon	6	6	6
Heptagon	7	7	7
Octagon	8	8	8
Nonagon	9	9	9
Decagon	10	10	10

Classify the polygon below.



How many sides does this polygon have? 5 sides

How many angles does this polygon have? 5 angles

Name the polygon. pentagon

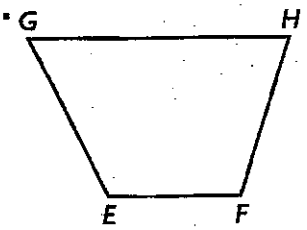
Are all the sides congruent? no

Are all the angles congruent? no

So, the polygon above is a pentagon. It is *not* a regular polygon.

Name each polygon. Then tell whether it is a *regular polygon* or *not a regular polygon*.

1.



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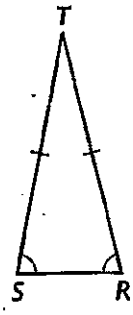

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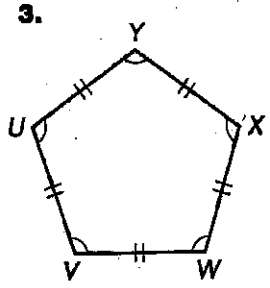

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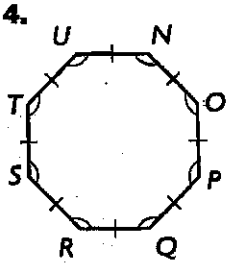
4.



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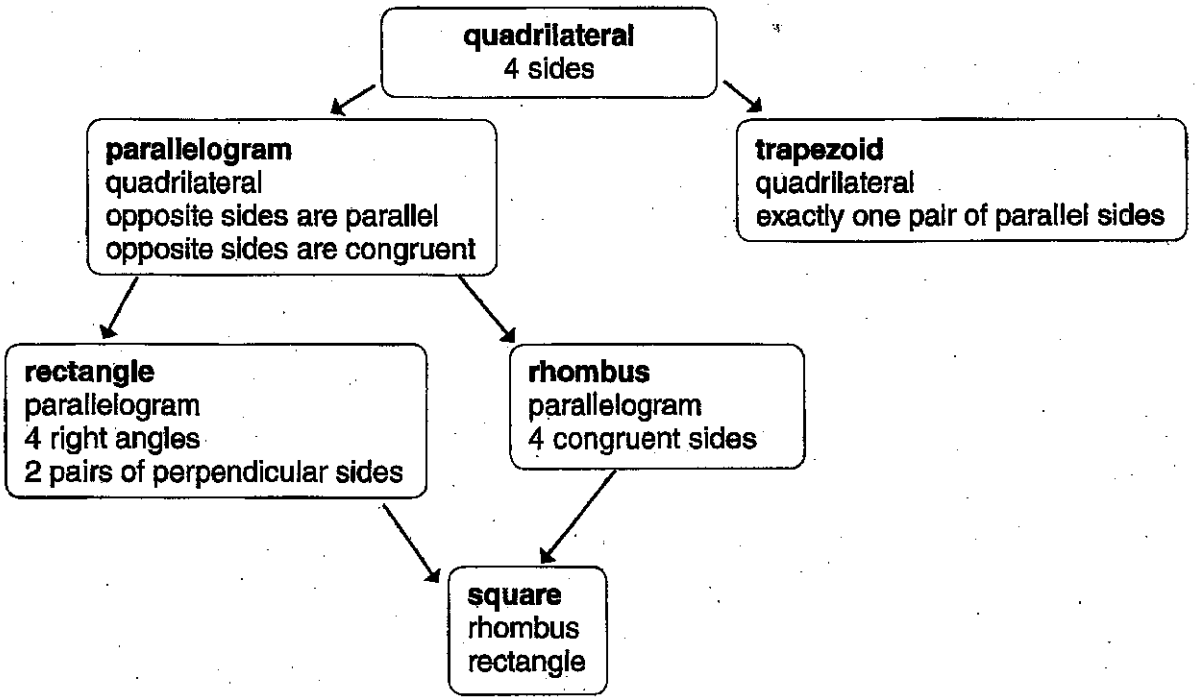
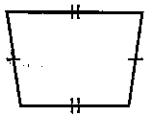
Name _____

Quadrilaterals

You can use this chart to help you classify quadrilaterals.



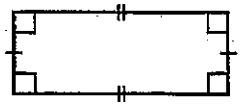
Classify the figure.

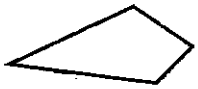


The figure has 4 sides, so it is a *quadrilateral*. The figure has exactly one pair of parallel sides, so it is a *trapezoid*.

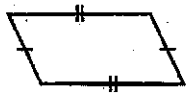
quadrilateral, trapezoid

Classify the quadrilateral in as many ways as possible. Write *quadrilateral*, *parallelogram*, *rectangle*, *rhombus*, *square*, or *trapezoid*.

1. 

2. 

3. 

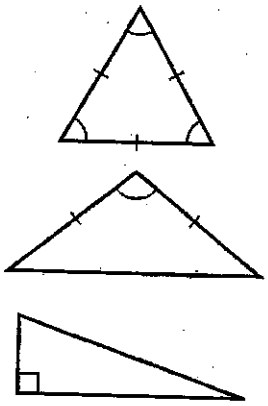
4. 

Triangles

You can classify triangles by the length of their sides and by the measure of their angles. **Classify each triangle.**

Use a ruler to measure the side lengths.

- **equilateral triangle**
  All sides are the same length.
- **isosceles triangle**
  Two sides are the same length.
- **scalene triangle**
  All sides are different lengths.

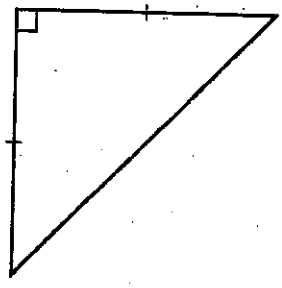


Use the corner of a sheet of paper to classify the angles.

- **acute triangle**
  All three angles are acute.
- **obtuse triangle**
  One angle is obtuse. The other two angles are acute.
- **right triangle**
  One angle is right. The other two angles are acute.

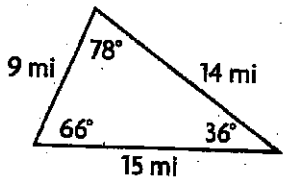
Classify the triangle according to its side lengths.
It has two congruent sides.
The triangle is an isosceles triangle.

Classify the triangle according to its angle measures.
It has one right angle.
The triangle is a right triangle.



Classify each triangle. Write *isosceles*, *scalene*, or *equilateral*. Then write *acute*, *obtuse*, or *right*.

1.



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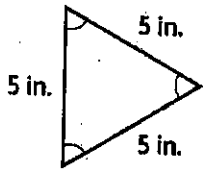

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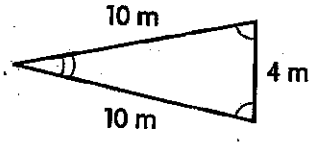
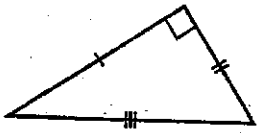


_____

4.

_____

5.



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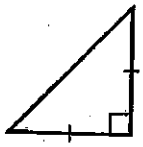


_____

Name _____

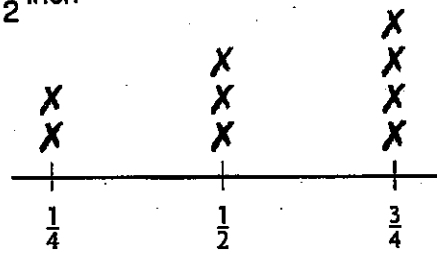
Line Plots

A **line plot** is a graph that shows the shape of a data set by placing *X*s above each data value on a number line. You can make a line plot to represent a data set and then use the line plot to answer questions about the data set.

Students measure the lengths of several seeds.
The length of each seed is listed below.

$\frac{1}{2}$ inch, $\frac{3}{4}$ inch, $\frac{1}{2}$ inch, $\frac{1}{4}$ inch, $\frac{3}{4}$ inch, $\frac{3}{4}$ inch, $\frac{3}{4}$ inch, $\frac{1}{4}$ inch, $\frac{1}{2}$ inch

What is the combined length of the seeds that are $\frac{1}{4}$ inch long?



Length of Seeds (in inches)

Step 1 To represent the different lengths of the seeds, draw and label a line plot with the data values $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$. Then use an *X* to represent each seed. The line plot has been started for you.

Step 2 There are **2** *X*s above $\frac{1}{4}$ on the line plot.

Multiply to find the combined length of the seeds:

2 × $\frac{1}{4}$ = **$\frac{2}{4}$, or $\frac{1}{2}$** inch

The combined length of the seeds that are $\frac{1}{4}$ inch long is $\frac{1}{2}$ inch.

You can use the same process to find the combined lengths of the seeds that are $\frac{1}{2}$ inch long and $\frac{3}{4}$ inch long.

Use the data and the line plot above to answer the questions.

1. What is the total length of all the seeds that the students measured?

2. What is the average length of one of the seeds that the students measured?

Ordered Pairs

A coordinate grid is like a sheet of graph paper bordered at the left and at the bottom by two perpendicular number lines. The **x-axis** is the horizontal number line at the bottom of the grid. The **y-axis** is the vertical number line on the left side of the grid.

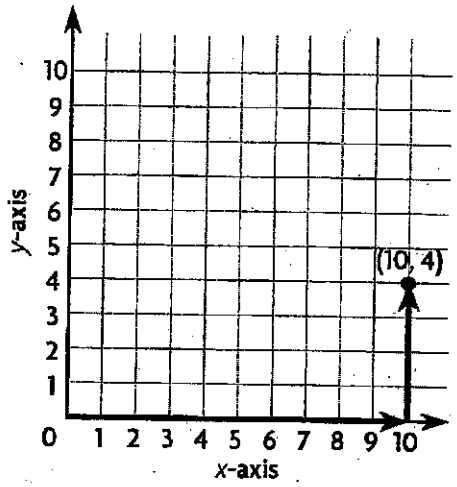
An ordered pair is a pair of numbers that describes the location of a point on the grid. An ordered pair contains two coordinates, *x* and *y*. The **x-coordinate** is the first number in the ordered pair, and the **y-coordinate** is the second number.

$(x, y) \longrightarrow (10, 4)$

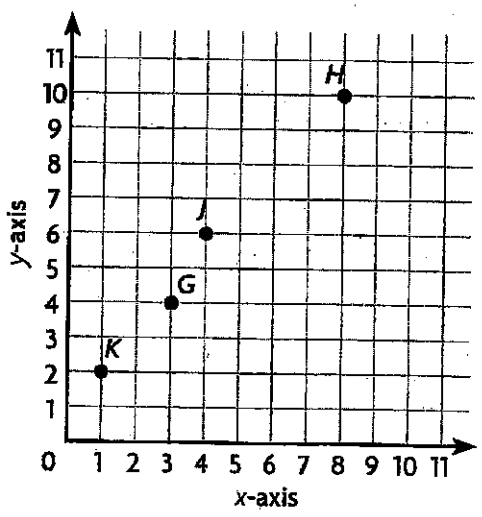
Plot and label (10, 4) on the coordinate grid.

To graph an ordered pair:

- Start at the origin, (0, 0).
- Think: The letter *x* comes before *y* in the alphabet. Move across the *x*-axis first.
- The *x*-coordinate is 10, so move 10 units right.
- The *y*-coordinate is 4, so move 4 units up.
- Plot and label the ordered pair (10, 4).



Use the coordinate grid to write an ordered pair for the given point.



1. *G* _____
2. *H* _____
3. *J* _____
4. *K* _____

Plot and label the points on the coordinate grid.

5. *A* (1, 6)
6. *B* (1, 9)
7. *C* (3, 7)
8. *D* (5, 5)
9. *E* (9, 3)
10. *F* (6, 2)

Graph Data

Graph the data on the coordinate grid.

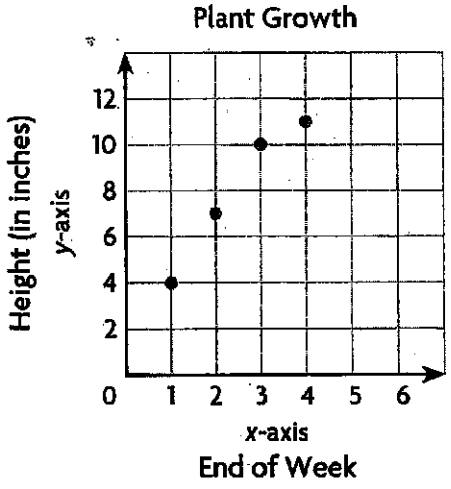
End of Week	1	2	3	4
Height (in inches)	4	7	10	11

- Choose a title for your graph and label it. You can use the data categories to name the *x*- and *y*-axis.
- Write the related pairs of data as ordered pairs.

(1, 4), (2, 7)

(3, 10), (4, 11)

- Plot the point for each ordered pair.



Graph the data on the coordinate grid. Label the points.

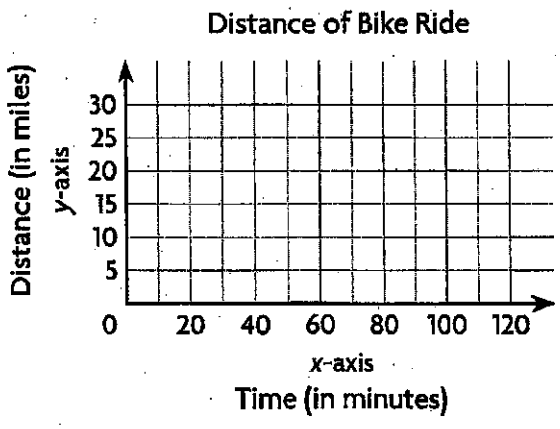
1.

Time (in minutes)	30	60	90	120
Distance (in miles)	9	16	21	27

Write the ordered pair for each point.

(____, ____), (____, ____)

(____, ____), (____, ____)



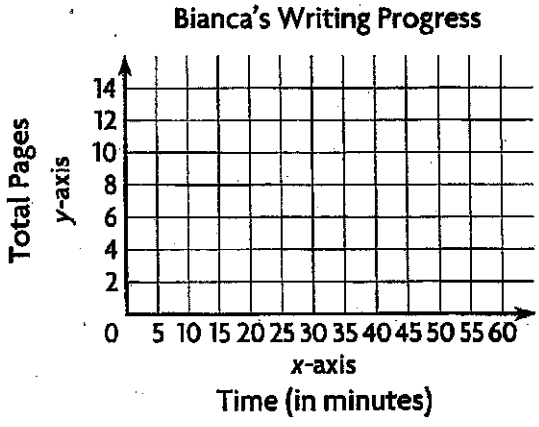
2.

Time (in minutes)	15	30	45	60
Total Pages	1	3	9	11

Write the ordered pair for each point.

(____, ____), (____, ____)

(____, ____), (____, ____)



Line Graphs

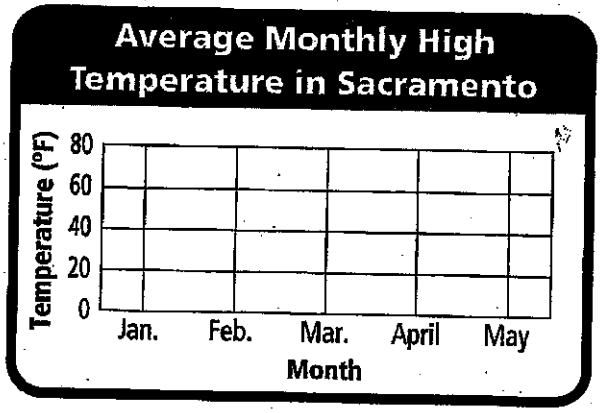
A **line graph** uses a series of line segments to show how a set of data changes over time. The **scale** of a line graph measures and labels the data along the axes. An **interval** is the distance between the numbers on an axis.

Use the table to make a line graph.

Month	Jan.	Feb.	Mar.	April	May
Temperature (°F)	53	60	65	71	80

- Write a title for your graph. In this example, use **Average Monthly High Temperature in Sacramento.**
- Draw and label the axes of the line graph. Label the horizontal axis **Month.** Write the months. Label the vertical axis **Temperature (°F).**
- Choose a scale and an interval. The range is 53–80, so a possible scale is 0–80, with intervals of 20.
- Write the related pairs of data as ordered pairs: **(Jan, 53); (Feb, 60); (Mar, 65); (April, 71); (May, 80).**

1. Make a line graph of the data above.



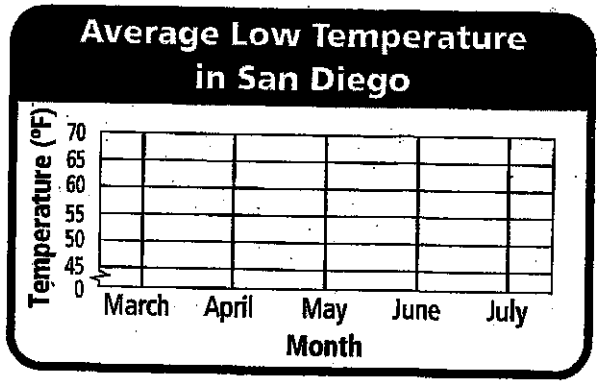
Use the graph to determine between which two months the least change in average high temperature occurs.

_____

_____

2. Make a line graph of the data in the table.

Average Low Temperature in San Diego, California					
Month	Mar.	April	May	June	July
Temperature (°F)	51	51	60	62	66



Use the graph to determine between which two months the greatest change in average low temperature occurs.

_____

Name _____

Numerical Patterns

A soccer league has 7 teams. How many players are needed for 7 teams? How many soccer balls are needed by the 7 teams?

	Number of Teams	1	2	3	4	7
Add 8.	Number of Players	8	16	24	32	56
Add 4.	Number of Soccer Balls	4	8	12	16	28

Step 1 Find a rule that could be used to find the number of players for the number of teams.

Think: In the sequence 8, 16, 24, 32, you add 8 to get the next term.

As the number of teams increases by 1, the number of players increases by 8. So the rule is to add 8.

Step 2 Find a rule that could be used to find the number of soccer balls for the number of teams.

Think: In the sequence 4, 8, 12, 16, you add 4 to get the next term.

As the number of teams increases by 1, the number of soccer balls needed increases by 4. So the rule is to add 4.

Step 3 For 7 teams, multiply the number of players by $\frac{1}{2}$ to find the number of soccer balls.

So, for 7 teams, 56 players will need 28 soccer balls.

Complete the rule that describes how one sequence is related to the other. Use the rule to find the unknown term.

Number of Teams	1	2	3	4	8	10
Number of Players	15	30	45	60	120	
Number of Bats	5	10	15	20		50

1. Divide the number of players by _____ to find the number of bats.

2. Multiply the number of bats by _____ to find the number of players.

Name _____

Problem Solving • Find a Rule

Samantha is making a scarf with fringe around it. Each section of fringe is made of 4 pieces of yarn with 2 beads holding them together. There are 42 sections of fringe on Samantha's scarf. How many wooden beads and how many pieces of yarn are on Samantha's scarf?

Read the Problem	Solve the Problem
What do I need to find? Possible answer: I need to find the number of beads and the number of pieces of yarn on Samantha's scarf.	
What information do I need to use? Possible answer: I need to use the number of sections on the scarf, and that each section has 4 pieces of yarn and 2 beads.	
How will I use the information? I will use the information to search for patterns to solve a simpler problem.	Possible answer: I can multiply the number of sections by 2 to find the number of beads. Then, I can multiply the number of sections by 4, or the number of beads by 2, to find the number of pieces of yarn. So, Samantha's scarf has 2 × 42, or 84 beads, and 4 × 42, or 168 pieces of yarn.

Sections of Fringe	1	2	3	4	6	42
Number of Beads	2	4	6	8	12	84
Pieces of Yarn	4	8	12	16	24	168

1. A rectangular tile has a decorative pattern of 3 equal-sized squares, each of which is divided into 2 same-sized triangles. If Marnie uses 36 of these tiles on the wall behind her kitchen stove, how many triangles are displayed?

2. Leta is making strawberry-almond salad for a party. For every head of lettuce that she uses, she adds 5 ounces of almonds and 10 strawberries. If she uses 75 ounces of almonds, how many heads of lettuce and how many strawberries does Leta use?

Graph and Analyze Relationships

The scale on a map is 1 in. = 4 mi. Two cities are 5 inches apart on the map. What is the actual distance between the two cities?

Step 1 Make a table that relates the map distances to the actual distances.

Map Distance (in.)	1	2	3	4	5
Actual Distance (mi)	4	8	12	16	?

Step 2 Write the number pairs in the table as ordered pairs.

(1, 4), (2, 8), (3, 12), (4, 16), (5, ?)

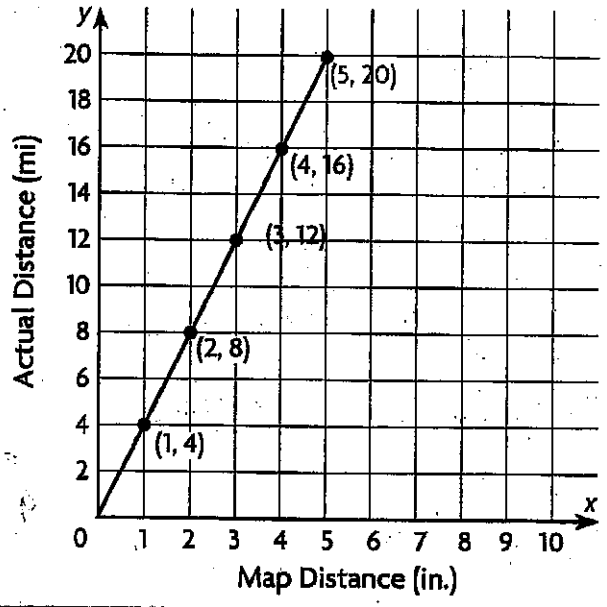
Step 3 Graph the ordered pairs. Connect the points with a line from the origin.

Possible rule: Multiply the map distance by 4 to get the actual distance.

Step 4 Use the rule to find the actual distance between the two cities.

So, two cities that are 5 inches apart on the map are actually 5 × 4, or 20 miles apart.

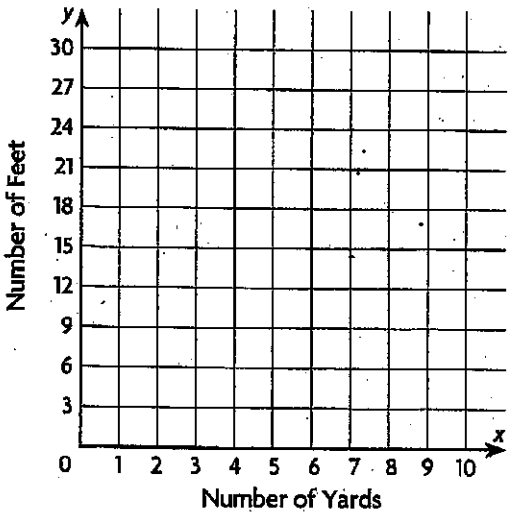
Plot the point (5, 20) on the graph.



Graph and label the related number pairs as ordered pairs. Then complete and use the rule to find the unknown term.

1. Multiply the number of yards by _____ to find the number of feet.

Number of Yards	1	2	3	4	5
Number of Feet	3	6	9	12	



Chapter 9

School-Home Letter

Dear Family,

Throughout the next few weeks, our math class will be working with data and graphs. We will learn how to make and use line plots and line graphs to analyze data and solve problems. We will also learn how to plot and name points on a coordinate grid.

You can expect to see homework that includes making and analyzing line graphs.

Here is a sample of how your child will be taught to interpret line graphs.

Vocabulary

interval The difference between one number and the next on the scale of a graph

line graph A graph that uses line segments to show how data changes over time

scale A series of numbers placed at fixed distances on a graph to help label the graph

***x*-axis** The horizontal number line on a coordinate plane

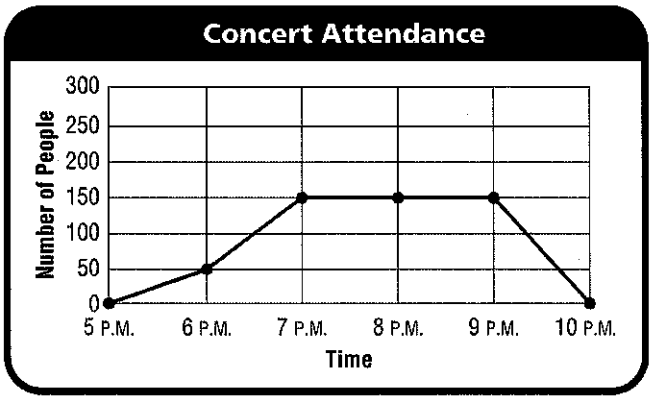
***x*-coordinate** The first number in an ordered pair, which tells the distance to move right or left from (0, 0)

***y*-axis** The vertical number line on a coordinate plane

***y*-coordinate** The second number in an ordered pair, which tells the distance to move up or down from (0, 0)

MODEL Analyze Line Graphs

This is how we will analyze line graphs.



Tips

Choose an Appropriate Graph

The type of data being reported will help determine what type of graph can be used to visually display the data. Line graphs are a good way to display data that change over time.

Use the graph to identify between what times the concert attendance increased the most.

STEP 1 Look at each segment in the graph.

STEP 2 Find the segment that shows the greatest increase in number of people between two consecutive points.

The greatest increase in the number of people occurred between 6 P.M. and 7 P.M.

Activity

Look through a few newspapers or magazines to find data displays. Then work together to write and answer questions about the information displayed.

Capítulo 9

Carta para la casa

Querida familia,

Durante las próximas semanas, en la clase de matemáticas vamos a trabajar con datos y gráficas. Aprenderemos cómo hacer y usar diagramas de puntos y gráficas lineales para analizar datos y resolver problemas. También aprenderemos a anotar y nombrar los puntos en una cuadrícula de coordenadas.

Llevaré a la casa tareas para aprender a hacer y analizar gráficas lineales.

Este es un ejemplo de la manera como aprenderemos a interpretar gráficas lineales.

Vocabulario

intervalo La diferencia entre un número y el siguiente en la escala de una gráfica

gráfica lineal Una gráfica que usa segmentos para mostrar cómo los datos cambian con el tiempo

escala Una serie de números colocados a distancias fijas en una gráfica que permite rotular la gráfica

eje de la x La recta numérica horizontal en un plano de coordenadas

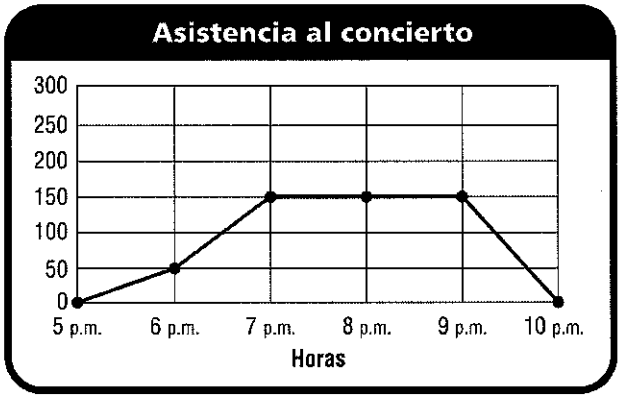
eje de la y La recta numérica vertical en un plano de coordenadas

coordenada x El primer número de un par ordenado que muestra la distancia para moverse hacia la derecha o la izquierda desde (0, 0)

coordenada y El segundo número de un par ordenado que muestra la distancia para moverse hacia arriba o hacia abajo desde (0, 0)

MODELO Interpretar gráficas lineales

Así es como interpretamos las gráficas lineales.



Usa la gráfica para identificar entre qué horas aumentó más la asistencia al concierto.

PASO 1 Analiza cada segmento de la gráfica.

PASO 2 Halla el segmento que muestre el mayor aumento de la cantidad de personas entre dos puntos consecutivos.
El mayor aumento en la cantidad de personas ocurrió entre las 6 y las 7 P.M.

Pistas

Elegir una gráfica adecuada

El tipo de datos que se van a reportar, determina el tipo de gráfica que se puede usar para mostrar esos datos. Las gráficas lineales nos permiten mostrar datos que cambian con el tiempo.

Actividad

Busquen datos presentados de diferentes formas en periódicos y revistas. Después escriban y contesten juntos preguntas sobre la información que se muestra.

Name _____

Line Plots

COMMON CORE STANDARD—5.MD.2
Represent and interpret data.

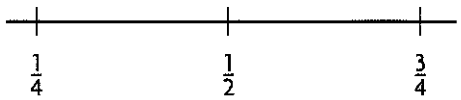
Use the data to complete the line plot. Then answer the questions.

A clerk in a health food store makes bags of trail mix. The amount of trail mix in each bag is listed below.

$\frac{1}{4}$ lb, $\frac{1}{4}$ lb, $\frac{3}{4}$ lb, $\frac{1}{2}$ lb, $\frac{1}{4}$ lb, $\frac{3}{4}$ lb,
$\frac{3}{4}$ lb, $\frac{3}{4}$ lb, $\frac{1}{2}$ lb, $\frac{1}{4}$ lb, $\frac{1}{2}$ lb, $\frac{1}{2}$ lb

1. What is the combined weight of the $\frac{1}{4}$-lb bags? 1 lb

   Think: There are four $\frac{1}{4}$-pound bags.



Weight of Trail Mix (in pounds)

2. What is the combined weight of the $\frac{1}{2}$-lb bags? _____

3. What is the combined weight of the $\frac{3}{4}$-lb bags? _____

4. What is the total weight of the trail mix used in all the bags? _____

5. What is the average amount of trail mix in each bag? _____

Julie uses crystals to make a bracelet. The lengths of the crystals are shown below.

$\frac{1}{2}$ in., $\frac{5}{8}$ in., $\frac{3}{4}$ in., $\frac{1}{2}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., $\frac{3}{4}$ in.,
$\frac{3}{8}$ in., $\frac{3}{4}$ in., $\frac{5}{8}$ in., $\frac{1}{2}$ in., $\frac{3}{8}$ in., $\frac{5}{8}$ in., $\frac{3}{4}$ in.

Lengths of Crystals (in inches)

6. What is the combined length of the $\frac{1}{2}$-in. crystals? _____

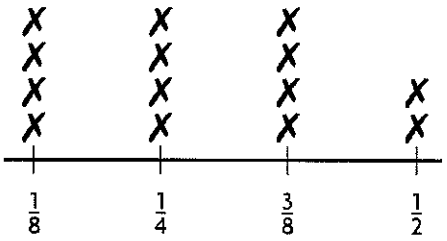
7. What is the combined length of the $\frac{5}{8}$-in. crystals? _____

8. What is the total length of all the crystals in the bracelet? _____

9. What is the average length of each crystal in the bracelet? _____

Lesson Check (5.MD.2)

A baker uses different amounts of salt when she bakes loaves of bread, depending on which recipe she is following. The amount of salt called for in each recipe is shown on the line plot.



Amount of Salt (in teaspoons)

1. Based on the line plot, how many recipes call for more than $\frac{1}{4}$ tsp of salt?

2. What is the average amount of salt called for in each recipe?

Spiral Review (5.NBT.4, 5.NF.1, 5.NF.4a, 5.NF.7c)

3. Ramona had $8\frac{3}{8}$ in. of ribbon. She used $2\frac{1}{2}$ in. for an art project. How many inches of ribbon does she have left? Find the difference in simplest form.

4. Ben bought $\frac{1}{2}$ pound of cheese for 3 sandwiches. If he puts the same amount of cheese on each sandwich, how much cheese will each sandwich have?

5. What is 92.583 rounded to the nearest tenth?

6. In Yoshi's garden, $\frac{3}{4}$ of the flowers are tulips. Of the tulips, $\frac{2}{3}$ are yellow. What fraction of the flowers in Yoshi's garden are yellow tulips?

Name _____

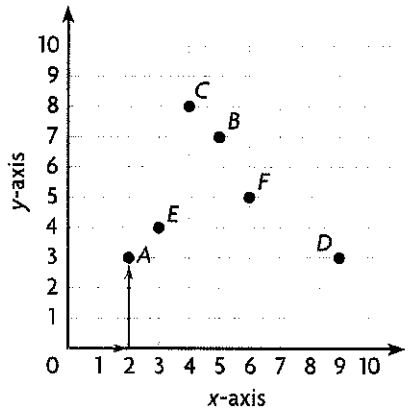
Ordered Pairs

COMMON CORE STANDARD—5.G.1
Graph points on the coordinate plane to solve real-world and mathematical problems.

Use Coordinate Grid A to write an ordered pair for the given point.

1. A (2, 3)
2. B
3. C
4. D
5. E
6. F

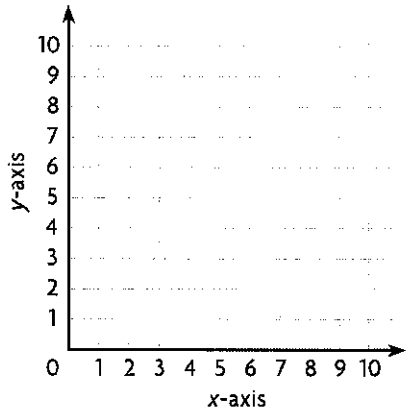
Coordinate Grid A



Plot and label the points on Coordinate Grid B.

7. $N(7, 3)$
8. $R(0, 4)$
9. $O(8, 7)$
10. $M(2, 1)$
11. $P(5, 6)$
12. $Q(1, 5)$

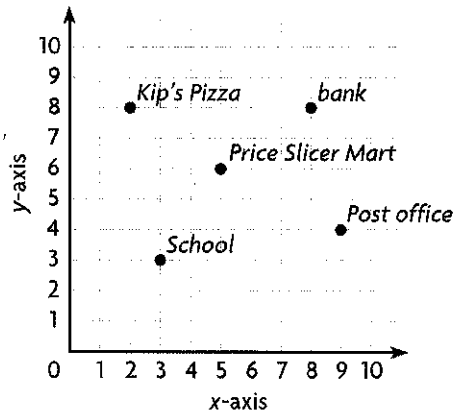
Coordinate Grid B



Problem Solving Real World

Use the map for 13–14.

Port Charlotte



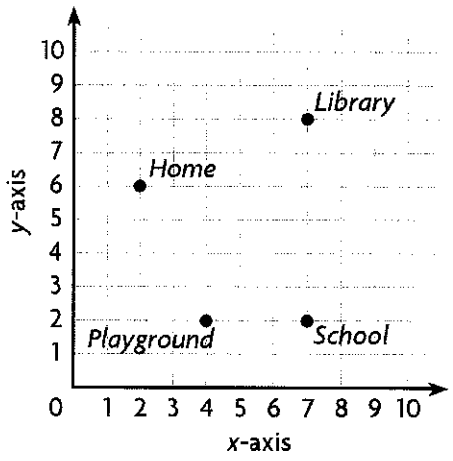
13. Which building is located at (5, 6)?

_____

14. What is the distance between Kip's Pizza and the bank?

_____

Lesson Check (5.G.1)



1. What ordered pair describes the location of the playground?

2. What is the distance between the school and the library?

Spiral Review (5.NBT.1, 5.NBT.5, 5.NBT.6)

3. What is the value of the underlined digit?

   45,7<u>6</u>9,331

4. Andrew charges $18 for each lawn he mows. Suppose he mows 17 lawns per month. How much money will Andrew make per month?

5. Harlow can bicycle at a rate of 18 miles per hour. How many hours would it take him to bicycle a stretch of road that is 450 miles long?

6. Molly uses 192 beads to make a bracelet and a necklace. It takes 5 times as many beads to make a necklace than it does to make a bracelet. How many beads are used to make the necklace?

Name _____

Lesson 9.3

Graph Data

COMMON CORE STANDARD—5.G.2
Graph points on the coordinate plane to solve real-world and mathematical problems.

Graph the data on the coordinate grid.

1.

Outdoor Temperature					
Hour	1	3	5	7	9
Temperature (°F)	61	65	71	75	77

a. Write the ordered pairs for each point.

_____

_____

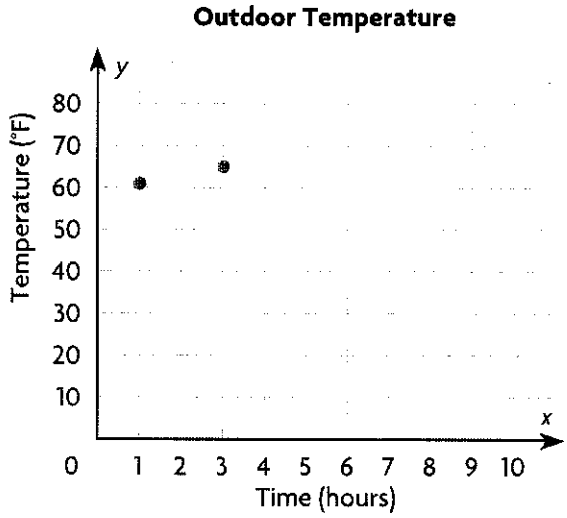
b. How would the ordered pairs be different if the outdoor temperature were recorded every hour for 4 consecutive hours?

_____

_____

_____

_____



Problem Solving Real World

2.

Windows Repaired					
Day	1	2	3	4	5
Total Number Repaired	14	30	45	63	79

a. Write the ordered pairs for each point.

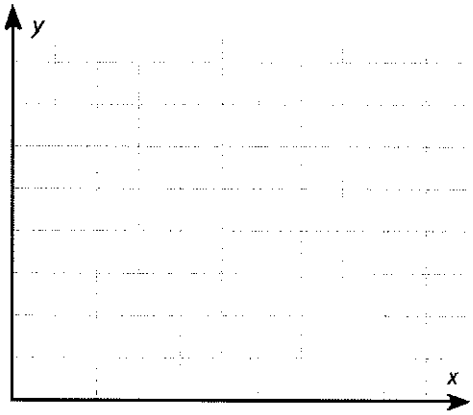
_____

_____

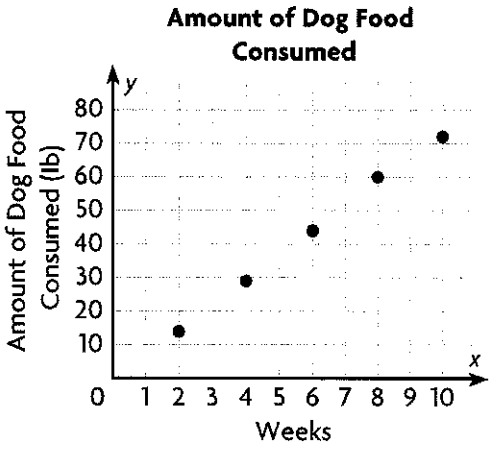
b. What does the ordered pair (2, 30) tell you about the number of windows repaired?

_____

_____



Lesson Check (5.G.2)



1. About how many weeks did it take for the dog to consume 45 pounds of food?

2. By the end of Week 8, how much food had the dog consumed?

Spiral Review (5.OA.2, 5.NBT.6, 5.NF.2)

3. A restaurant chain ordered 3,940 pounds of rice in 20-pound bags. About how many 20-pound bags of rice did the chain order?

4. The population of Linton is 12 times as great as the population of Ellmore. The combined population of both towns is 9,646 people. What is the population of Linton?

5. Timothy needs $\frac{1}{2}$ cup of bread crumbs for a casserole and $\frac{1}{3}$ cup of bread crumbs for the topping. How many cups of bread crumbs does Timothy need?

6. Jessie bought 3 T-shirts for $6 each and 4 T-shirts for $5 each. What expression can you use to describe what Jessie bought?

Name _____

Lesson 9.4

Line Graphs

COMMON CORE STANDARDS—5.G.2
Graph points on the coordinate plane to solve real-world and mathematical problems.

Use the table for 1–5.

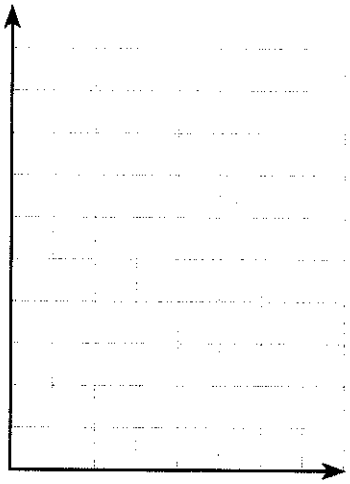
Hourly Temperature							
Time	10 A.M.	11 A.M.	12 noon	1 P.M.	2 P.M.	3 P.M.	4 P.M.
Temperature (°F)	8	11	16	27	31	38	41

1. Write the related number pairs for the hourly temperature as ordered pairs.
(10, 8);

2. What scale would be appropriate to graph the data?

3. What interval would be appropriate to graph the data?

4. Make a line graph of the data.



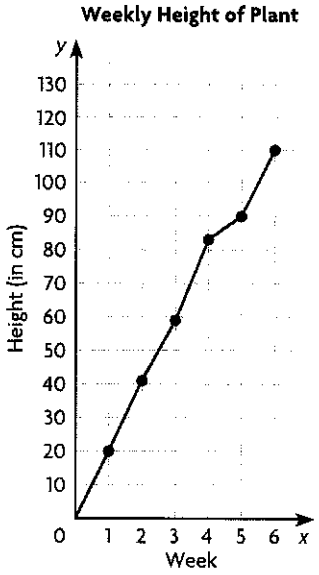
5. Use the graph to find the difference in temperature between 11 A.M. and 1 P.M.

Problem Solving Real World

6. Between which two hours did the least change in temperature occur?

7. What was the change in temperature between 12 noon and 4 P.M.?

Lesson Check (5.G.2)



1. How many centimeters did the plant grow in the first three weeks?

2. Between which two weeks did the plant grow the least?

Spiral Review (5.OA.2, 5.NBT.6, 5.NF.6, 5.NF.7c)

3. Write an expression using the Distributive Property to find the product of 7×63.

4. Ali multiplies 3 numbers using the expressions $a \times (b \times c)$ and $(a \times b) \times c$. What property of multiplication does Ali use?

5. A student athlete runs $3\frac{1}{3}$ miles in 30 minutes. A professional runner can run $1\frac{1}{4}$ times as far in 30 minutes. How far can the professional runner run in 30 minutes?

6. A recipe for salad dressing calls for $\frac{1}{4}$ cup of vinegar. You have 4 cups of vinegar. How many batches of salad dressing could you make with the vinegar?

Name _____

Numerical Patterns

COMMON CORE STANDARD—5.OA.3
Analyze patterns and relationships.

Complete the rule that describes how one sequence is related to the other. Use the rule to find the unknown term.

1. Multiply the number of laps by 50 to find the number of yards.

Think: The number of yards is 50 times the number of laps.

Swimmers	1	2	3	4
Number of Laps	4	8	12	16
Number of Yards	200	400	600	800

2. Multiply the number of pounds by _____ to find total cost.

Boxes	1	2	3	4	6
Number of Pounds	3	6	9	12	18
Total Cost ($)	12	24	36	48	

3. Multiply the number of hours by _____ to find the number of miles.

Cars	1	2	3	4
Number of Hours	2	4	6	8
Number of Miles	130	260	390	

4. Multiply the number of hours by _____ to find the amount earned.

Days	1	2	3	4	7
Number of Hours	8	16	24	32	56
Amount Earned ($)	96	192	288	384	

Problem Solving Real World

5. A map's key shows that every 5 inches on the map represents 200 miles of actual distance. Suppose the distance between two cities on the map is 7 inches. What is the actual distance between the two cities? Write the rule you used to find the actual distance.

_____

_____

_____

_____

6. To make each costume, Rachel uses 6 yards of material and 3 yards of trim. Suppose she uses a total of 48 yards of material to make several costumes. How many yards of trim does she use? Write the rule you used to find the number of yards of trim.

_____

_____

_____

_____

Lesson Check (5.OA.3)

Use the table below to answer questions 1 and 2.

Term Number	1	2	3	4	...	6
Sequence 1	4	8	12	16	...	24
Sequence 2	12	24	36	48	...	?

1. What rule could you write that relates Sequence 2 to Sequence 1?

2. What is the unknown number in Sequence 2?

Spiral Review (5.OA.1, 5.NBT.1, 5.NF.2, 5.NF.3)

3. What is the value of the following expression?

$$40 - (3 + 2) \times 6$$

4. What is the value of the digit 9 in the number 597,184?

5. What is the best estimate for the sum of $\frac{3}{8}$ and $\frac{1}{12}$?

6. Terry uses 3 cups of pumpkin seeds to decorate the tops of 12 loaves of bread. She puts an equal amount of seeds on each loaf. How many cups of pumpkin seeds does she put on each loaf of bread?

Name _____

Problem Solving • Find a Rule

PROBLEM SOLVING
Lesson 9.6

COMMON CORE STANDARD—5.OA.3
Analyze patterns and relationships.

Write a rule and complete the table. Then answer the question.

1. Faye buys 15 T-shirts, which are on sale for $3 each. How much money does Faye spend?

Number of T-Shirts	1	2	3	5	10	15
Amount Spent ($)	3	6	9			

Possible rule:
Multiply the number of T-shirts by 3.

The total amount Faye spends is $45.

2. The Gilman family joins a fitness center. They pay $35 per month. By the 12th month, how much money will the Gilman family have spent?

Number of Months	1	2	3	4	5	12
Total Amount of Money Spent ($)	35	70				

Possible rule:
_____

The Gilman family will have spent _____.

3. Hettie is stacking paper cups. Each stack of 15 cups is 6 inches high. What is the total height of 10 stacks of cups?

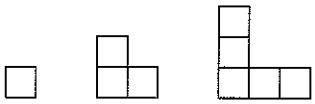
Number of stacks	1	2	3	10
Height (in.)	6	12	18	

Possible rule:
_____

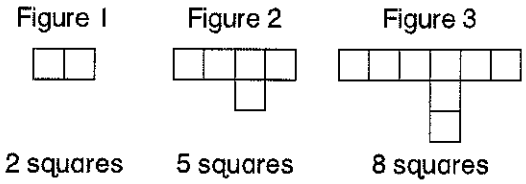
The total height of 10 stacks is _____.

Lesson Check (5.OA.3)

1. How many squares are needed to make the eighth figure in the pattern?



2. What expression could describe the number of squares in the next figure in the pattern, Figure 4?



Spiral Review (5.OA.3, 5.NBT.2, 5.NBT.7, 5.NF.2)

3. Talia stores her collection of stickers equally in 7 sticker albums. If she has 567 stickers, how many stickers are in each album?

4. Ms. Angelino made 2 pans of lasagna and cut each pan into twelfths. Her family ate $1\frac{1}{12}$ pans of lasagna for dinner. How many pans of lasagna were left?

5. What is the next number in this pattern?

   0.54, 0.6, 0.66, 0.72, ▯, . . .

6. How do you write 100 as a power of 10?

Name _____

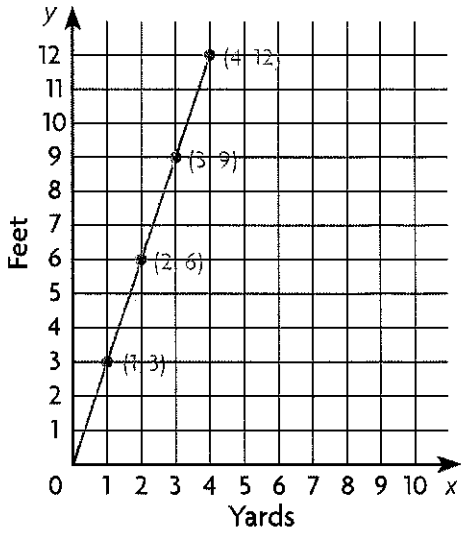
Graph and Analyze Relationships

COMMON CORE STANDARD—5.OA.3, 5.G.2 *Analyze patterns and relationships.*

Graph and label the related number pairs as ordered pairs. Then complete and use the rule to find the unknown term.

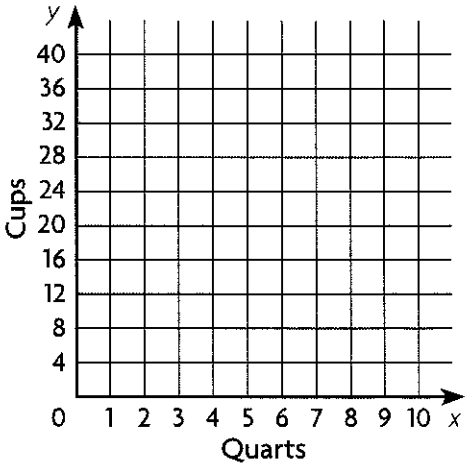
1. Multiply the number of yards by 3 to find the number of feet.

Yards	1	2	3	4
Feet	3	6	9	12



2. Multiply the number of quarts by _____ to find the number of cups that measure the same amount.

Quarts	1	2	3	4	5
Cups	4	8	12	16	



Problem Solving Real World

3. How can you use the graph for Exercise 2 to find how many cups are in 9 quarts?

_____

_____

_____

_____

_____

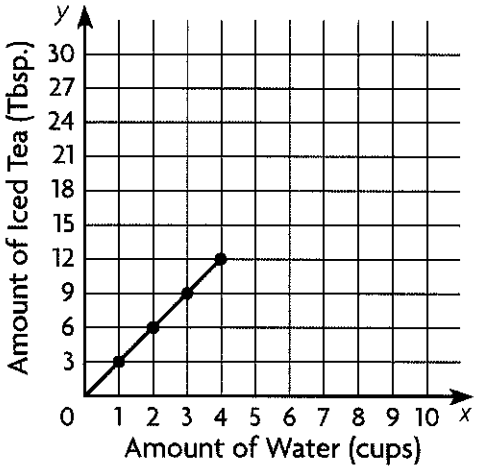
_____

4. How many cups are equal to 9 quarts? _____

Lesson Check (5.OA.3)

Use the data to complete the graph. Then answer the questions.

Paola is making a pitcher of iced tea. For each cup of water, she uses 3 tablespoons of powdered iced tea mix.



1. Fill in the missing number to complete the following rule.

   Multiply the amount of iced tea mix by _____ to get the amount of water.

2. Suppose Paola uses 18 tablespoons of iced tea mix. How many cups of water does she need to use?

Spiral Review (5.NBT.2, 5.NBT.6, 5.NBT.7)

3. A biologist counted 10,000 migrating monarch butterflies. How do you express 10,000 as a power of 10?

4. Find the quotient. Write your answer using a decimal and round to the nearest hundredth.

   $8{,}426 \div 82$

5. What is $54.38 + 29.7$?

6. On a certain day, \$1 is worth 30.23 Russian rubles. Omar has \$75. How many rubles will he get in exchange?

Chapter 11

School-Home Letter

Dear Family,

Throughout the next few weeks, our math class will be studying two-dimensional and three-dimensional figures. The students will use definitions to identify and describe characteristics of these figures. We will also learn how to find volume of rectangular prisms.

You can expect to see homework that includes identifying types of triangles and quadrilaterals.

Here is a sample of how your child will be taught to classify a triangle by the length of its sides.

Vocabulary

congruent Having the same size and shape

trapezoid A quadrilateral with exactly one pair of parallel sides

polyhedron A three-dimensional figure with faces that are polygons

lateral faces Faces of a polyhedron that connect the bases

MODEL Classify a triangle by the length of its sides.

A triangle has side lengths 3 in., 2 in., and 3 in. What type of triangle is it?

STEP 1

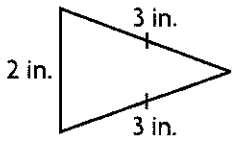
Identify how many sides are congruent.

There are 2 sides with lengths of 3 in.

STEP 2

Determine the correct classification.

A triangle with two congruent sides is isosceles.



Tips

Congruent Figures

Congruent figures are figures that have the same size and shape.

If measurements aren't given and you need to check whether a figure has pairs of congruent sides or angles, trace the figure and cut out the tracing. Then fold the figure to see if the sides or angles match.

Activity

Try to have students commit most of the classifications of triangles, quadrilaterals, and polyhedrons to memory. You can make a series of flash cards with the classifications on one side of the card and definitions and/or sketches of examples on the other side of the card.

Capítulo 11

Carta para la casa

Querida familia

Durante las próximas semanas, en la clase de matemáticas estudiaremos las figuras bidimensionales y tridimensionales. Usaremos las definiciones para identificar y describir las características de esas figuras. También aprenderemos a hallar el volumen de los prismas rectangulares.

Llevaré a la casa tareas con actividades para identificar diferentes tipos de triángulos y cuadriláteros.

Este es un ejemplo de la manera como aprenderemos a clasificar un triángulo por sus lados.

Vocabulario

congruentes Figuras que tienen el mismo tamaño y la misma forma

trapecio Un cuadrilátero que tiene exactamente 1 par de lados paralelos

poliedro Una figura tridimensional con caras que son polígonos

caras laterales Las caras poligonales de un poliedro que conectan las bases

MODELO Clasificar un triángulo por sus lados.

Los lados de un triángulo miden 3 pulg., 2 pulg. y 3 pulg. ¿Qué tipo de triángulo es?

PASO 1

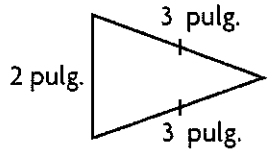
Identifica cuántos lados son iguales.

Hay dos lados que tienen la misma longitud de 3 pulg.

PASO 2

Determina la clasificación correcta.

Un triángulo con dos lados congruentes es isósceles.



Pistas

Figuras congruentes

Las figuras congruentes son figuras que tienen el mismo tamaño y la misma forma. Para comprobar si una figura tiene pares de lados o ángulos congruentes, dibuja la figura y recórtala. Luego dobla la figura para ver si los lados o los ángulos coinciden.

Para estar seguro de que dos figuras son congruentes, haz una lista de todos los lados y ángulos que corresponden uno con el otro y luego verifica que las medidas de cada par sean iguales.

Actividad

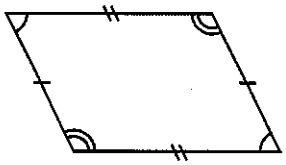
Anime a su hijo/a a memorizar las clasificaciones de los triángulos, los cuadriláteros y los poliedros. Puede hacer tarjetas nemotécnicas con las clasificaciones en un lado y las definiciones y/o ejemplos visuales en el otro lado de cada tarjeta.

Name _____

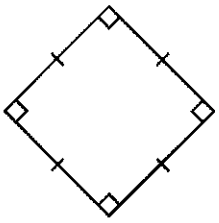
Polygons

COMMON CORE STANDARD—5.G.3
Classify two-dimensional figures into categories based on their properties.

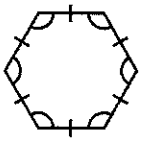
Name each polygon. Then tell whether it is a *regular polygon* or *not a regular polygon.*

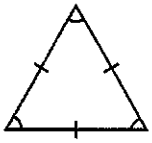
1. 

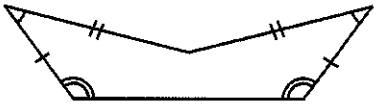
4 sides, 4 vertices, 4 angles means it is a quadrilateral. The sides are not all congruent, so it is not regular.

2. 

3. 

4. 

5. 

6. 

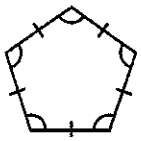
Problem Solving Real World

7. Sketch nine points. Then, connect the points to form a closed plane figure. What kind of polygon did you draw?

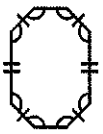
8. Sketch seven points. Then, connect the points to form a closed plane figure. What kind of polygon did you draw?

Lesson Check (5.G.3)

1. Name the polygon. Write whether it is regular or not regular.



2. Name the polygon. Write whether it is regular or not regular.



Spiral Review (5.OA.2, 5.NBT.7, 5.MD.1)

3. Ann needs 42 feet of fabric to make a small quilt. How many yards of fabric should she buy?

4. Todd begins piano practice at 4:15 P.M. and ends at 5:50 P.M. How long does he practice?

5. Jenna has 30 barrettes. She is organizing her barrettes into 6 boxes. She puts the same number of barrettes in each box. Write an expression that you can use to find the number of barrettes in each box.

6. Melody had $45. She spent $32.75 on a blouse. Then her mother gave her $15.50. How much money does Melody have now?

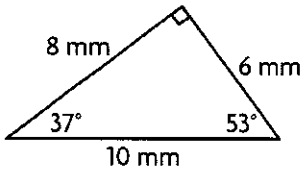
Name _____

Triangles

COMMON CORE STANDARDS—5.G.3, 5.G.4 *Classify two-dimensional figures into categories based on their properties.*

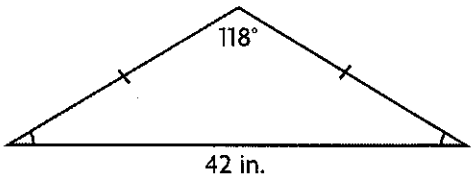
Classify each triangle. Write *isosceles, scalene,* or *equilateral.* Then write *acute, obtuse,* or *right.*

1.



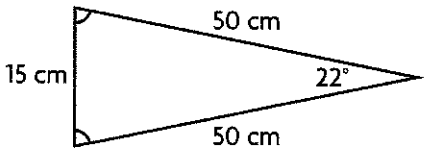
None of the side measures are equal. So, it is scalene. There is a right angle, so it is a right triangle.

2.



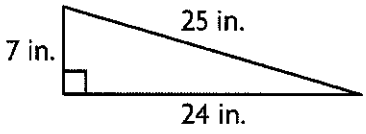
_____ _____

3.



_____ _____

4.



_____ _____

A triangle has sides with the lengths and angle measures given. Classify each triangle. Write *scalene, isosceles,* or *equilateral.* Then write *acute, obtuse,* or *right.*

5. **sides:** 44 mm, 28 mm, 24 mm
angles: 110°, 40°, 30°

_____ _____

6. **sides:** 23 mm, 20 mm, 13 mm
angles: 62°, 72°, 46°

_____ _____

Problem Solving Real World

7. Mary says the pen for her horse is an acute right triangle. Is this possible? **Explain.**

_____

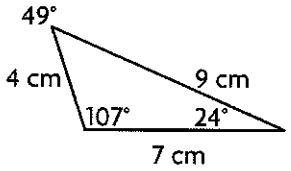
8. Karen says every equilateral triangle is acute. Is this true? **Explain.**

_____

Lesson Check (5.G.3, 5.G.4)

1. If two of a triangle's angles measure 42° and 48°, how would you classify that triangle? Write *acute, obtuse,* or *right.*

2. What is the classification of the following triangle? Write *scalene, isosceles,* or *right.*



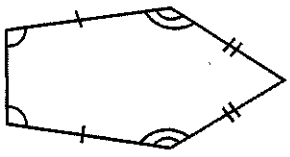
Spiral Review (5.MD.1, 5.G.3)

3. How many tons are equal to 40,000 pounds?

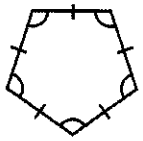
4. Choose a symbol to make the following statement true. Write >, <, or =.

6 kilometers ◯ 600 centimeters

5. What polygon is shown?



6. Name the polygon. Write whether it is regular or not regular.



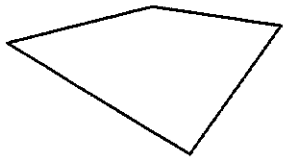
Name _____

Lesson 11.3

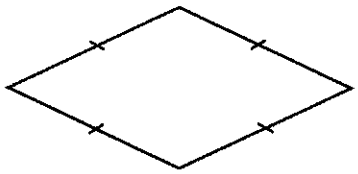
Quadrilaterals

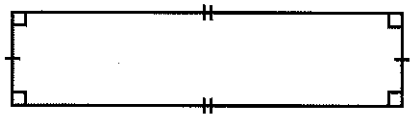
COMMON CORE STANDARD—5.G.4
Classify two-dimensional figures into categories based on their properties.

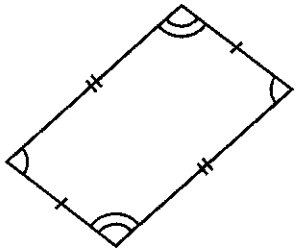
Classify the quadrilateral in as many ways as possible.
Write *quadrilateral, parallelogram, rectangle, rhombus, square,* or *trapezoid.*

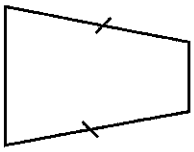
1. 

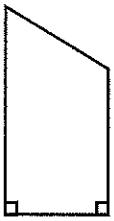
It has 4 sides, so it is a quadrilateral.
None of the sides are parallel, so there is no other classification.

2. 

3. 

4. 

5. 

6. 

Problem Solving (Real World)

7. Kevin claims he can draw a trapezoid with three right angles. Is this possible? **Explain.**

8. "If a figure is a square, then it is a regular quadrilateral." Is this true or false? **Explain.**

Lesson Check (5.G.4)

1. What quadrilateral has exactly one pair of parallel sides?

2. Complete the following statement. Write *sometimes, always,* or *never.*

A rhombus _____ has four congruent angles.

Spiral Review (5.NF.3, 5.MD.1, 5.G.3, 5.G.4)

3. How many kilograms are equal to 5,000 grams?

4. The sides of a triangle measure 6 inches, 8 inches, and 10 inches. The triangle has one 90° angle. What type of triangle is it?

5. A warehouse has 355 books to ship. Each shipping carton holds 14 books. How many cartons does the warehouse need to ship all of the books?

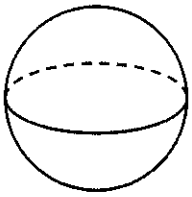
6. How many vertices does a heptagon have?

Name _____

Three-Dimensional Figures

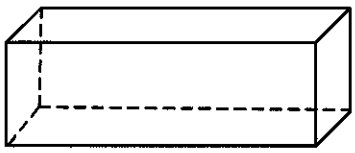
COMMON CORE STANDARD—5.MD.3
Geometric measurements: understand concepts of volume and relate volume to multiplication and to addition.

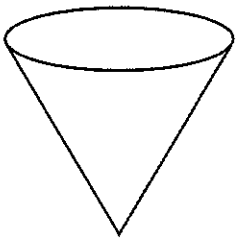
Classify the solid figure. Write *prism, pyramid, cone, cylinder,* or *sphere.*

1. 

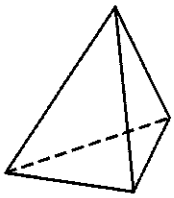
There are no bases. There is 1 curved surface. It is a

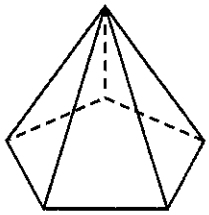
sphere.

2. 

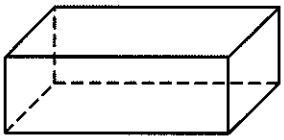
3. 

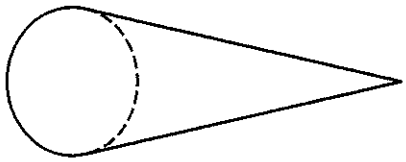
Name the solid figure.

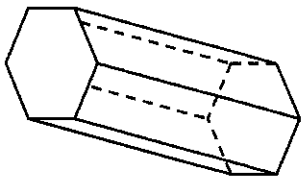
4. 

5. 

6. 

7. 

8. 

9. 

Problem Solving Real World

10. Darrien is making a solid figure out of folded paper. His solid figure has six congruent faces that are all squares. What solid figure did Darrien make?

11. Nanako said she drew a square pyramid and that all of the faces are triangles. Is this possible? **Explain.**

Lesson Check (5.MD.3)

1. Luke made a model of a solid figure with 1 circular base and 1 curved surface. What solid figure did he make?

2. How many rectangular faces does a hexagonal pyramid have?

Spiral Review (5.NF.1, 5.MD.1, 5.G.3, 5.G.4)

3. Laura walks $\frac{3}{5}$ mile to school each day. Isaiah's walk to school is 3 times as long as Laura's. How far does Isaiah walk to school each day?

4. James has $4\frac{3}{4}$ feet of rope. He plans to cut off $1\frac{1}{2}$ feet from the rope. How much rope will be left?

5. Latasha made 128 ounces of punch. How many cups of punch did Latasha make?

6. Complete the following statement. Write *sometimes, always,* or *never.*

Trapezoids are _____ parallelograms.

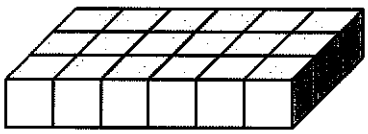
Name _____

Lesson 11.5

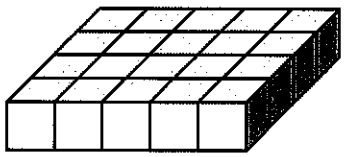
Unit Cubes and Solid Figures

COMMON CORE STANDARD—5.MD.3a
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

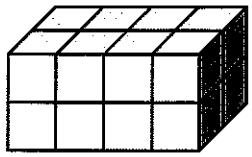
Count the number of cubes used to build each solid figure.

1. 

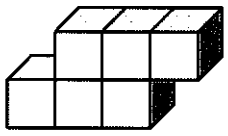
18 unit cubes

2. 

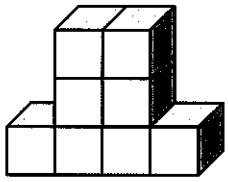
_____ unit cubes

3. 

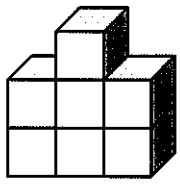
_____ unit cubes

4. 

_____ unit cubes

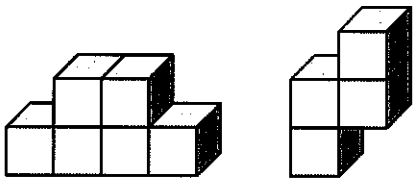
5. 

_____ unit cubes

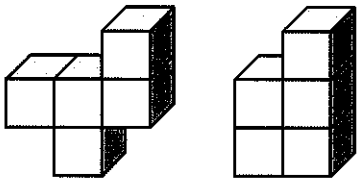
6. 

_____ unit cubes

Compare the number of unit cubes in each solid figure. Use <, >, or =.

7. 

_____ unit cubes ◯ _____ unit cubes

8. 

_____ unit cubes ◯ _____ unit cubes

Problem Solving Real World

9. A carton can hold 1,000 unit cubes that measure 1 inch by 1 inch by 1 inch. Describe the dimensions of the carton using unit cubes.

_____

_____

_____

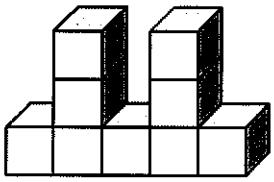
_____

10. Peter uses unit cubes to build a figure in the shape of the letter X. What is the fewest unit cubes that Peter can use to build the figure?

_____

Lesson Check (5.MD.3a)

1. Cala stacked some blocks to make the figure below. How many blocks are in Cala's figure?



2. Quentin has 18 unit cubes. How many different rectangular prisms can he build if he uses all of the cubes?

Spiral Review (5.MD.1, 5.MD.3, 5.G.4)

3. In what shape are the lateral faces of a pyramid?

4. The Arnold family arrived at the beach at 10:30 A.M. They spent $3\frac{3}{4}$ hours there. What time did they leave the beach?

5. Complete the following statement. Write *sometimes, always,* or *never.*

The opposite sides of a parallelogram

are _____ congruent.

6. The tire on Frank's bike moves 75 inches in one rotation. How many rotations will the tire have made after Frank rides 50 feet?

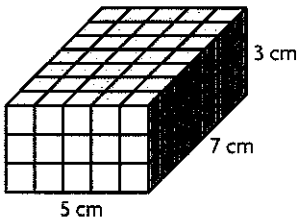
Name _____

Understand Volume

COMMON CORE STANDARDS—5.MD.3b, 5.MD.4 *Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.*

Use the unit given. Find the volume.

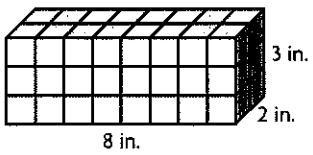
1.



Each cube = 1 cu cm

Volume = 105 cu cm

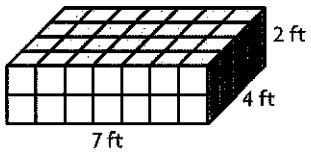
2.



Each cube = 1 cu in.

Volume = _____ cu _____

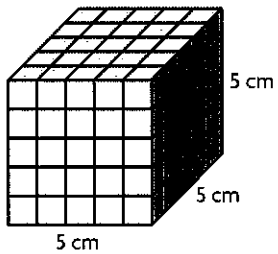
3.



Each cube = 1 cu ft

Volume = _____ cu _____

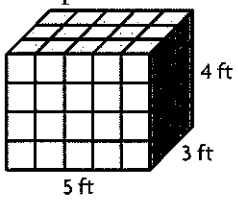
4.



Each cube = 1 cu cm

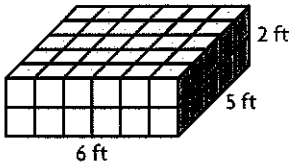
Volume = _____ cu _____

5. Compare the volumes. Write <, >, or =.



Each cube = 1 cu ft

_____ cu ft ◯ _____ cu ft



Each cube = 1 cu ft

Problem Solving Real World

6. A manufacturer ships its product in boxes with edges of 4 inches. If 12 boxes are put in a carton and completely fill the carton, what is the volume of the carton?

_____

_____

7. Matt and Mindy each built a rectangular prism that has a length of 5 units, a width of 2 units, and a height of 4 units. Matt used cubes that are 1 cm on each side. Mindy used cubes that are 1 in. on each side. What is the volume of each prism?

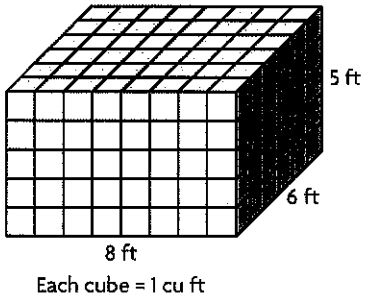
_____

_____

Lesson Check (5.MD.3b, 5.MD.4)

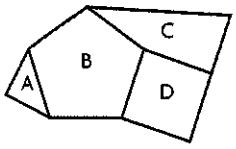
1. Elena packed 48 cubes into this box. Each cube has edges that are 1 centimeter. How many layers of cubes did Elena make?

2. What is the volume of the rectangular prism?

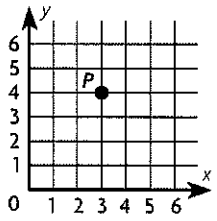


Spiral Review (5.MD.1, 5.G.1, 5.G.3, 5.G.4)

3. Juan made a design with polygons. Which polygon in Juan's design is a pentagon?



4. What ordered pair describes the location of point *P*?



5. What is the least number of acute angles that a triangle can have?

6. Karen bought 3 pounds of cheese to serve at a picnic. How many ounces of cheese did Karen buy?

Name _____

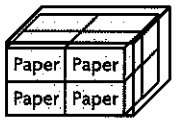
Lesson 11.7

Estimate Volume

COMMON CORE STANDARD—5.MD.4
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Estimate the volume.

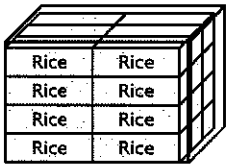
1. Volume of package of paper: 200 cu in.



Think: Each package of paper has a volume of 200 cu in. There are 8 packages of paper in the larger box. So, the volume of the large box is about 8 × 200, or 1,600 cubic inches.

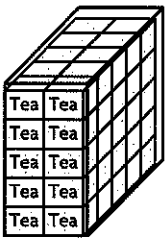
Volume of large box: 1,600 cu in.

2. Volume of rice box: 500 cu cm



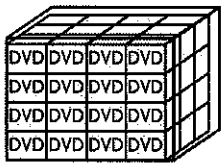
Volume of large box: _____

3. Volume of tea box: 40 cu in.



Volume of large box: _____

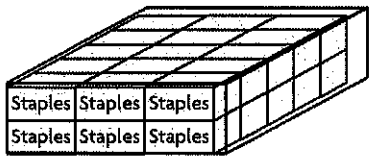
4. Volume of DVD case: 20 cu in.



Volume of large box: _____

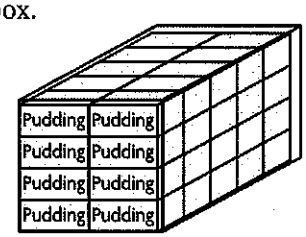
Problem Solving (Real World)

5. Theo fills a large box with boxes of staples. The volume of each box of staples is 120 cu cm. Estimate the volume of the large box.



_____

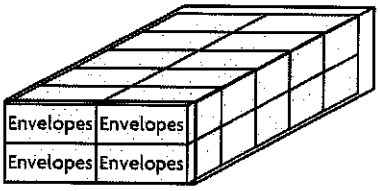
6. Lisa uses pudding boxes to estimate the volume of the box below. The volume of each pudding box is 150 cu in. Estimate the volume of the large box.



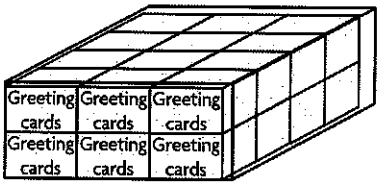
_____

Lesson Check (5.MD.4)

1. Melanie packs boxes of envelopes into a larger box. The volume of each box of envelopes is 1,200 cubic centimeters. What is the approximate volume of the large box?



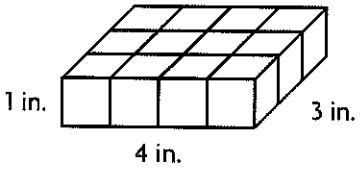
2. Calvin packs boxes of greeting cards into a larger box. The volume of each box of greeting cards is 90 cubic inches. What is the approximate volume of the large box?



Spiral Review (5.MD.1, 5.MD.3a, 5.MD.3b, 5.MD.4)

3. Rosa has 16 unit cubes. How many different rectangular prisms can she build with the cubes?

4. Each cube represents 1 cubic inch. What is the volume of the prism?



5. A certain aquarium holds 20 gallons of water. How many quarts of water does the aquarium hold?

6. Monique ran in a 5-kilometer race. How many meters did Monique run?

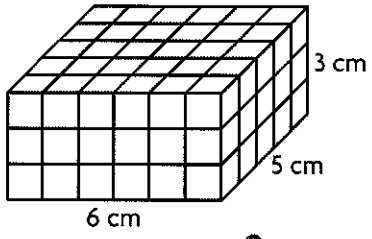
Name _____

Lesson 11.8

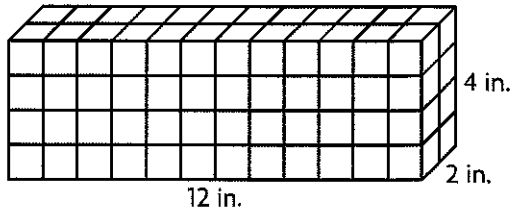
Volume of Rectangular Prisms

COMMON CORE STANDARD—5.MD.5a
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

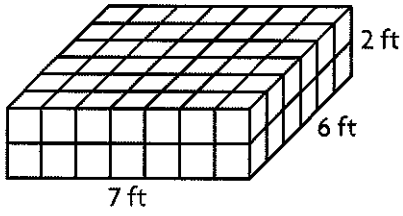
Find the volume.

1. 

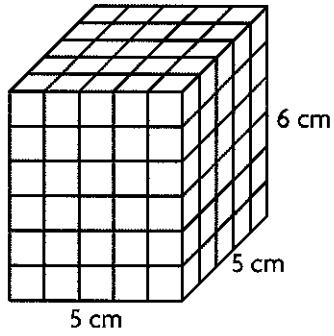
Volume: 90 cm^3

2. 

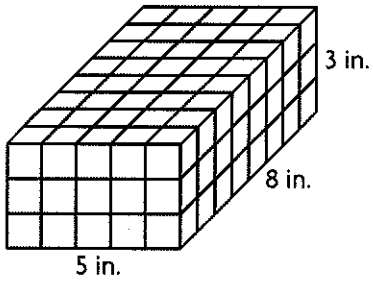
Volume: _____

3. 

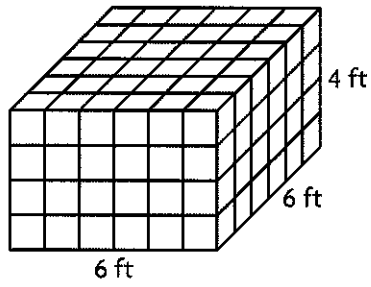
Volume: _____

4. 

Volume: _____

5. 

Volume: _____

6. 

Volume: _____

Problem Solving (Real World)

7. Aaron keeps his baseball cards in a cardboard box that is 12 inches long, 8 inches wide, and 3 inches high. What is the volume of this box?

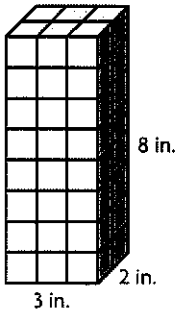
_____

8. Amanda's jewelry box is in the shape of a cube that has 6-inch edges. What is the volume of Amanda's jewelry box?

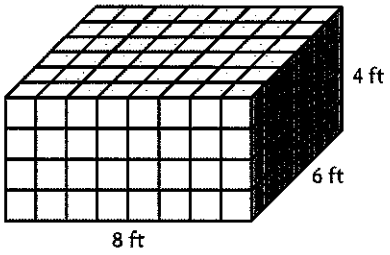
_____

Lesson Check (5.MD.5a)

1. Laini uses 1-inch cubes to build the box shown below. What is the volume of the box?

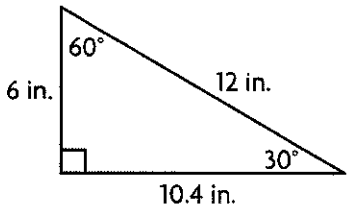


2. Mason stacked 1-foot cube-shaped boxes in a warehouse. What is the volume of the stack of boxes?



Spiral Review (5.MD.1, 5.G.3, 5.G.4)

3. What type of triangle is shown below?



4. What quadrilateral always has 4 congruent angles and opposite sides that are congruent and parallel?

5. Suzanne is 64 inches tall. What is Suzanne's height in feet and inches?

6. Trevor bought 8 gallons of paint to paint his house. He used all but 1 quart. How many quarts of paint did Trevor use?

Name _____

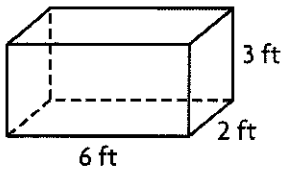
ALGEBRA
Lesson 11.9

Apply Volume Formulas

COMMON CORE STANDARDS—5.MD.5b
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Find the volume.

1.

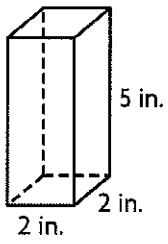


$V = \underline{l} \times \underline{w} \times \underline{h}$

$V = \underline{6} \times \underline{2} \times \underline{3}$

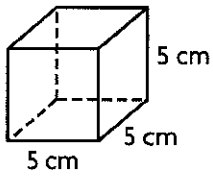
$V = \underline{36 \text{ ft}^3}$

2.



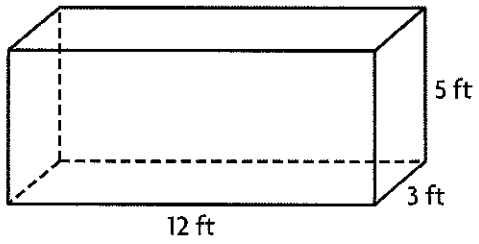
$V =$ _____

3.



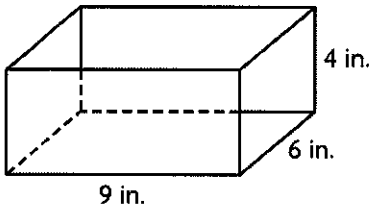
$V =$ _____

4.



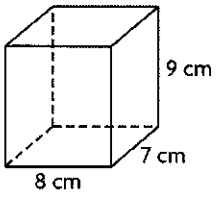
$V =$ _____

5.



$V =$ _____

6.



$V =$ _____

Problem Solving Real World

7. A construction company is digging a hole for a swimming pool. The hole will be 12 yards long, 7 yards wide, and 3 yards deep. How many cubic yards of dirt will the company need to remove?

_____

8. Amy rents a storage room that is 15 feet long, 5 feet wide, and 8 feet. What is the volume of the storage room?

_____

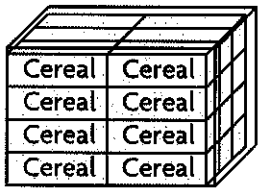
Lesson Check (5.MD.5b)

1. Sayeed is buying a crate for his puppy. The crate is 20 inches long, 13 inches wide, and 16 inches high. What is the volume of the crate?

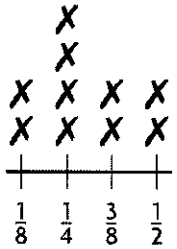
2. Brittany has a gift box in the shape of a cube. Each side of the box measures 15 centimeters. What is volume of the gift box?

Spiral Review (5.MD.1, MD.2, 5.MD.3a, 5.MD.4)

3. Max packs cereal boxes into a larger box. The volume of each cereal box is 175 cubic inches. What is the approximate volume of the large box?



4. In health class, students record the weights of the sandwiches they have for lunch. The weights are shown in the line plot below. What is the average weight of one sandwich?



Weights of Sandwiches (in pounds)

5. Chloe has 20 unit cubes. How many different rectangular prisms can she build with the cubes?

6. Darnell went to the movies with his friends. The movie started at 2:35 P.M. and lasted 1 hour 45 minutes. What time did the movie end?

Name _____

Problem Solving • Compare Volumes

PROBLEM SOLVING
Lesson 11.10

COMMON CORE STANDARD—5.MD.5b
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Make a table to help you solve each problem.

1. Amita wants to make a mold for a candle. She wants the shape of the candle to be a rectangular prism with a volume of exactly 28 cubic centimeters. She wants the sides to be in whole centimeters. How many different molds can she make?

   10 molds

2. Amita decides that she wants the molds to have a square base. How many of the possible molds can she use?

   _____

3. Raymond wants to make a box that has a volume of 360 cubic inches. He wants the height to be 10 inches and the other two dimensions to be whole numbers of inches. How many different-sized boxes can he make?

   _____

4. Jeff put a small box that is 12 inches long, 8 inches wide, and 4 inches tall inside a box that is 20 inches long, 15 inches wide, and 9 inches high. How much space is left in the larger box?

   _____

5. Mrs. Nelson has a rectangular flower box that is 5 feet long and 2 feet tall. She wants the width of the box to be no more than 5 feet. If the width is a whole number, what are the possible volumes for the flower box?

   _____

6. Sophina bought 3 yards of trim to put around a rectangular scarf. She wants the width of the scarf to be a whole number that is at least 6 inches and at most 12 inches. If she uses all the trim, what are the possible dimensions of her scarf? Write your answers in inches.

   _____

Lesson Check (5.MD.5b)

1. Corey bought a container shaped like a rectangular prism to hold his photo collection. If the container's dimensions are 6 in. by 8 in. by 10 in., what is its volume?

2. Aleka has a box for keepsakes that has a volume of 576 cubic inches. The length of the box is 12 inches and the width is 8 inches. What is the height of the box?

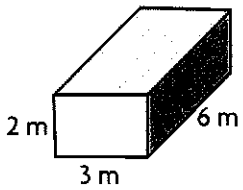
Spiral Review (5.MD.1, 5.MD.3, 5.MD.5a, 5.MD.5b)

3. A movie is 2 hours and 28 minutes long. It starts at 7:50 P.M. At what time will the movie end?

4. How many rectangular faces does a pentagonal pyramid have?

5. An aquarium is in the shape of a rectangular prism. Its length is 24 inches, its width is 12 inches, and its height is 14 inches. How much water can the aquarium hold?

6. What is the volume of the rectangular prism shown?



Name _____

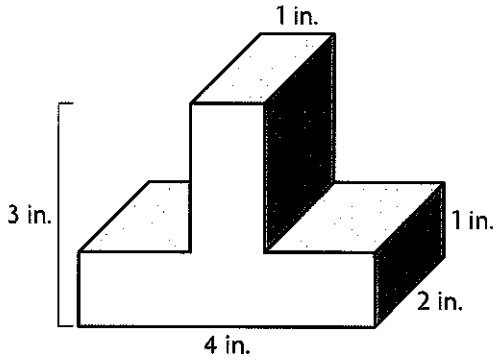
Lesson 11.11

Find Volume of Composed Figures

COMMON CORE STANDARD—5.MD.5C
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

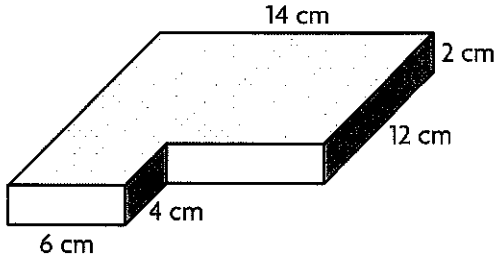
Find the volume of the composite figure.

1.



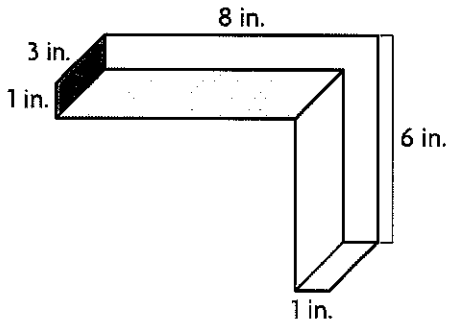
$V =$ _____

2.



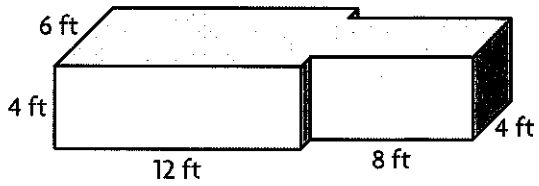
$V =$ _____

3.



$V =$ _____

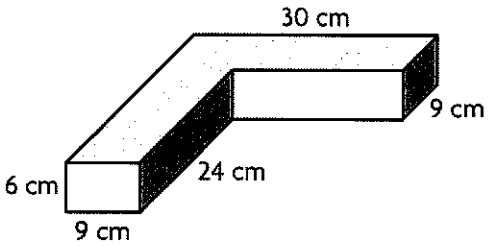
4.



$V =$ _____

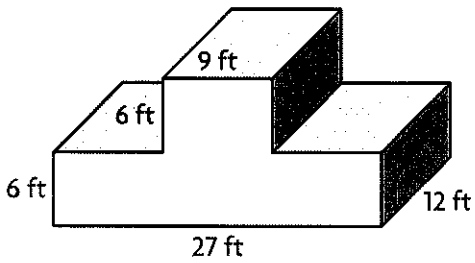
Problem Solving Real World

5. As part of her shop class, Jules made the figure below out of pieces of wood. How much space does the figure she made take up?



_____

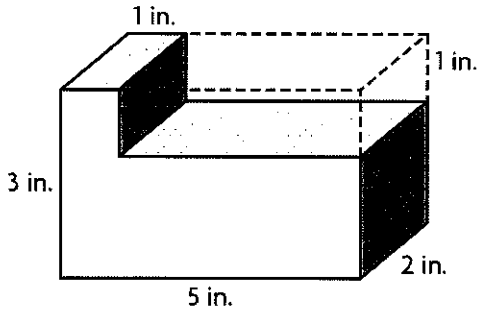
6. What is the volume of the composite figure below?



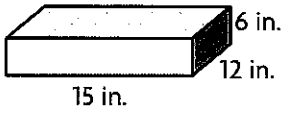
_____

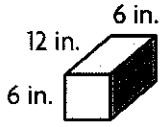
Lesson Check (5.MD.5c)

1. Write an expression to represent the volume of the composite figure.



2. Suppose you take the small prism and stack it on top of the larger prism. What will be the volume of the composite figure?

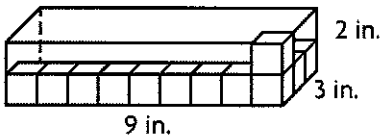




Spiral Review (5.NF.6, 5.NF.7c, 5.MD.5a, 5.MD.5b)

3. Jesse wants to build a wooden chest with a volume of 8,100 cubic inches. The length will be 30 inches and the width will be 15 inches. How tall will Jesse's chest be?

4. What is the volume of the rectangular prism?



5. Adrian's recipe for cranberry relish calls for $1\frac{3}{4}$ cups of sugar. He wants to use $\frac{1}{2}$ that amount. How much sugar should he use?

6. Joanna has a board that is 6 feet long. She cuts it into pieces that are each $\frac{1}{4}$ foot long. Write an equation to represent the number of pieces she cut.

5th Grade Math/Science Independent Study

Math Students have been advised to keep Workbooks in their backpacks, in case of necessity.	**Science has all been uploaded to Google Classroom. All students have stated they have access to internet.**
Math Practice Workbook Needed ~~1.10 pg 21-22~~ Done ~~1.11 pg 23-24~~ Done ~~1.12 pf 25-26~~ Done Review and Unit 7 Assessment (taken upon return) 9.1 pg 167-168 9.2 pg 169-170 9.3 pg 171-172 9.4 pg 173-174 9.5 pg 175-176 9.6 pg 177-178 9.7 pg 179-180 Review Unit 8 Assessment (taken upon return) 11.1 pg 201-202 11.2 pg 203-204 11.3 pg 205-206 Review Unit 9 Assessment (taken upon return)	1. **Google Classroom** ;Read and take notes on Khan Academy Food Chains (2-3 days) 2. **Google Classroom** Interactive Quiz on Food Chains (Khan Academy) 3. **Google Classroom** What are decomposers and What is the role of microorganisms? (pg 20-23) (Copied Worksheet. Read and Answer Questions.) 4. **Also found Google Classroom** What determines survival? (pg 28-29) Copied Worksheet. Read and Answer Questions.) 5. **Google Classroom** How do environmental changes affect living things? (pg 30-31) Copied Worksheet. Read and Answer Questions.) 6. **Google Classroom** Video Plant and Animal Dependency (Students to view and take notes.) https://www.youtube.com/watch?v=YGxzFBRBwpg "How Plants and Animals Depend on Each Other" 7. **Classroom** How do animals depend on plants? (pg 32-33) Copied Worksheet. Read and Answer Questions.) 8. **Google Classroom** How do plants depend on animals? (pg 34-35) Copied Worksheet. Read and Answer Questions.) 9. **Water Cycle (TBD)** 10. **Google Classroom** Khan Academy Video "human impact on Environment" https://www.youtube.com/watch?v=54JkvkIT0Dc 11. Human Impact on the Environment Research and Poster (google classroom provides the requirements and document)

Math	Science
Follow the lessons below from the students Math Workbook(if you have it at home) OR the Reteach packets attached here. Complete one lesson per day. The accompanying homework pages are also attached. ❑ **Day 1**: 9.1 Workbook pg 167-168 homework 9.1, Reteach 9.1 ❑ **Day 2**: 9.2 Workbook pg 169-170 , Reteach 9.2, homework 9.2 ❑ **Day 3**: 9.3 Workbook pg 171-172, Reteach 9.2, homework 9.2 ❑ **Day 4:** 9.4 Workbook pg 173-174, Reteach 9.4, Homework 9.4 ❑ **Day 5**: 9.5 Workbook pg 175-176, Reteach 9.5, Homework 9.5 ❑ **Day 6:** 9.6 Workbook pg 177-178, Reteach 9.6, Homework 9.6 ❑ **Day 7:** 9.7 Workbook pg 179-180, Reteach 9.6, Homework 9.7 ❑ **Day 8:** 11.1 Workbook pg 201-202, Reteach 11.1, Homework 11.1 ❑ **Day 9:** 11.2 Workbook pg 203-204, Reteach 11.2, Homework 11.2 ❑ **Day 10**: 11.3 Workbook pg 205-206, Reteach 11.3, Homework 11.3 ❑ **Day 11:** Year long review handout (also attached) Tests will be given upon return. **Additional resources to use.** Students have access and accounts for the following math programs. You can have them work on these when the math lesson is done. Khanacademy.org, Esparkleanring.com, Prodigy.play.com	**Follow the lessons below in order:** 1. **Water Cycle** a. Read the attached Unit on the Water Cycle and answer all the questions at the end of the pages and chapters. Record the questions and answers on a lined piece of paper (or you can type them up if you have computer access). Read one chapter per day. b. Take the test at the end of the unit. Record the answers on a lined piece of paper (or you can type up the answers if you have computer access). 2. **Google Classroom** Khan Academy Video "human impact on Environment" https://www.youtube.com/watch?v=54JkvkIToDc 3. Human Impact on the Environment Research and Poster (google classroom provides the requirements and document) *If you have internet access, you can additionally watch Our Planet on Netflix, use Khan Academy sciences, or Ed Head for further enrichment. In google classroom, students also have **Interest Report projects**, where they are researching a science topic of their choice. They can always work on that when they are done with the other work. They can make as many of these reports as they like.

Name _____ Class_____ Date_____

OPERATIONS & ALGEBRAIC THINKING

Skill Practice and Problem Solving

1. Sam had 12 marshmallows. He shared them equally among himself and 4 friends. Then Sam found 6 more marshmallows in his lunchbox. Write an expression to match the words.

2. Gina wants to buy a new coat for $150. If she has already saved $60 and plans on saving $30 each week, how many weeks will it take Gina to save enough money to buy the coat?

3. Evaluate the numerical expression.

$48 + [(3 \times 2) - (7 \times 4)]$

4. Ms. Wallace has 4 packs of pens. She then buys 2 packs of pens. Each pack has 6 pens. Write a numerical expression to represent how many pens Ms. Wallace has in all.

5. What is the unknown number in Miles in the chart?

Days	1	2	3	6	8
Hours	3	6	9	18	24
Miles	6	12	19	36	?

6. At the bake sale, Aidan sold 5 brownies for $2 each and 11 slices of apple pie for $3 each. What was the total amount, in dollars, that Aidan received from these sales?

7. Write an expression to represent subtracting ten from the product of 4 and 7.

8. To make one scarf, Millie uses 15 yards of pink yarn and 3 yards of white yarn. Suppose she uses a total of 60 yards of pink yarn to make several scarves. How many yards of white yarn does she use?

Name _____ Class_____ Date_____

NUMBERS & OPERATIONS IN BASE TEN

Skill Practice and Problem Solving

1. Amber completed the competition in 28.37 seconds. Jamal completed the competition in 28.3 seconds. Compare the distances using >, <, or=. 28.37 ___ 28.3	2. Ryan earns $18 per hour at work. He worked 125 hours last month. How much did Ryan earn working last month?
3. Ms. Cooper is making gift bags for her guests. She has 95 stickers and wants to put the same number in each bag. How many bags will Ms. Cooper make if she puts 5 stickers in each bag?	4. Write the value of the underlined digit. 83<u>5</u>,502,658
5. Adventureland has about 3×10^2 visitors per day. Based on this, about how many visitors come to Adventureland per week?	6. Darlene's math average last year was 86.17. What is 86.17 rounded to the nearest tenth?
7. Bradley jogged 2.04 miles on Monday and 1.68 miles on Wednesday. What total distance did he jog?	8. July bought 16 quarts of vinegar for $10.40. How much did she pay for 1 quart of vinegar?

Name _____ Class_____ Date_____

NUMBERS & OPERATIONS - FRACTIONS

Skill Practice and Problem Solving

1. Cheryl spends $\frac{1}{5}$ hour reading each day. She also spends $\frac{1}{3}$ hour exercising. What is the least common denominator of the fraction?	**2.** Mr. Reid needs $5\frac{1}{2}$ yards of fabric to make a costume. He alerady has $2\frac{1}{4}$ yards. How many yards of fabric does he need?
3. At lunch, 8 friends share 5 cookies equally. What fraction of a cookie does each friend get?	**4.** Elana needs $\frac{2}{9}$ ounces of paint to make a flower. How much paint does she need for 3 flowers?
5. Francine bought $\frac{3}{4}$ pound of apples and $\frac{1}{2}$ pound of grapes. How many pounds of fruit did she buy?	**6.** Ms. Alvarez jogs $1\frac{3}{7}$ miles for exercise each day. What is the total number of miles she jogs in 12 days?
7. Steve cut a 5-foot pipe into $\frac{1}{8}$-foot pieces. How many pieces does he cut?	**8.** Victor made 50 ounces of trail mix for a camping trip. He pours 12 ounces for one serving. How many people can have a full serving?

Name _____ Class_____ Date_____

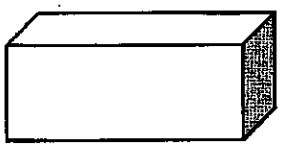
MEASUREMENT & DATA

Skill Practice and Problem Solving

1. The post office is 3,000 yards from the park. How many feet is the post office from the park?

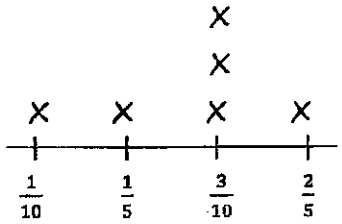
2. Mya's ballet class starts at 3:15 P.M. and end at 5:00 P.M. How long is her ballet class?

3. Classify this figure.



4. Mr. William orders 2 feet of trim to decorate pillows. If he needs 1 inch of trim for each pillow, how many pillows can he decorate?

Sandy recorded the weight of several rocks from her rock collection. The weight of each rock is shown on the plot.



Weight of Rocks (pounds)

5. Based on the line plot, how many rocks weigh more than $\frac{1}{5}$ pounds?

6. What is the average weight of each rock?

7. A garage in the shape of a rectangular prism has a volume of 448 cubic feet. The base area of the garage is 64 square feet. What is the height of the garage?

8. Mr. Ford has a plastic container in the shape of a cube. Each side of the container measures 12 inches. What is the volume of the plastic container?

Name _____ Class_____ Date_____

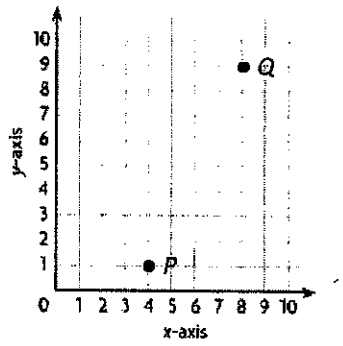
GEOMETRY

Skill Practice and Problem Solving

Write an ordered pair for the given points.

1. P

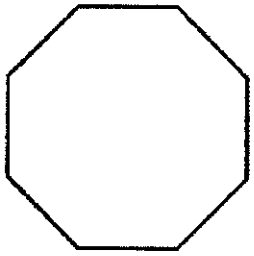
2. Q



Pages Read				
Days	1	3	5	7
Pages	24	37	55	79

3. Write the ordered pair for each point.

4. Name the polygon.



5. Trisha has a triangle-shaped scarf. The lengths of the sides are 30 in, 40 in, and 50 in. The scarfs angles measures are 60°, 90°, and 30°. Classify the triangle. Write isosceles, scalene or equilateral. Then write acute, obtuse, or right.

6. Igor drew a quadrilateral with two pairs of parallel sides. What type of quadrilateral is it?

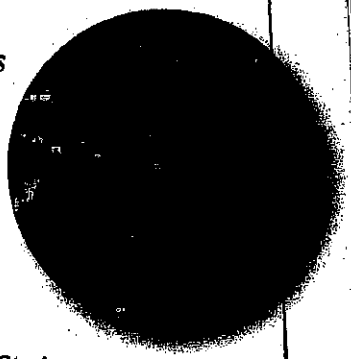
7. What is the correct name of a polygon that has 7 sides and 7 angles?

8. What type of triangle has one angle that is greater than 90°?

Lesson 1

How can the oceans be described?

Earth is sometimes called the blue planet. It gets this name because it is covered mostly by water. Water makes Earth appear blue from space. Most of Earth's water is in its salty oceans.



The Hydrosphere

What body of water is closest to where you live? More than half the people in the United States live within 80 kilometers of an ocean. Many people live near other bodies of water, such as rivers and lakes. Bodies of water play a huge role in our lives. They give us a way to travel, places to catch food, and beautiful sights to visit. What are some ways that oceans or lakes have affected your life?

All of the waters of Earth make up the hydrosphere. Almost all of the hydrosphere is ocean water. Only $\frac{3}{100}$, or 3 percent, of the hydrosphere is in places other than the oceans. The hydrosphere covers three-fourths of Earth's surface. The Pacific Ocean is the largest ocean, followed by the Atlantic Ocean, the Indian Ocean, the Southern Ocean, and the Arctic Ocean. On a map or globe, you can see that the oceans are all connected.

The Pacific Ocean is both the largest and deepest ocean. Its average depth is about 4,000 meters. In its deepest place, it is more than 11,000 meters deep.

The oceans are all a bit different from one another. Some have more storms than others. Many properties of the water are different, such as the amount of salt in the water or the average temperature. Even [redacted] the level of the ocean's surface, differs slightly from ocean to ocean.

1. **Checkpoint** How much of Earth's surface is covered by water?
2. List the oceans in order from smallest to largest.

Earth's Oceans

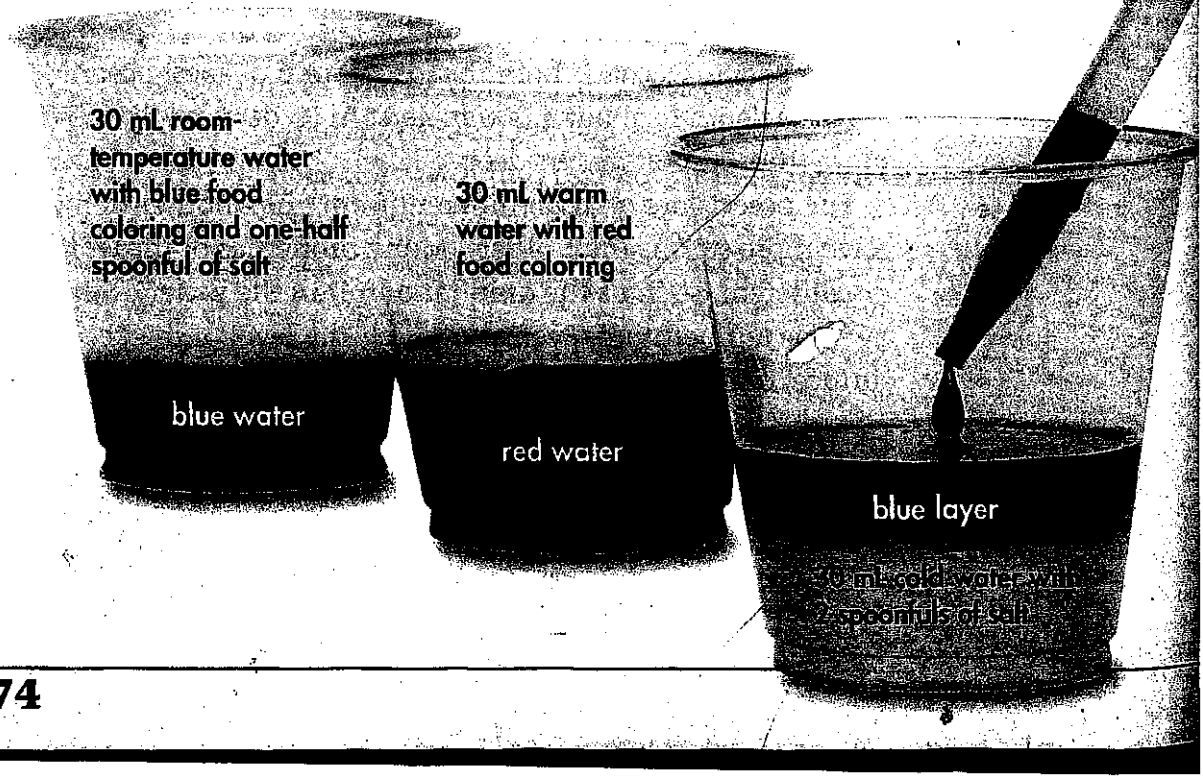
Have you ever had a taste of seawater while swimming in the ocean? If you have, you know that it tastes salty. Ocean water contains many kinds of salt. Ocean water not only tastes bad, it is also bad for your health if you drink too much of it.

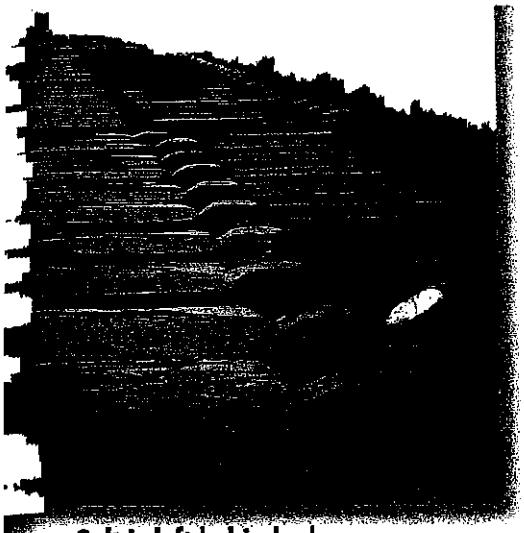
The oceans get salt from rivers. Rain falls over the oceans and land. When rain falls over land, it dissolves salts and other minerals, which are then carried to the oceans by rivers. When water evaporates from the surface of the ocean, the dissolved salts are left behind in the ocean water.

[redacted] is a measure of the amount of salt in water. Ocean water is saltier in some places than in others. Places where rivers pour fresh water into the ocean have low salinity. In warm, dry areas, ocean water evaporates fairly quickly. Salt is left behind, and the ocean water has higher salinity.

Cold, salty water is heavier than the same amount of water that is either warmer or has lower salinity. Look at the cups below. The blue water is at room temperature and holds one-half spoonful of salt. The red water is warm but has no salt. The clear water is cold and holds two spoonfuls of salt.

If drops of the blue water are added to the clear water, the blue water forms a layer on top of the clear water. The warmer blue water with lower salinity is lighter than the clear water. The red water is even warmer and has lower salinity, so it will form a layer on top of the blue water.





Salt is left behind when ocean water in these shallow ponds evaporates.

Ocean Temperatures

The temperature of ocean water differs from place to place. Ocean water near the equator is about 30°C. Near the poles, ocean water can be as cold as –2°C.

The temperature of ocean water does not only vary according to how close it is to the poles. Some currents carry warm water toward the poles. The Gulf Stream is such a current. It moves warm water from the Caribbean Sea to the North Atlantic Ocean. Other currents carry cold water toward the equator. The California Current carries cold water southward along the west coast of the United States. You will learn more about ocean currents in Chapter 6.

Ocean Resources

Much of the salt that people add to food comes from the ocean. One way to get this salt is by evaporating ocean water. People who process the salt allow ocean water to flow into shallow ponds. The water evaporates, and the salt is left.

Materials such as magnesium and drinking water also come from ocean water. Ocean water can be made drinkable by removing the salt. This process is expensive, so it is not done in many places.

The ocean is the source of many useful products. Do you like tuna fish? Tuna is just one of many foods that come from the ocean.

Ocean water near the mouth of the Nile River has less salinity than ocean water farther away.

Lesson Review

1. How does salt get into the ocean?
2. **Writing in Science** **Descriptive** Suppose that you are on a raft in the ocean near an area where a river flows into it. Describe how the salinity of the water changes as you float away from the river.

Lesson 2

Where is fresh water found?

Only $\frac{3}{100}$ of Earth's water is fresh water. This is the water that we use for drinking, cooking, and cleaning. We also use this water to grow crops, make electricity, and make many products.

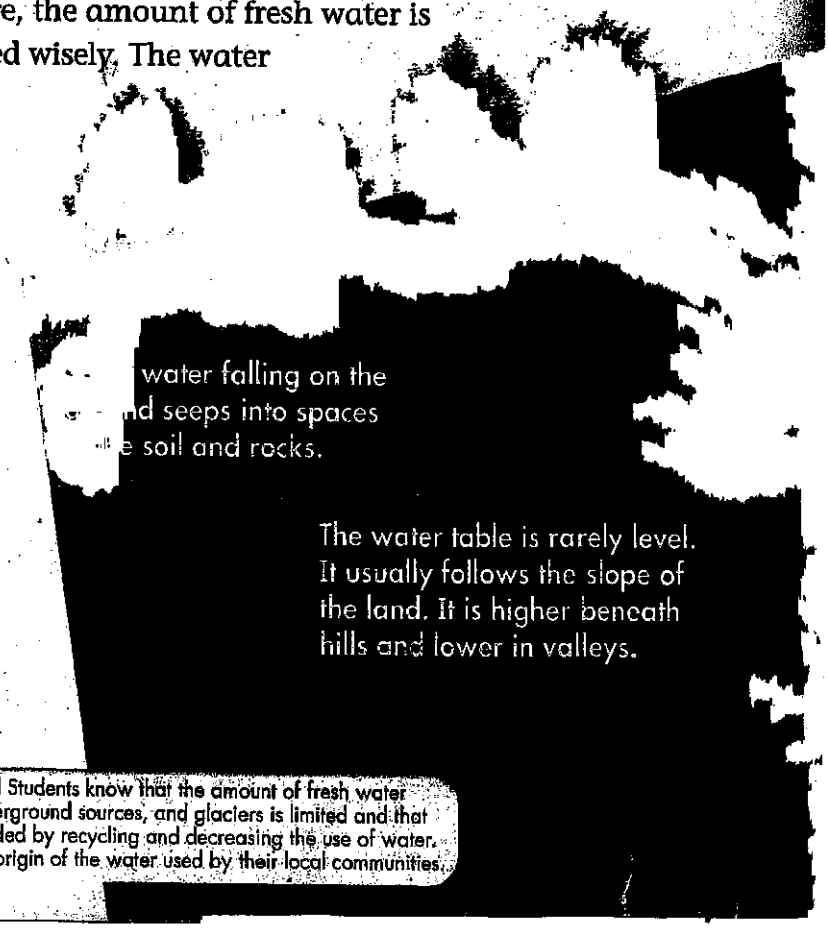
Fresh Water

Drinking water is also called fresh water. Fresh water has some dissolved salts but much less than seawater. After playing hard on a warm day, a cool glass of fresh water can be very refreshing. Where does this fresh water come from?

Almost all of Earth's fresh water starts as rain or snow. Some of this fresh water sinks into the ground. Some collects in rivers and lakes. Some is frozen in ice sheets and glaciers.

Fresh water is not evenly spread over the world. Some places have much more fresh water than others. Some areas have more available fresh water in some seasons than in others. But no matter where you are, the amount of fresh water is limited. Water should be used wisely. The water supply can be extended by recycling or by using less water whenever possible.

Scientists can help communities use water wisely. The scientists can give people information about the location of underground water and about the water's quality. They can also provide technology that reduces the amount of water a community needs.



water falling on the
nd seeps into spaces
e soil and rocks.

The water table is rarely level. It usually follows the slope of the land. It is higher beneath hills and lower in valleys.

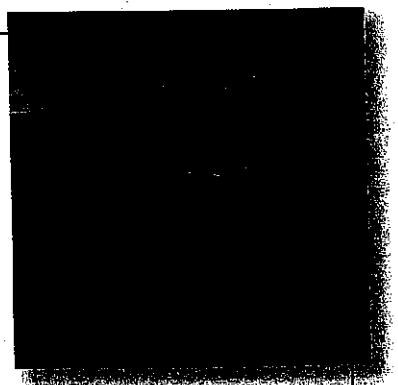
Standards Focus 5ES3.d Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water. **5ES3.e** Students know the origin of the water used by their local communities.

Groundwater

Rain or melted snow that soaks into the ground is called groundwater. This water fills spaces between particles of soil and rock. Groundwater keeps sinking until it reaches a layer of rock or clay it cannot move through. Some layers of rock or clay act like a dam to keep the water from moving deeper. The water can slowly flow over these layers.

The layer of rock and soil that groundwater flows through is an **aquifer**. The top level of groundwater in an aquifer is the **water table**. The level of a water table changes during the year. It rises when water is added by rain or melting snow. It gets lower when there is a drought.

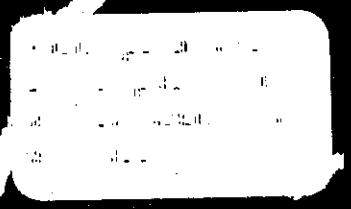
Many people get their water from wells that go into an aquifer. The water table gets lower if people pump water out of the aquifer faster than it is replaced. People must use groundwater wisely to keep aquifers from becoming dry.



If too much water is pumped out of an aquifer, the water table in the area will drop. That can cause lakes like this one to dry up and wells to go dry.

1. **Checkpoint** Identify three places in which fresh water is found.
2. **Main Idea and Details** What is the main idea of the last paragraph on page 176? List some details that support the main idea.

Pollution from the surface can seep into the groundwater in the same way that rain does.



The water table is lower in places where people are using groundwater from an aquifer faster than it can be refilled.

Rivers

Surface waters include rivers, streams, and lakes. Melting snow, rainwater, and groundwater all help form Earth's surface waters. Water from rain and melting snow flows downhill in small creeks. These small creeks join to form larger streams and rivers. Most rivers flow into the ocean. Groundwater also seeps into rivers. The area from which water drains into a river is called the river's **watershed**.

What happens on the land in a watershed can affect places far away. If chemicals or pollutants are placed in the watershed, they may be carried by water to rivers. Rainwater may erode soil from fields and construction sites. This soil can run into the rivers and cause changes to the ecosystems downstream. Many researchers are studying how these and other issues affect watersheds.

Lakes

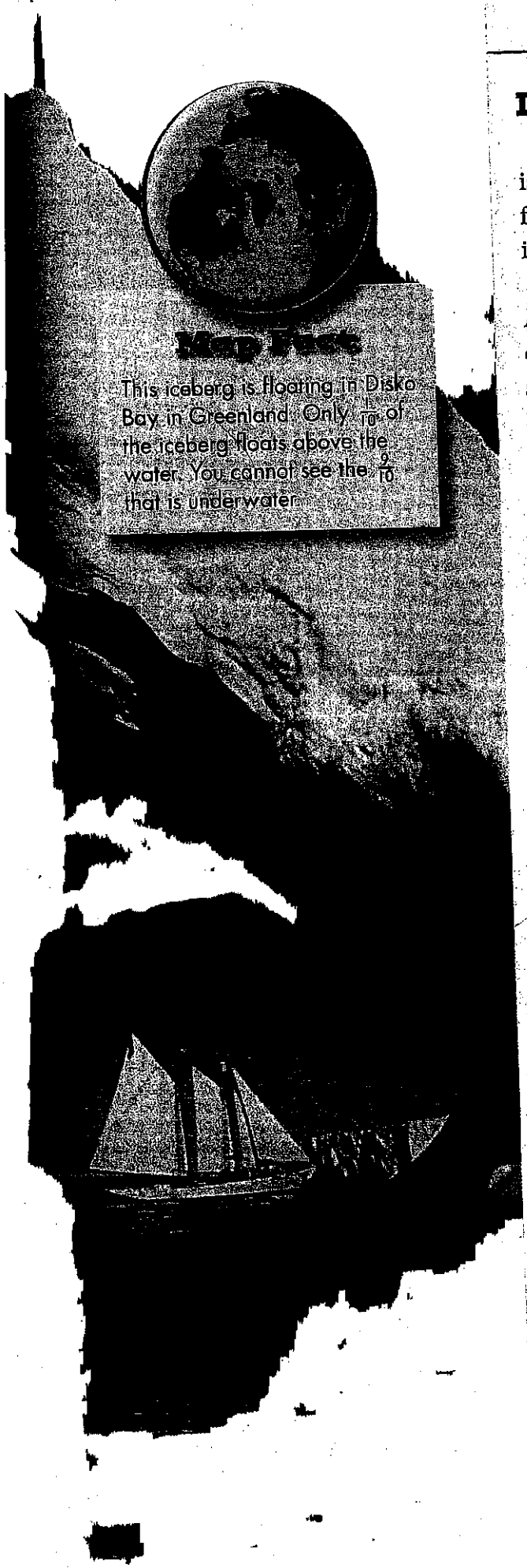
Sometimes water flows into a place that is surrounded by higher land or blocked by a dam. Lakes form when the water collects in a low spot. A **reservoir** is usually an artificial lake that forms behind a dam.

Water that forms a lake is not trapped. Water can leave a lake by flowing into a river, seeping into the ground, or evaporating into the air.

This dam forms the Hetch Hetchy Reservoir in Yosemite National Park.

Map Fact

Rivers and creeks sometimes flow over cliffs, forming waterfalls. Yosemite National Park in central California has many waterfalls. Yosemite Falls is the fifth tallest falls in the world. It is about 739 meters high. Water usually starts to flow slowly over the falls in the autumn. As snow above the falls starts to melt in spring, the water comes roaring down.



Key Fact

This iceberg is floating in Disko Bay in Greenland. Only $\frac{1}{10}$ of the iceberg floats above the water. You cannot see the $\frac{9}{10}$ that is underwater.

Ice

About seven-tenths of Earth's fresh water is frozen into ice. Because most of Earth's fresh water is frozen and far from cities, it is hard for people to use.

Much of Earth's ice is on Greenland and Antarctica. In these places, huge ice sheets cover most of the land. The ice sheets are several kilometers thick in some places. The ice at the North Pole floats on the ocean. There is no land under it.

Glaciers

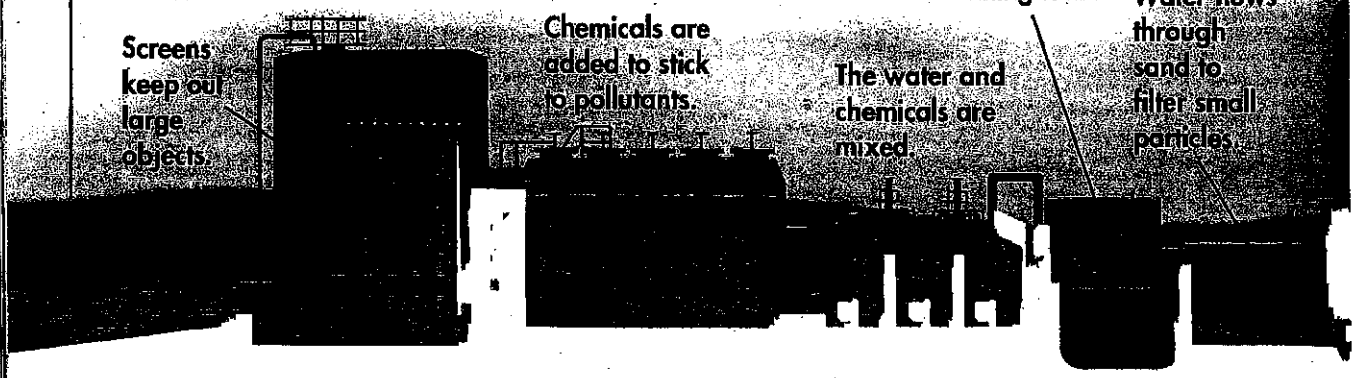
Smaller areas of ice are called glaciers. Valley glaciers are found in the valleys of high mountains. Valley glaciers are long stretches of ice that flow slowly downhill. As they flow, they scrape and move rock. This changes the shape of the valley bottom.

Glaciers and ice sheets form over time if snowfall is greater than the amount of snow that melts. The weight of new snow squeezes the snow underneath into ice.

In places where glaciers and ice sheets are in contact with the ocean, large pieces of ice can break off. These floating ice pieces are icebergs. One iceberg that broke off the Antarctic ice sheet was twice the area of the state of Rhode Island.

1. **Checkpoint** Where is most of Earth's fresh water located?
2. **Writing in Science** **Persuasive** Write a letter to the editor of a farm magazine encouraging farmers to keep rivers that flow through their farms clean. Explain how farmers' actions can affect many people.

Water Treatment Plant

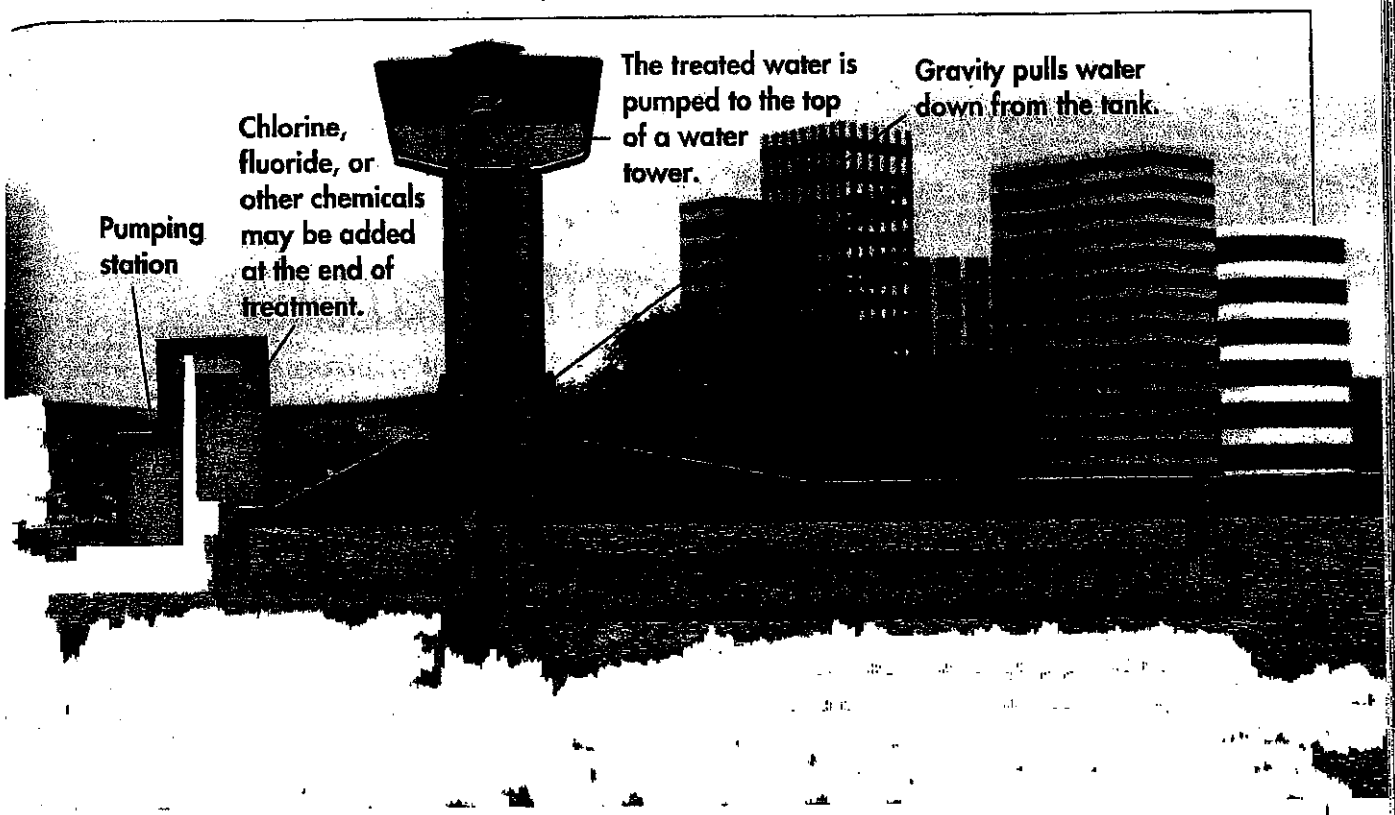


Getting Water to Homes

Does your town have a water tower? Do you know how water gets into the tower? A water tower is often the tallest structure in a small town. Water towers are only part of the system that gets water to homes and businesses.

Some towns in the United States get their water from groundwater. Other towns use surface waters as a source of fresh water. But surface water might have harmful bacteria. Because water easily dissolves many materials, it is easily polluted. Harmful chemicals that wash off farm fields, city streets, and even lawns can end up in rivers and lakes. Even groundwater may have pollutants. Because of these problems, water must be treated before it is used.

The process of treating water is shown in the diagram. First, water is pumped from a river or lake through screens to a tank in a treatment plant. Next, chemicals are added to the water. The chemicals cause small particles to stick together and form larger particles. The larger particles become heavy enough to sink to the bottom of the tank.



The water then passes through filters. Some filters are formed by layers of sand and gravel. These filters remove small particles that did not settle earlier.

After the filters remove harmful materials from water, more chemicals are added to the water. Many treatment plants add a small amount of chlorine to kill harmful bacteria. Other treatment plants use other ways to kill bacteria. Many towns add fluoride to water. This chemical helps your teeth resist decay. Water is then pumped to a water tower for storage.

As you can see, getting water to your home is not easy! This is why people should take care not to waste water. The chart on this page shows the average amount of water a person uses in a day. You will learn about conserving water in the next lesson.

Average Daily Water Use (Per Person)	
Toilet flush	71 L
Laundry	57 L
Shower/ bath	49 L
Other	38 L

Lesson Review

1. On an average day, how does a person use the most water?
2. Why does water need to be treated before it can be used?

Lesson 3

What are some California water sources?

Californians get fresh water from lakes, rivers, and groundwater. Because the amount of fresh water is limited, it is important to use water wisely.

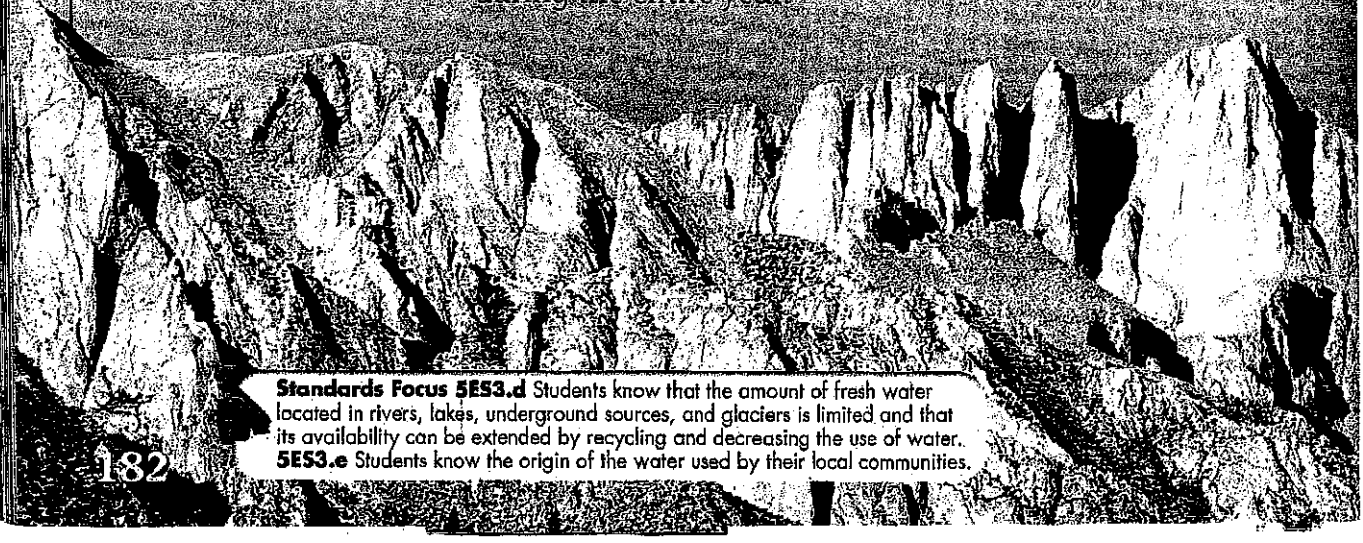
This dam in northern California creates a reservoir of fresh water.

Too Much or Not Enough?

Does your town get plenty of rain? Or do you live in a dry area? Not all parts of California get the same amount of rain. In the northern coastal region of the state, about 250 centimeters of rain falls each year. In the same period, the deserts of southeastern California get only about 10 centimeters of rain. Because most fresh water starts as rain or snow, the supply of fresh water in southern California is very limited. This area uses about two-thirds of all the fresh water used in California. Getting enough water to meet the needs of all areas of California is a challenge.

Much of the water in California falls as snow in the winter. As temperatures rise in the spring, the snow melts to form fresh water. This water runs off the mountains to feed nearby streams and lakes. This water can be collected and transported to all parts of the state for use during the entire year.

Snow melting off the Sierra Nevada provides drinking water to many Californians.



Standards Focus 5ES3.d Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water. **5ES3.e** Students know the origin of the water used by their local communities.

Transporting Water Throughout California

Many Californians depend on aqueducts to bring them fresh water. An *aqueduct* is a system of pipes that carries water from a river or lake to the area where it is needed. The California Aqueduct carries fresh water from the mouth of the Sacramento River to people living more than 400 kilometers to the south.

The Los Angeles Aqueduct provides some of the fresh water used by the city of Los Angeles. The first part of the system was built about 100 years ago. It transports water from the Owens River on the east side of the Sierra Nevada to Los Angeles. Later, more pipes were added to get water from some streams that supplied Mono Lake. In 1970, a second aqueduct was added to the system.

The Colorado River Aqueduct provides much of San Diego's fresh water. This aqueduct begins at Lake Havasu at the border of Arizona and California. It carries water nearly 390 kilometers to Lake Mathews in Riverside County before it heads south to San Diego.

Aqueduct systems like this one carry fresh water from rivers and lakes to people living many kilometers away.

1. **Checkpoint** Why are aqueducts important to Californians?
2. **Writing in Science** **Descriptive** Using library-media center resources, find out about the history of the Los Angeles Aqueduct and why it has been important to the growth of Los Angeles. Write a brief report of your findings.

Local Water Sources

You have learned that a watershed is the land that water flows across or under on its way to a stream, lake, river, or ocean. No matter where you live, you live in a watershed. The map on the next page shows California's watersheds. In which watershed do you live?

The amount of water available to an area depends on how much water is collected in the watershed. It also depends on how much water is used. This water falls as rain or snow and collects on the surface in streams, rivers, and lakes. It also soaks into the soil and becomes groundwater. The water that collects on the surface, along with groundwater that is pumped to the surface, is available for people to use.

Water quality also affects how much fresh water is available to people. The way land in a watershed is used affects water quality. For example, harmful chemicals can be carried in water that runs off farms or city streets. Soil is carried in water that flows over land disturbed by construction, projects that control rivers, or farming. Using land wisely in these areas can help keep water safe for use. Federal, state, and local governments have laws to help keep water safe.

This farm uses reclaimed water for irrigation to help conserve water.

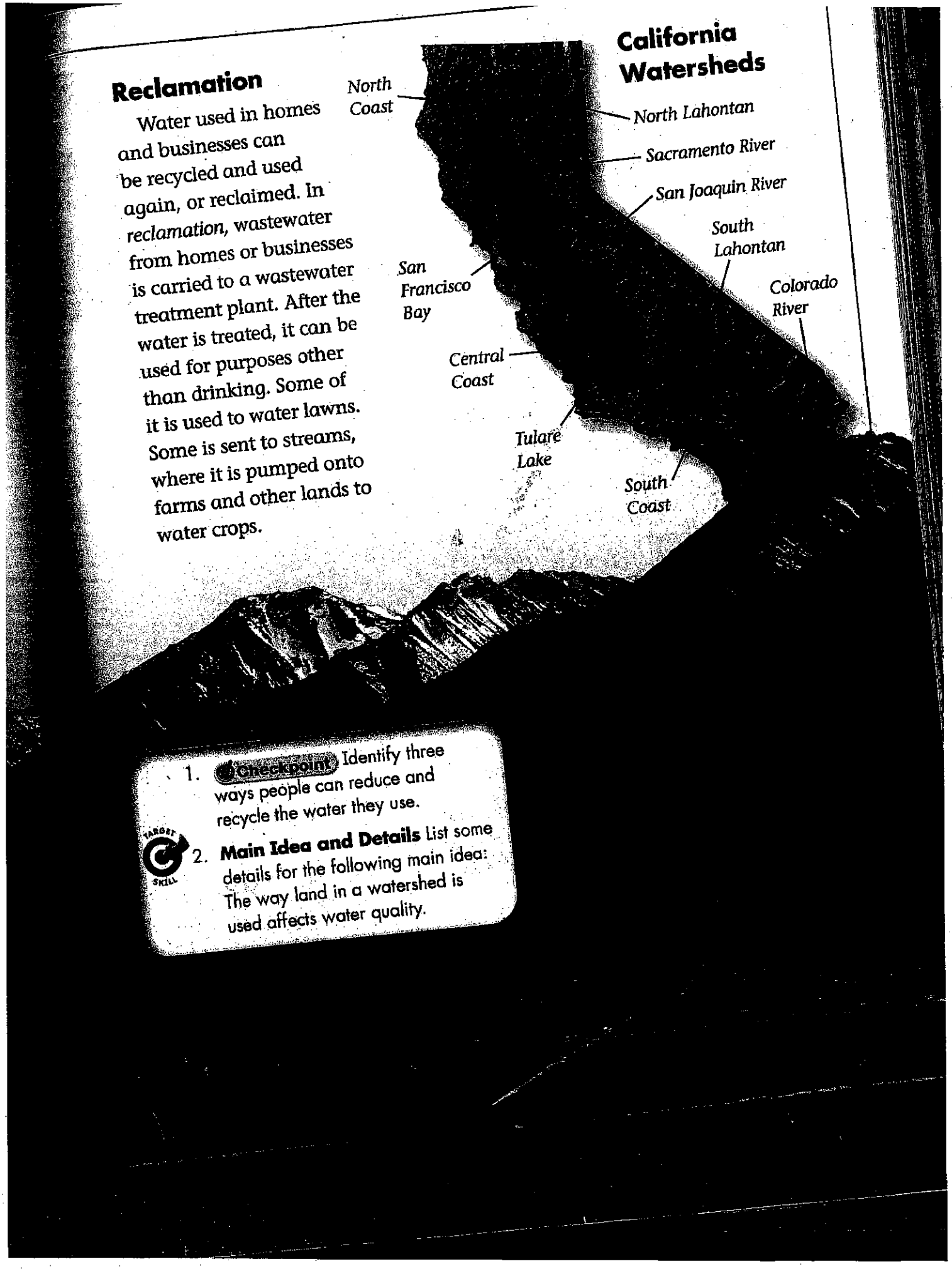
Conserve Water!

Conservation is using a resource such as water wisely so that it lasts longer. Here are some ways you can conserve water.

- Take shorter showers.
- Use a low-flow showerhead.
- Don't let the water run while brushing your teeth.
- Fix leaky faucets and toilets.
- Use a water displacement device in toilet tanks.

Reclamation

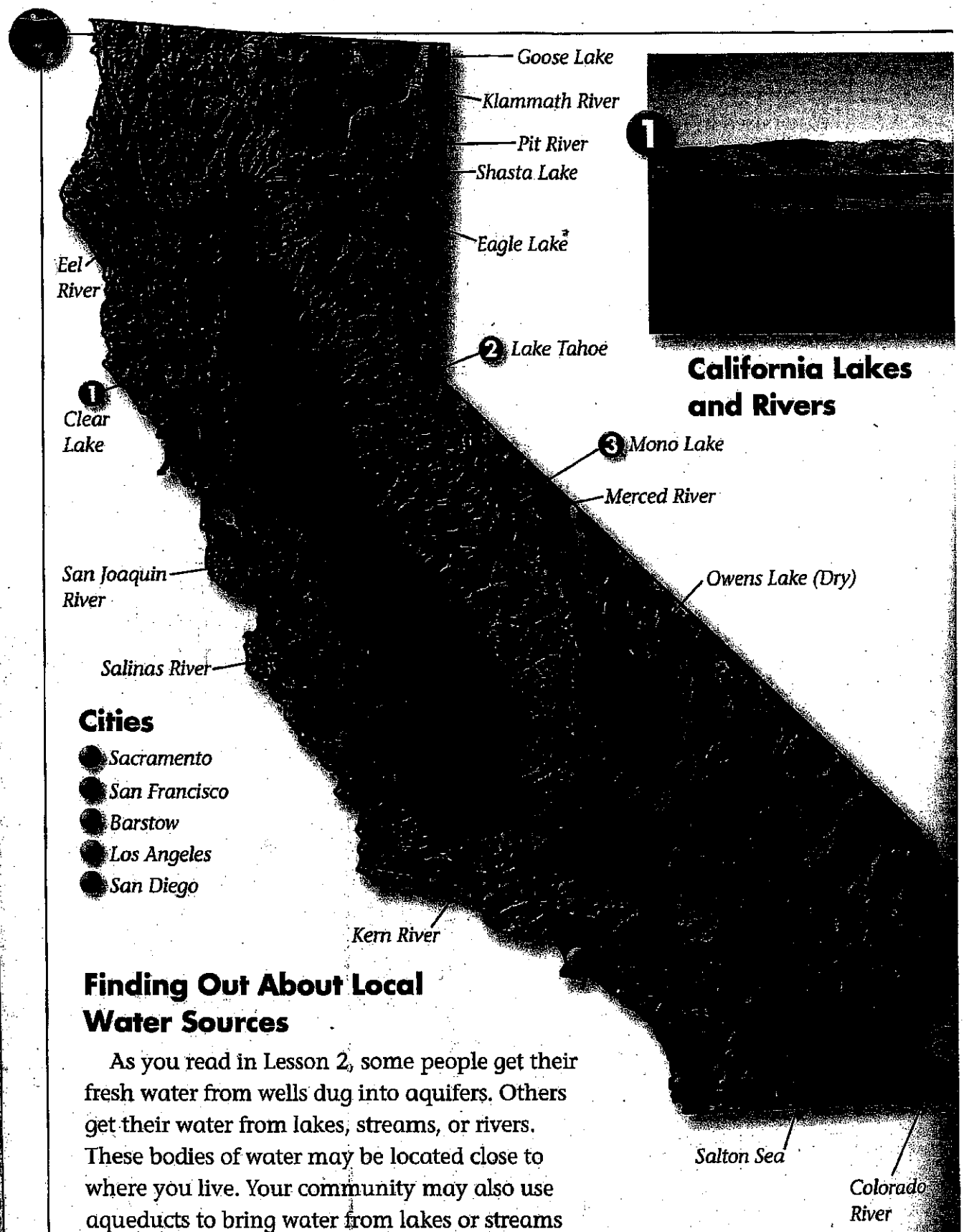
Water used in homes and businesses can be recycled and used again, or reclaimed. In *reclamation*, wastewater from homes or businesses is carried to a wastewater treatment plant. After the water is treated, it can be used for purposes other than drinking. Some of it is used to water lawns. Some is sent to streams, where it is pumped onto farms and other lands to water crops.



1. **Checkpoint** Identify three ways people can reduce and recycle the water they use.

TARGET SKILL

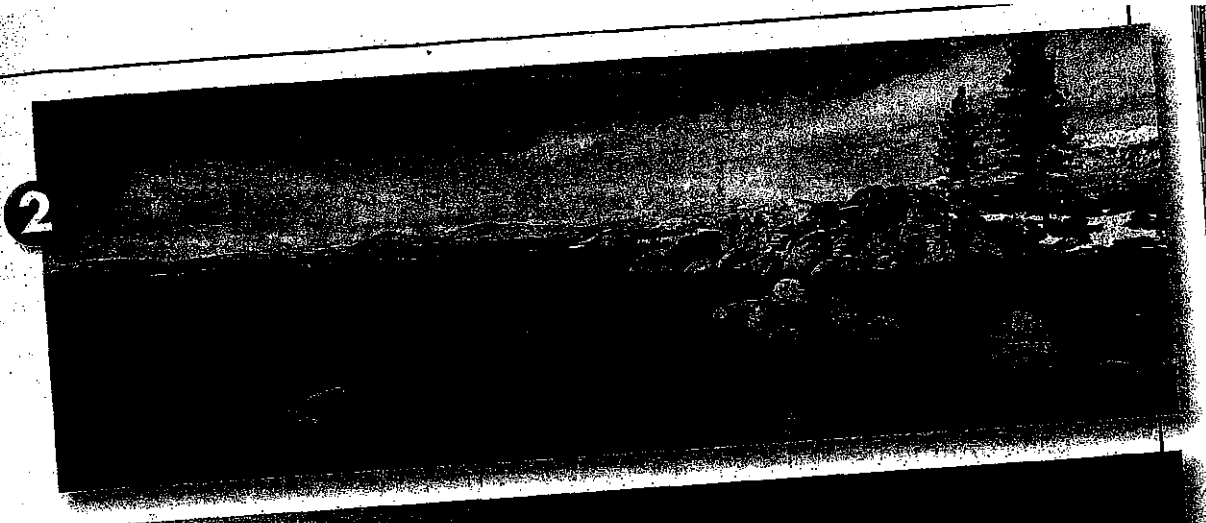
2. **Main Idea and Details** List some details for the following main idea: The way land in a watershed is used affects water quality.

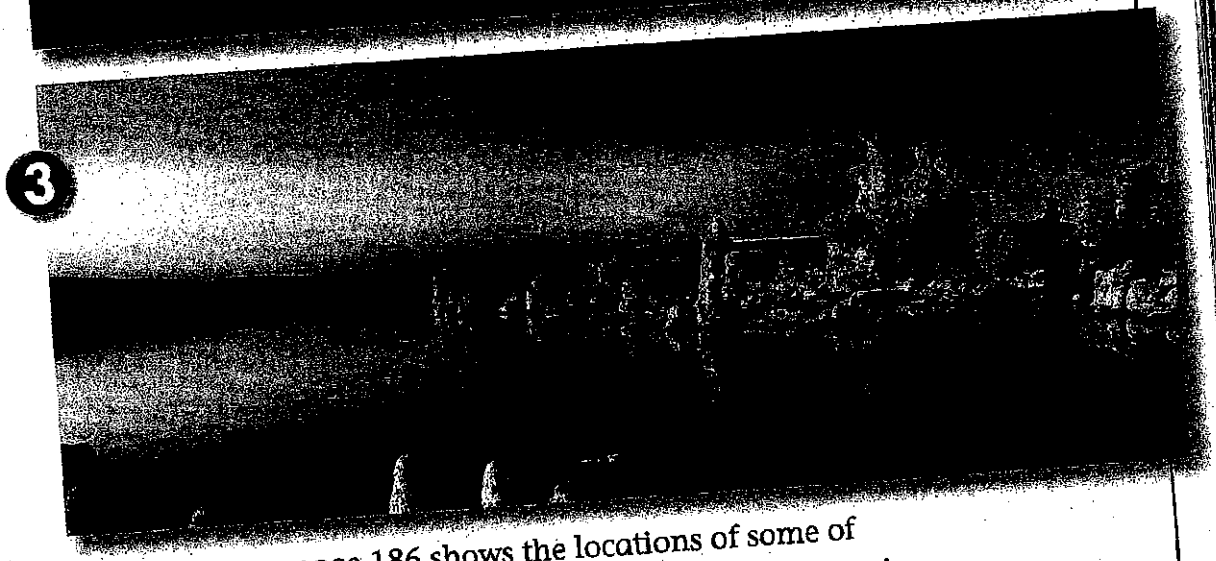


California Lakes and Rivers

Finding Out About Local Water Sources

As you read in Lesson 2, some people get their fresh water from wells dug into aquifers. Others get their water from lakes, streams, or rivers. These bodies of water may be located close to where you live. Your community may also use aqueducts to bring water from lakes or streams located far away. This water may be collected and stored in reservoirs located near your home.





The map on page 186 shows the locations of some of California's larger lakes and rivers. The amount of water in each of these sources is limited by how much rain and snow falls there. Seasonal activities, such as irrigation, can also affect how much water is available. Using water wisely can help keep the demand for water resources in balance with the available supply.

Where does your community's water come from? The source of your water depends both on where you live and on how much water your community needs. You can find the source of your water supply by contacting your local water company. Information about your water source may also be found in the library-media center or by contacting the Association of California Water Agencies or another local water agency.

Lesson Review

1. Look at the map on page 186. Identify the nearest lake and/or river that could provide fresh water to your community.
2. **Writing in Science Descriptive** Use the library-media center to find out where and how your community gets water. Write a report that traces the journey of the water from its source to your home.

Lesson 4

What is the water cycle?

Earth's water does not stay in one place. It changes form and moves from one place to another.

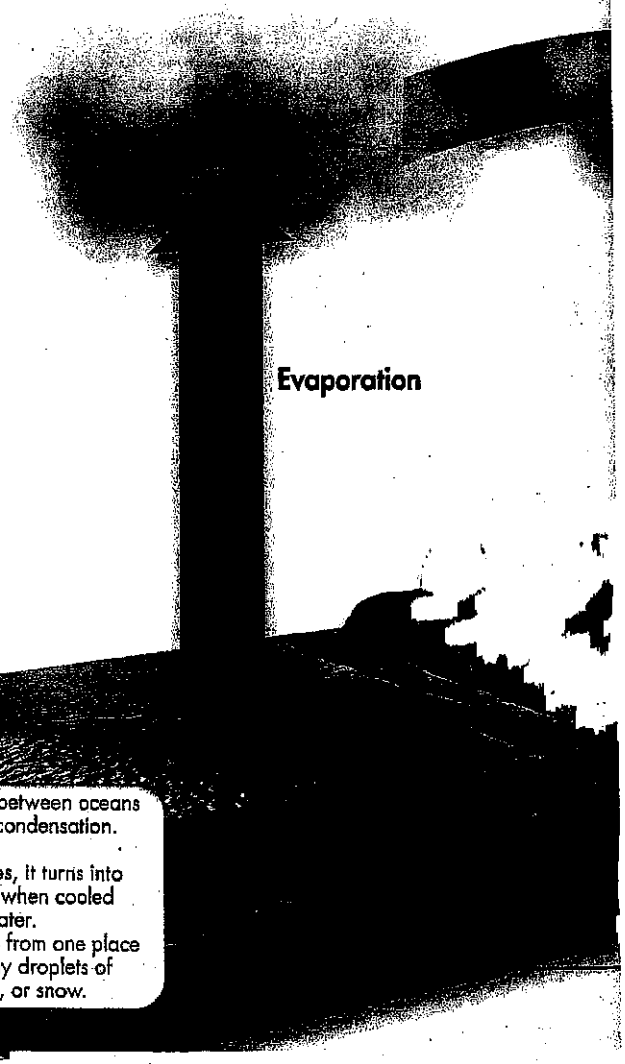
Water in the Air

Look around the room you are in now. Can you see water around you? Even if you do not see it, water surrounds you all the time. This water is not in a liquid form as in rivers or a solid form as in glaciers. This water is an invisible gas called water vapor. Air always has some water vapor in it, even air in the driest deserts. This water vapor was liquid water at some time in the past. It may have been water inside a plant, in a tropical river, or in the Arctic Ocean.

Water vapor makes up only a small fraction of the gases in the air. The particles of water vapor, like the particles of other gases, are always moving.

The Water Cycle

Water on Earth moves between the oceans and land through the processes of the water cycle. The **water cycle**, or the hydrologic cycle, is the repeated movement of water through the environment in different forms. The steps of the water cycle include evaporation, condensation, and precipitation. These steps are affected by temperature and pressure. A simple diagram of a water cycle is shown here.



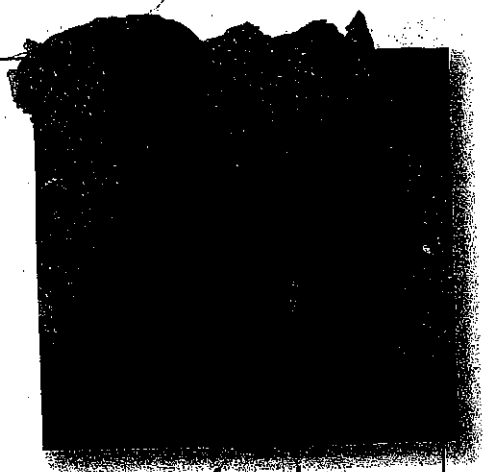
DIGITAL Look for Active Art animations at www.pearsonsuccessnet.com

Standards Focus 5ES3.0 Water on Earth moves between oceans and land through the processes of evaporation and condensation. As a basis for understanding this concept:
5ES3.b Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water.
5ES3.c Students know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet, or snow.

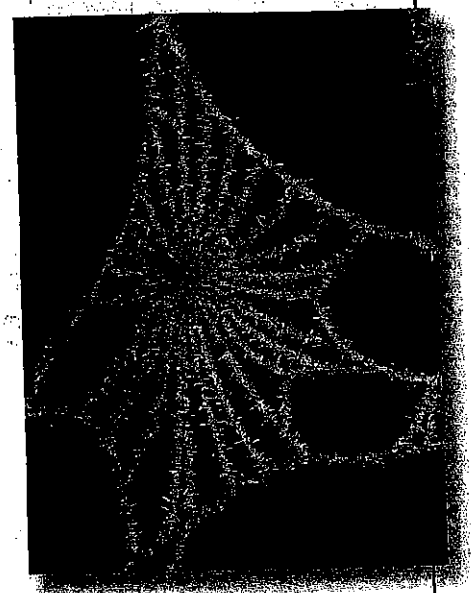
Evaporation is the changing of liquid water to water vapor. Liquid water evaporates into invisible water vapor when it is heated by the Sun. In **condensation**, air cools and some of the water vapor turns into a liquid, such as water droplets in clouds or fog. These water droplets are so small they remain suspended in air. In **precipitation**, air cools further so the water droplets grow large enough to fall from clouds as rain, hail, sleet, or snow.

Water can take many different paths through the water cycle. For example, condensation does not form only clouds. Condensation also forms dew, like that shown in the photograph.

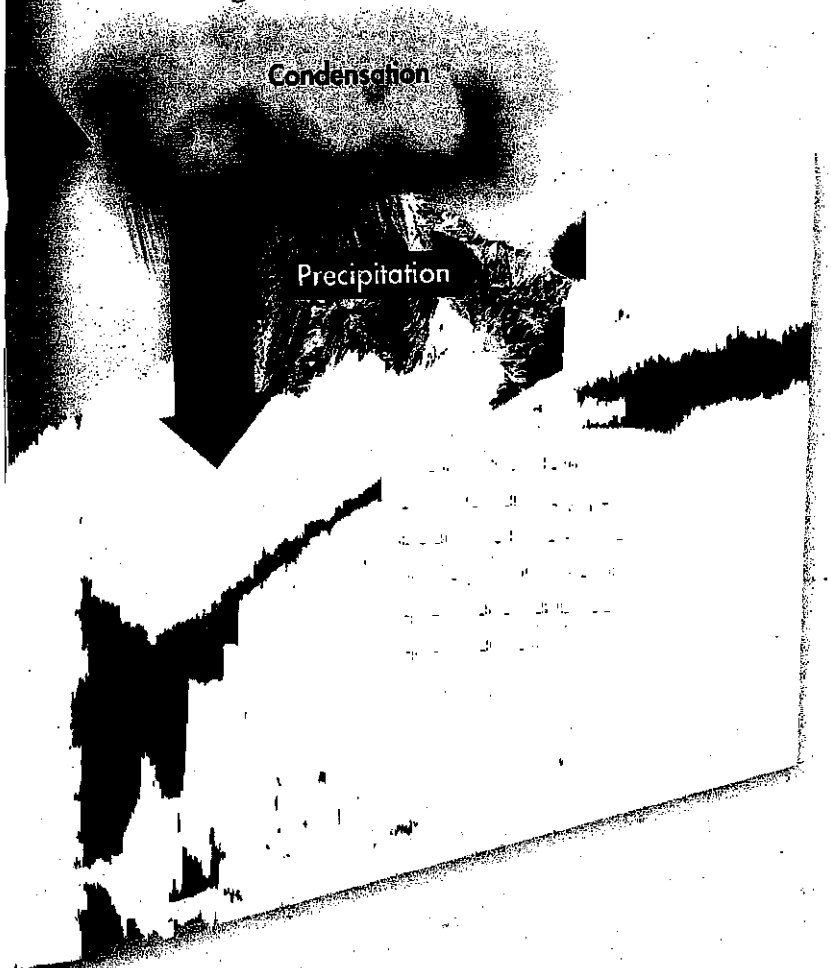
It is important to note that precipitation does not always fall over land as it does in the simple water cycle below. Evaporation, condensation, and precipitation occur over all areas of Earth, including land and ocean.



Condensation forms dew.



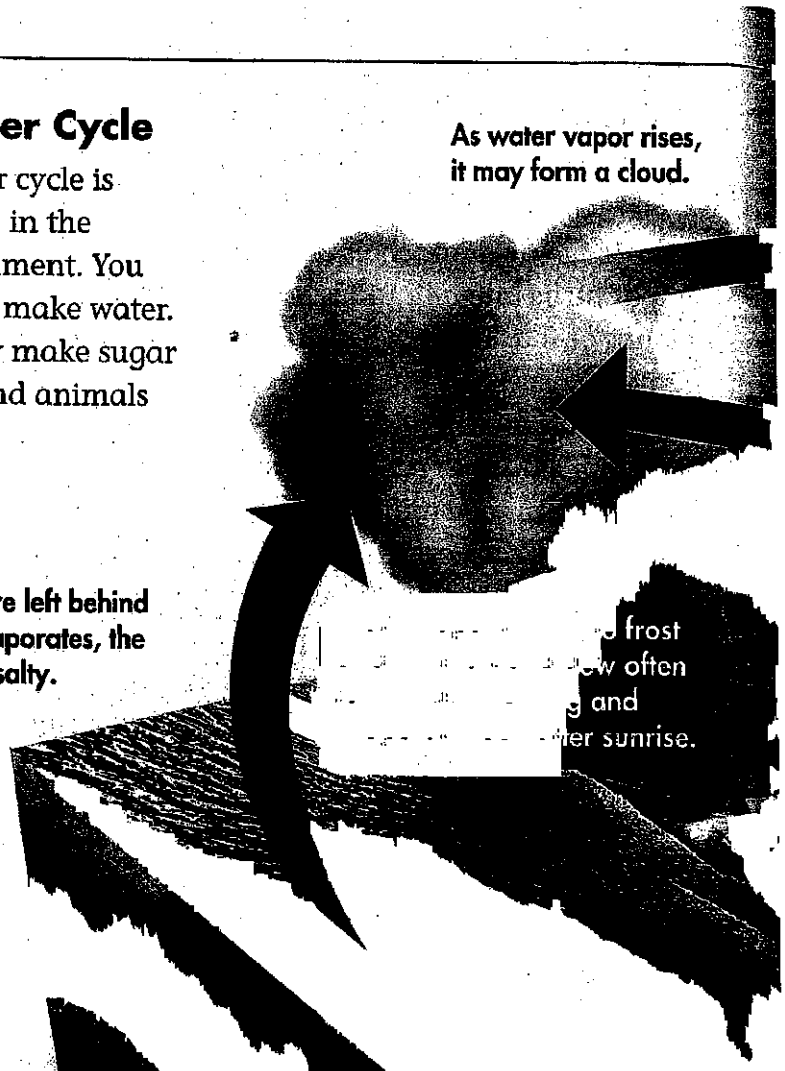
Water vapor on a cold surface may freeze without first becoming liquid water. The ice crystals that form are called frost.



1. **Checkpoint** How are evaporation and condensation the same? How are they different?
2. Trace the path of water through the simple water cycle shown here. List the stages water passes through, starting with water in a lake or an ocean.

Many Paths of the Water Cycle

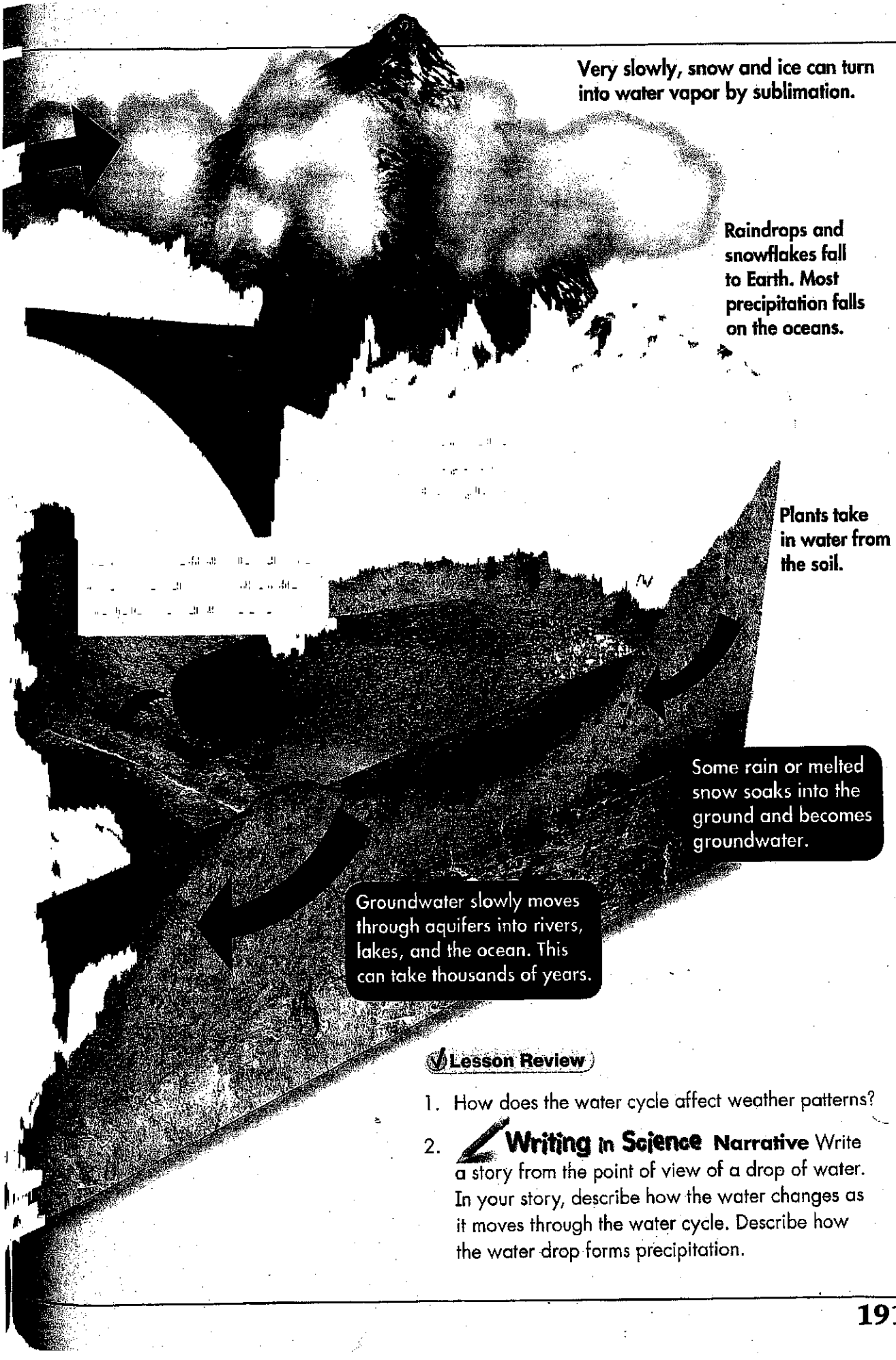
A detailed picture of the water cycle is shown here. Water is not always in the nonliving portion of the environment. You know that living things use and make water. Plants break down water as they make sugar during photosynthesis. Plants and animals release water during respiration.



Energy in the Water Cycle

The Sun has a major effect on the water cycle. The energy of sunlight causes melting, evaporation, and sublimation, or changing from solid ice directly to water vapor. Energy is needed to raise water vapor to the clouds and move it with winds. This energy originally comes from the Sun.

Water vapor releases energy as it condenses into liquid water. This energy is heat that warms nearby air or water. During evaporation, water takes in heat energy. This cools nearby air and water. This heating and cooling of air and water can change weather patterns.



Lesson Review

1. How does the water cycle affect weather patterns?
2. **Writing in Science Narrative** Write a story from the point of view of a drop of water. In your story, describe how the water changes as it moves through the water cycle. Describe how the water drop forms precipitation.

Lesson 5

How do clouds form?

Clouds have an important role in the water cycle. Clouds bring precipitation to all parts of the world. Without clouds, rivers and lakes would dry up.

Temperature and Pressure

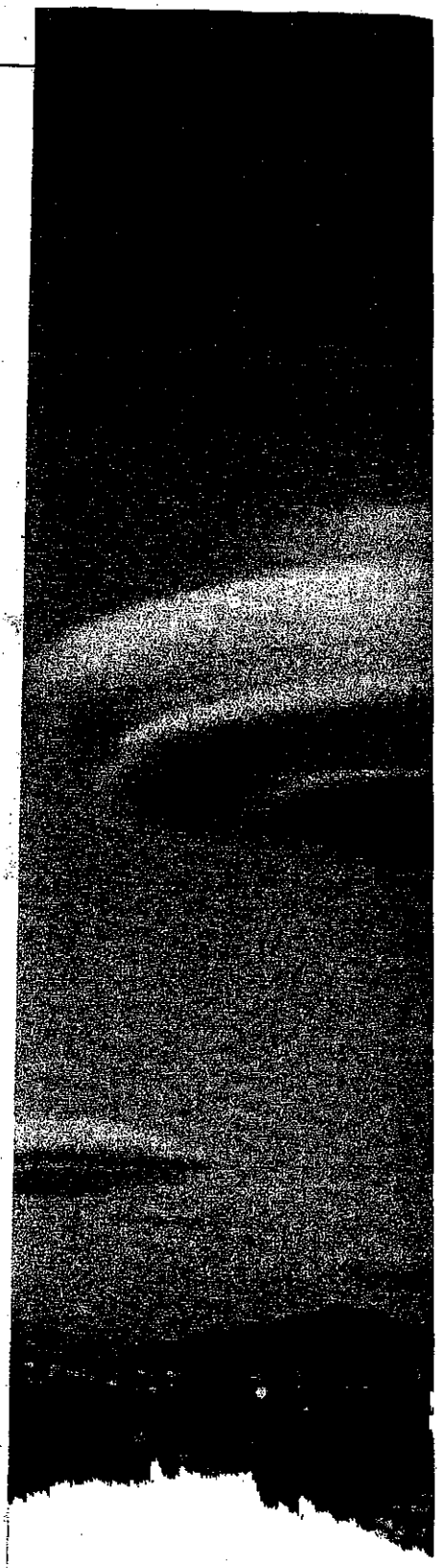
Have you ever watched a cloud get larger and larger? Have you tried to see shapes in the clouds? Clouds come in many shapes and sizes.

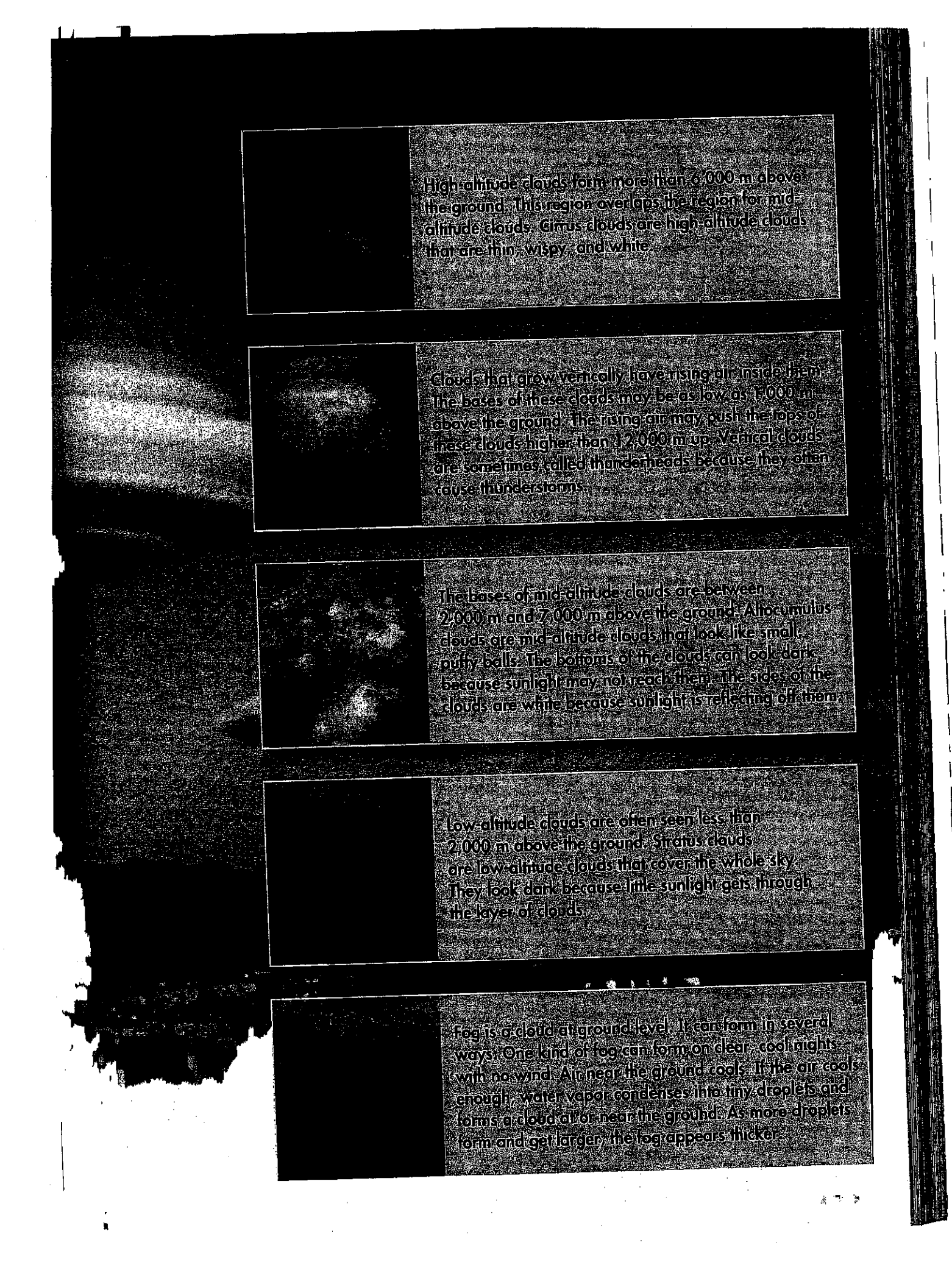
Clouds form when water vapor condenses to form tiny water droplets or ice crystals. Forming of clouds is a major part of the water cycle.

Whether a cloud is made of water droplets or ice crystals depends partly on the air's temperature. The temperature of air high in the clouds is often much lower than that of air near the ground. Even on summer days, many clouds are made of ice crystals.

Air pressure also affects the forming of clouds. Clouds often form when air moves upward to areas of lower air pressure. Saucer-shaped clouds like those in the picture on this page can form when winds blow over a mountain. When air moves up, the air pressure is less. With less pressure, the air expands and cools. If the air cools enough at this new air pressure, water vapor will form droplets or ice crystals. You will learn more about air pressure in Chapter 6.

1. **Checkpoint** What are clouds made of?
2. Why are clouds important?





High-altitude clouds form more than 6,000 m above the ground. This region overlaps the region for mid-altitude clouds. Cirrus clouds are high-altitude clouds that are thin, wispy, and white.

Clouds that grow vertically have rising air inside them. The bases of these clouds may be as low as 1,000 m above the ground. The rising air may push the tops of these clouds higher than 12,000 m up. Vertical clouds are sometimes called thunderheads because they often cause thunderstorms.

The bases of mid-altitude clouds are between 2,000 m and 7,000 m above the ground. Altocumulus clouds are mid-altitude clouds that look like small, puffy balls. The bottoms of the clouds can look dark because sunlight may not reach them. The sides of the clouds are white because sunlight is reflecting off them.

Low-altitude clouds are often seen less than 2,000 m above the ground. Stratus clouds are low-altitude clouds that cover the whole sky. They look dark because little sunlight gets through the layer of clouds.

Fog is a cloud at ground level. It can form in several ways. One kind of fog can form on clear, cool nights with no wind. Air near the ground cools. If the air cools enough, water vapor condenses into tiny droplets and forms a cloud at or near the ground. As more droplets form and get larger, the fog appears thicker.

Daily Weather

Day	Conditions
Monday 	Temperature: 17°C Humidity: 90% Precipitation: Light rain
Tuesday 	Temperature: 18°C Humidity: 80% Precipitation: Light rain

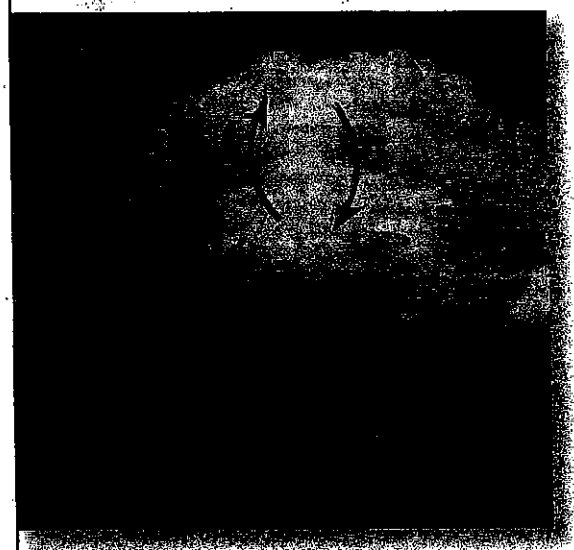
Exploring Weather Data

Explore the relationship among humidity, temperature, and the likelihood of rainfall or snowfall. Using news reports, record the daily humidity and the temperature for two weeks. Also record if it rains or snows. After two weeks, graph your data. Examine your results. Look for relationships among humidity, temperature, and whether it rained or snowed. Describe what you learned.

Precipitation

You may be surprised to learn that most rain in the United States starts as snow. The temperature of the air high above the ground is often below 0°C. Clouds of ice crystals form in the cold air. The ice crystals grow larger until they start to fall as snowflakes. As they fall, the crystals may stick to other crystals and form larger snowflakes. If the temperature of the air between the cloud and the ground is less than 0°C, the ice crystals fall to the ground as snow.

Ice crystals from a cloud may change as they fall through different layers of air. If the ice crystals fall into air that is warmer than 0°C, they will melt and fall as rain. If the air near the ground is very cold, the rain may freeze before it hits the ground. These frozen raindrops are **sleet**. Sleet, freezing rain, and hail are not the same. They form in different ways. Freezing rain, or an ice storm, forms from rain that freezes as soon as it hits the ground or other cold objects.



Upward winds carry hail through a cloud many times.

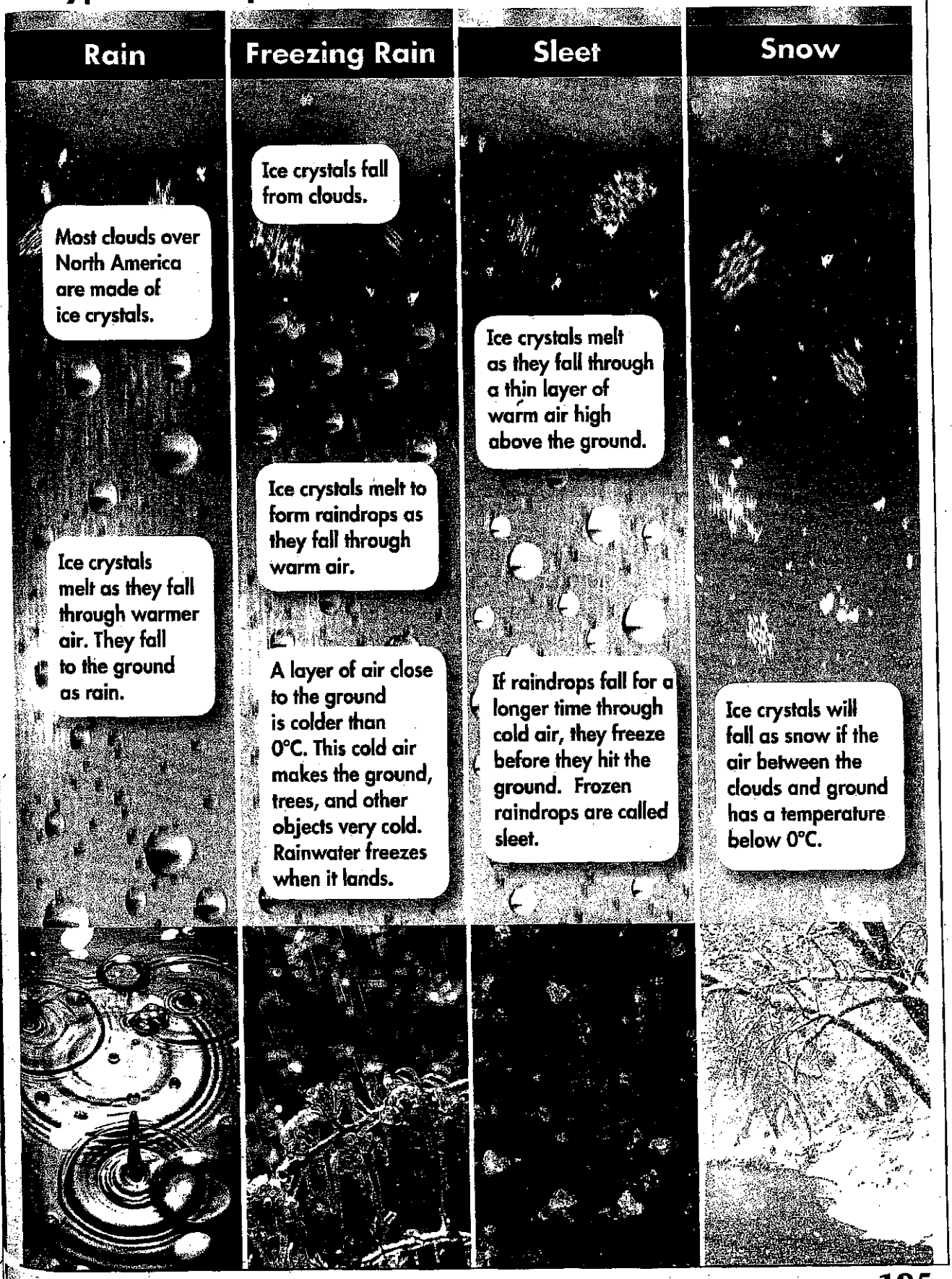
Hail Formation

Hail forms when very strong winds blow upward into a cloud. The winds blow raindrops back up into the freezing air at the top of a cloud. The raindrops freeze into small bits of ice. As the ice is blown back up into the cloud many times, many layers of water freeze on it. Hailstones fall when they become too heavy for the upward winds to lift them.

Lesson Review

1. Summarize how snow, rain, and sleet form.
2. **Main Idea and Details** List four details to support the following main idea: Almost all precipitation in the United States starts as snow.

Types of Precipitation



Chapter 5 Reviewing Key Concepts

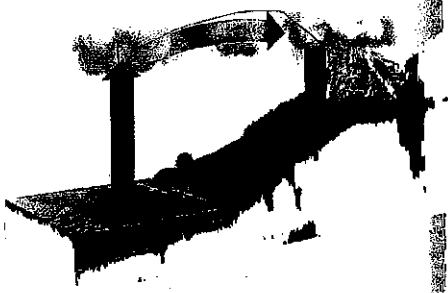
Focus on the BIG Idea

Water moves through the water cycle. Evaporation, condensation, and precipitation are the parts of the water cycle.

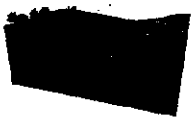
Lesson 1

How can the oceans be described?

- Most of Earth's water is salt water in the oceans, which cover most of Earth's surface.
- Salinity is a measure of how salty water is. Ocean water is saltier in some places than in others.



Lesson 2



Where is fresh water found?

- Fresh water is found in rivers, lakes, underground sources, and glaciers.
- The amount of fresh water is limited. Its availability can be extended by recycling and decreasing the use of water.

Lesson 3

What are some California water sources?

- Sources of fresh water in California include streams, rivers, lakes, and underground sources.
- In many parts of California, pipelines called aqueducts carry water long distances from rivers or lakes to local communities.

Lesson 4

What is the water cycle?

- The water cycle is the repeated movement of water through the environment in different forms.
- In the water cycle, liquid water evaporates from Earth to form water vapor in the air that moves from place to place. In time this water vapor cools and condenses to form water that falls back to Earth.

Lesson 5

How do clouds form?

- In the water cycle, water vapor in the air can cool to form clouds, which are tiny droplets of water or ice. These droplets can fall back to Earth as rain, hail, sleet, or snow.

Chapter 5 Review/Test

Use Vocabulary

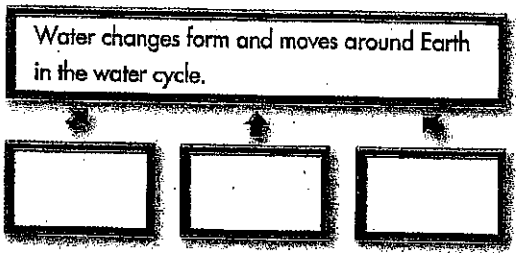
aquifer (p. 177)	**sea level** (p. 173)
condensation (p. 189)	**sleet** (p. 194)
evaporation (p. 189)	**water cycle** (p. 188)
precipitation (p. 189)	**watershed** (p. 178)
reservoir (p. 178)	**water table** (p. 177)
salinity (p. 174)	

Fill in the blanks with the correct vocabulary terms. If you have trouble answering a question, read the listed page again.

1. _____ is a measure of how salty water is.
2. _____ is the level of the surface of an ocean.
3. A _____ is a lake that forms behind a dam.
4. _____ forms when raindrops freeze before they hit the ground.
5. The layer of rock and soil that groundwater flows through is a(n) _____.
6. The _____ is the top level of groundwater in an aquifer.
7. The area from which water drains into a river is called the river's _____.
8. The repeated movement of water through the environment is the _____.

Think About It

9. Describe the oceans and explain how the water cycle affects the salinity of the ocean.
10. Explain how clouds usually form rain over the United States.
11. Process Skills **Communicate** Summarize the roles of evaporation, sublimation, and condensation in the water cycle.
12. **Main Idea and Details** Make a graphic organizer like the one shown below. List some details for the main idea in the box below. Look at Lesson 4 if you need help.



13. **Writing in Science**
Descriptive List and describe three different sources that local communities use for fresh water. Choose one and describe how water gets from the source to a person's home.

California Standards Practice

Write the letter of the correct answer.

14. What is one way you can conserve water?

A take long showers
B dig wells
C fix leaky faucets
D swim in the ocean

15. Which kind of cloud touches the ground?

A altocumulus
B fog
C cirrus
D lenticular

16. Where is most of Earth's water located?

A rivers
B groundwater
C oceans
D lakes

17. Warm water is moved from the Caribbean Sea to the North Atlantic Ocean by

A an ocean current.
B the water cycle.
C the water table.
D an aquifer.

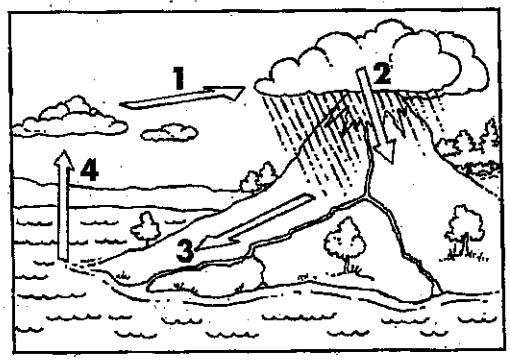
18. What is the process that changes water vapor into clouds or fog?

A evaporation
B sublimation
C condensation
D runoff

19. Which of the following is an example of evaporation?

A Water on land sinks into soil.
B A layer of ice forms on a puddle.
C Rain falls from a cloud.
D Water in a puddle slowly disappears.

20. In the diagram of the water cycle, which arrow shows that condensation is taking place?



A 1
B 2
C 3
D 4

Focus Skill: Forming Compound Sentences - Part I + Review

Name _____ **Date** _____

Week 20: Day One-Teacher-Directed Lesson

Following the mini-lesson activity, summarize what you have learned about compound sentences.

Name the four parts you need to "build" a compound sentence.

1. _____
2. _____
3. _____
4. _____

What are two NEW names you have learned for the term *complete sentence*?

5. _____ + _____

6. What does it mean when we say an *independent clause* is **independent**?

_____

_____

7. A **simple sentence** includes _____ subject and _____ predicate.

8. A **compound sentence** includes _____ **simple sentences.**

9. Name the seven conjunctions that can be used to connect two independent clauses.

_____, _____, _____, _____, _____, _____, _____

- Underline the subject once and the predicate twice in each independent clause.
- Next to each independent clause, write the label ***independent clause*** on the line.
- Use a comma and a conjunction to combine each pair of independent clauses.
- Circle the comma and conjunction in the new compound sentence.
- Use a pronoun to replace a noun in the second independent clause when possible.

10. European nations claimed land in the New World. _____

Many Europeans moved to North America in the 1700s. _____

_____

_____

_____

Focus Skill: Forming Compound Sentences - Part I + Review

Name _____ **Date** _____

Week 20: Day Two

1. Name the seven conjunctions that can be used to connect two independent clauses.

_____, _____, _____, _____, _____, _____, _____

- Underline the subject once and the predicate twice in each independent clause.
- Next to each independent clause, write the label ***independent clause*** on the line.
- Use a comma and a conjunction to combine each pair of independent clauses.
- Circle the comma and conjunction in the new compound sentence.
- Use a pronoun to replace a noun in the second independent clause when possible.

Ex. Europeans wanted a chance to own land. _____

Europeans hoped for a new beginning in the New World. _____

_____

_____

_____

2. England claimed land along the Atlantic Ocean. _____

France chose the Ohio River Valley and parts of Canada. _____

_____

_____

_____

3. Many English colonies took the land from Native Americans. _____

The French shared the Ohio River Valley with them. _____

_____

_____

_____

Focus Skill: Forming Compound Sentences - Part I + Review

Name _____ **Date** _____

Week 20: Day Three

Name the four parts you need to "build" a compound sentence.

1. _____
2. _____
3. _____
4. _____

- Underline the subject once and the predicate twice in each independent clause.
- Next to each independent clause, write the label ***independent clause*** on the line.
- Use a comma and a conjunction to combine each pair of independent clauses.
- Circle the comma and conjunction in the new compound sentence.
- Use a pronoun to replace a noun in the second independent clause when possible.

5. The growing English colonies wanted to move into the Ohio River Valley. _____

   The French and Native Americans were already settled there. _____

_____

_____

_____

6. This struggle for the land erupted in a war. _____

   The French and Indian War pitted England against France. _____

_____

_____

_____

7. Most Native Americans supported the French in the war. _____

   Some tribes joined the English side. _____

_____

_____

_____

Focus Skill: Forming Compound Sentences - Part I + Review

Name _____ **Date** _____

Week 20: Day Four

1. What does it mean when we say an *independent clause* is **independent**?

_____

_____

- Underline the subject once and the predicate twice in each independent clause.
- Next to each independent clause, write the label ***independent clause*** on the line.
- Use a comma and a conjunction to combine each pair of independent clauses.
- Circle the comma and conjunction in the new compound sentence.
- Use a pronoun to replace a noun in the second independent clause when possible.

2. The French and the Native Americans knew the land well. _____

   The French and the Native Americans had the advantage. _____

_____

_____

3. The writer forgot to **indent** (¶) each time the speaker changed in this conversation. Write the conversation correctly below. Indent for each change of speaker.

> Tim shouted, "Watch out for the forward!" "He is really fast," replied Marc. Kip said, "They're protecting him, too." "Their defense," Marc added, "must have had a jet-powered breakfast."

_____¶_____

_____

_____

_____

_____

4. How many times did you indent? _____

5. Label each **Five in the Front** conversation sentence with a number **5.**
   Label **Six in the Back** with **6** and **Interrupted Eight** sentences with **8.**

Mini-Lesson Activity: One-House Sentence = Independent Clause

Week 21

Name **Date**

Week 21: One-House Sentences-Teacher-Directed Lesson for use with Lesson One

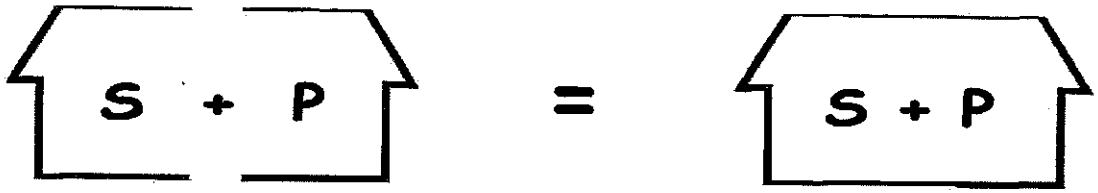
P1

Think of an *independent clause* as a one-house sentence. It is composed of <u>one</u> subject and <u>one</u> predicate. The subject can be simple or compound; the predicate can be simple or compound.

Similar to the "Build a Compound Sentence" activity in Week 20, you would write each one-house sentence below on <u>one</u> green strip. Underline the subjects <u>once</u> and the predicates <u>twice</u>. Write an ***N*** above nouns in the subjects and a ***V*** above verbs in the predicates. Look at the labels on Ex: 1. Add similar labels to Ex: 2.

***Examples 1 and 2 are both One-House sentences. How are they different?**

Ex 1: One-House Sentence

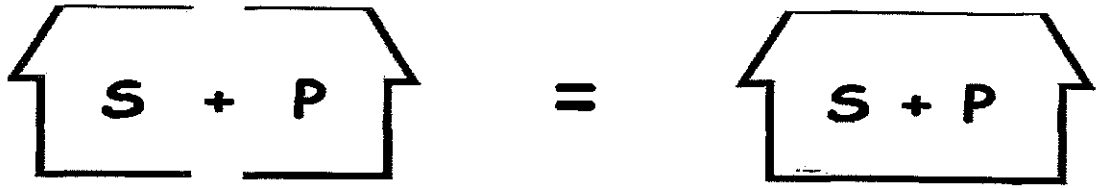


Austin + shot baskets = Austin shot baskets.

simple subject simple predicate

subject + ***predicate*** = ***independent clause***

Ex:2 One-House Sentence



Austin and Kip + shot baskets and practiced lay-ups

Austin and Kip shot baskets and practiced lay-ups.

_____ _____

_____ + _____ = _____

Mini-Lesson Activity- Independent Clause + Independent Clause = Compound Sentence

Name _____ **Date** _____

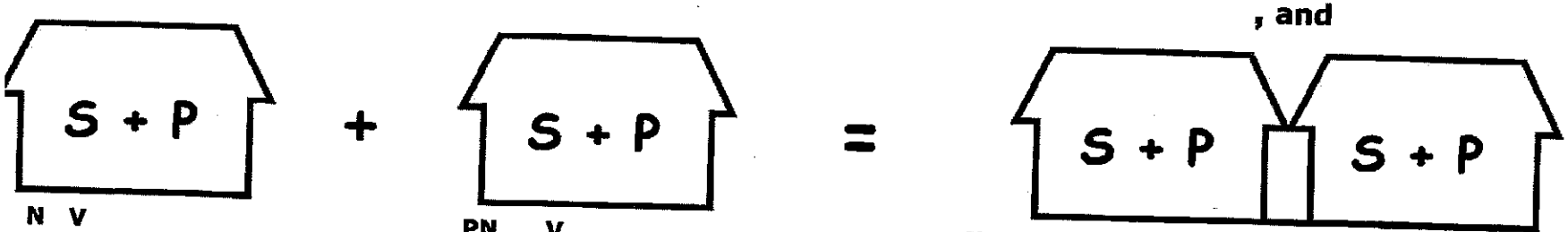
Week 21: Duplex House Sentences–Teacher-Directed Lesson for use with Lesson Two

Think of a compound sentence as a duplex house sentence: two complete houses connected by a coordinating conjunction. Similar to the "Build a Compound Sentence" activity from Week 20, a duplex house uses two green strips connected w/ a conjunction.

Directions: Study the example. Then, complete the following steps for item number 1. along with your teacher.

- Underline the subject(s) once and the predicate(s) twice in the independent clauses and compound sentences.
- Write an ***N*** above nouns and a ***PN*** above pronouns in the subject(s); write a ***V*** above verbs in the predicate(s).
- Add a comma and conjunction above the **roof** of each duplex house. Circle the comma and conjunction in the compound sentence.
- Complete the labels below the house models.

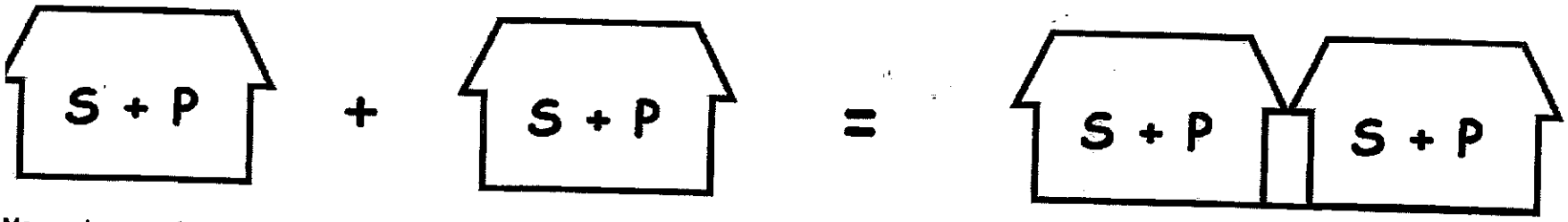
Ex:



N V
Meg has a trampoline. + PN V She invited me to try it. = N V PN V Meg has a trampoline , and she invited me to try it.

independent clause + *independent clause* = *compound sentence*

1.



Mason loves science. + Sophia prefers math. = Mason loves science , but Sophia prefers math.

_____ + _____ = _____

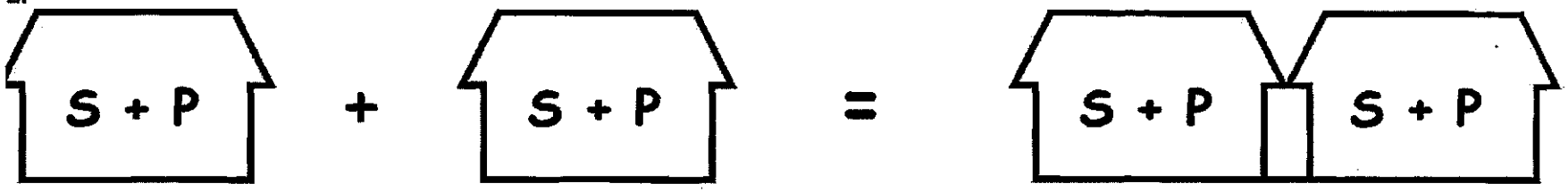
Mini-Lesson Activity- Independent Clause + Independent Clause = Compound Sentence

Name _____ **Date** _____

Week 21: Duplex House Sentences–Teacher-Directed Lesson for use on **Lesson Two**

- Underline the subject(s) once and the predicate(s) twice in the independent clauses and compound sentences.
- Write an ***N*** above nouns and a ***PN*** above pronouns in the subject(s); write a ***V*** above verbs in the predicate(s).
- Add a comma and conjunction above the **roof** of the duplex house. Circle the comma and conjunction in the compound sentence.
- Complete the labels below the house models. **On numbers 2 and 3 write the compound sentence on the lines provided.

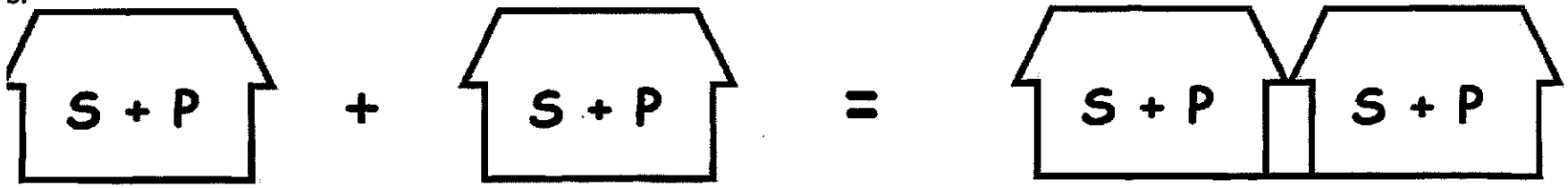
2.



Dad often skips lunch. + He is famished at dinner. = _____

_____ + _____ = _____

3.



Cici and I may go swimming. + We may play cards. = _____

_____ + _____ = _____

Focus Skill: Forming Compound Sentences - Part II + Review

Name _____ **Date** _____

Week 21: Day One-Review: Independent Clauses-"One-House" Sentences

Independent Clauses are the "building blocks" for compound sentences.

In the mini-lesson you learned that an independent clause can be compared to a "house." To be complete the independent clause or "house" needs <u>one</u> subject and <u>one</u> predicate.

The complete <u>subject</u> can be simple or compound.
The complete <u>predicate</u> can be simple or compound.

All of the sentences below are "One-House Sentences" also known as independent clauses.

What kind of words do you find linking the <u>nouns</u> in the <u>compound subjects</u> together?

What kind of words do you find linking the <u>verbs</u> in the <u>compound predicates</u> together?

Underline the subject <u>once</u> and the predicate <u>twice</u> in each independent clause.
Write an ***N*** above nouns in the subject and a ***V*** above verbs in the predicate.

1. Austin practiced free throws.

2. Austin and Kip practiced free throws.

3. Austin and Kip practiced free throws and performed passing drills.

4. Kip and Travis worked on footwork and practiced dribbling.

5. Which sentences have compound subjects? _____

6. Which sentences have compound predicates? _____

7. Along with your teacher, circle all coordinating conjunctions that link the <u>nouns</u> in compound subjects and the <u>verbs</u> in compound predicates together.

8. Sentences 3 and 4 are very long. Explain why they are still "one-house" sentences. _____

_____

Focus Skill: Forming Compound Sentences - Part II + Review

Name _____ **Date** _____

Week 21: Day Two

Circle the comma and conjunction that join the two independent clauses.
Underline the subject once and the predicate twice on **each side** of the compound sentence.

Ex. Cells in your body need nutrients to survive, and those nutrients include proteins, fats, vitamins, minerals, and carbohydrates.

1. Each bite you eat makes a journey through your digestive system, so the food can be changed into a form your body can use.

2. Digestion starts in your mouth, and your teeth tear and chop the food into smaller pieces.

3. Your saliva starts a chemical reaction, and it begins the steps toward breakdown and softening.

- Underline the subject once and the predicate twice in each independent clause below.
- Next to each independent clause, write the label ***independent clause*** on the line.
- Use a comma and a conjunction to combine each pair of independent clauses.
- Circle the comma and conjunction in the new compound sentence.

4. Your food travels to the stomach through the esophagus._____

It is squeezed by the wave-like action of this tube. _____

_____

_____

_____

Focus Skill: Forming Compound Sentences - Part II + Review

Name _____ **Date** _____

Week 21: Day Three-Teacher-Directed Lesson

What can go wrong when creating a compound sentence?

In the sentence-strip activity, you learned that a compound sentence can fall apart if one of the independent clauses is not complete.

The incorrect compound sentence below is in trouble. Study the two sentences.

Incorrect: Strong acids | squirt into the stomach , and help to dissolve food.

Correct: Strong acids | squirt into the stomach, and **they** | help to dissolve food.

1. Why is the first sentence in trouble? _____

_____

_____

2. Why is the second sentence correct? _____

_____

_____

- Look at each of the **incorrect** sentences below.
- Circle the comma and conjunction and leave them in place.
- Underline the subjects once and the predicates twice on both sides.
- Add the missing word or words to make each one a correct compound sentence.

3. The stomach is a muscular organ, and is shaped like a letter *J*.

4. The stomach would be harmed by its acid, but is protected by mucus.

Choose the sentence that is correct.

5. O Food is mixed and churned in the stomach, and changes to a liquid.
   O Food is mixed and churned in the stomach, and it changes to a liquid.

6. O Dissolved food leaves the stomach, and it goes to the small intestine.
   O Dissolved food leaves the stomach, and goes to the small intestine.

7. O The food is now in liquid form, so is small enough for the cells.
   O The food is now in liquid form, so it is small enough for the cells.

Focus Skill: Forming Compound Sentences - Part II + Review

Name _____ **Date** _____

Week 21: Day Four-Teacher-Directed Lesson

Use the "Period Test" to decide if you have a compound sentence that requires a comma.

The Period Test

Step One:
Remove the coordinating conjunction from the sentence by covering it up with your finger.

Replace it with a **period**.

If the words on BOTH sides of the period are complete sentences, then you have a compound sentence.

Step Two:
If you have a compound sentence, leave the conjunction in place and add a comma before the conjunction.

If you find a compound sentence, add a comma to make it correct.
Be prepared to explain if it is a compound sentence or not.

1. The small intestine does a big job and absorbs nutrients from the liquid.

Compound: yes/no Why? _____

2. More chemicals break down and liquefy the food so your body can absorb it.

Compound: yes/no Why? _____

3. The small intestine is 22 feet long and food travels through it in four hours.

Compound: yes/no Why? _____

4. Finger-like projections act like sponges and absorb nutrients.

Compound: yes/no Why? _____

Focus Skill: Forming Compound Sentences - Part II + Review

Name _____ **Date** _____

Week 21: Day Four-p.2- Simple or Compound?

Complete the two examples below along with your teacher.

- Circle the conjunctions in the sentences below.
- Underline the subject(s) once and the predicate(s) twice.
- Write an ***N*** *or* ***PN*** above nouns in or pronouns in the subjects and a ***V*** above verbs.
- Decide if the sentences are **simple** or **compound** and explain why.
- **If they are compound sentences,** add commas before the conjunctions.
  (Hint: Simple sentence=one green strip / Compound sentence=two green strips)

Ex: N V V
Food material moves to the large intestine (and) experiences more changes.

Simple/Compound Why? The group of words following "and" is not an independent clause - a subject is missing.

Ex: The large intestine is five feet long and it is three to four inches in diameter.

Simple/Compound Why? _____

1. Water and minerals are absorbed and they travel to the cells in the bloodstream.

Simple/Compound Why? _____

2. The remaining waste becomes drier and is more compact.

Simple/Compound Why? _____

- Underline the subject once and the predicate twice in each independent clause below.
- Label each independent clause on the line.
- Use a comma and a conjunction to combine each pair of independent clauses.
- Circle the comma and conjunction in the new compound sentence.

3. Two-thirds of our food can be used by the body. _____

   The remaining one-third is eliminated. _____

_____

_____

_____

Week 22: Mini-Lesson-Three Types of Adverbs

Name _____ **Date** _____

Three Types of Adverbs

Working with a partner, place each adverb below in the appropriate category.

today	clearly	there	regularly	carefully	nearby	soon
inside	down	forever	never	often	tomorrow	quickly
next	usually	seldom	silently	outside	eventually	tightly
frequently	yesterday	faithfully	always	easily	here	
successfully		everywhere		upside down		

How?	Where?	When?
•to tell how something was done	•where •to where •from where	•when •how often •how long

Focus Skill: Adverbs + Review

Name _____ **Date** _____

Week 22: Day One-Teacher-Directed Lesson

Adverbs are words that modify verbs. They **add to** the verb and give more precise details by answering the questions: *How? When?* or *Where?*

Ex: Our bus arrived immediately after school.
(verb) (adverb)

The adverb *immediately* gives more information about the verb *arrived*.
Ex: When did the bus arrive? It arrived immediately.

Note: Adverbs may be placed before or after verbs.
In order to find an adverb, identify the verb in the sentence and ask these questions: *How? When?* or *Where?*

Many adverbs end in ***ly*** when answering the question *How?*

- Underline the verb(s) or verb phrase(s) twice in each sentence.
- Draw arrows from verbs you find to the adverbs that modify them.
- Place an *X* in the box to show what question the adverbs answer.

The adverb answers the question:

	How?	When?	Where?
Ex: People often are frightened of bats.		X	
Ex: Bats can be observed outside.			X
1. Bats seldom harm humans.			
2. They fly silently and search hungrily for insects. Note: Look for two adverbs.			
3. Bats are always nocturnal hunters.			

Focus Skill: Adverbs + Review

Name _____ **Date** _____

Week 22: Day Two

- Underline the verbs or verb phrases twice in the sentences below.
- Draw arrows from the verbs to the adverbs that modify them.
- Tell which question the adverb answers: *How? When? Where?*

Example: Bats tightly cling to the roofs of caves or bridges.

This adverb answers the question How?.

1. Hibernating bats sleep upside down.

   This adverb answers the question _____.

2. Scientists usually observe bats in their caves.

   This adverb answers the question _____.

3. Bats clearly belong to the mammal family.

   This adverb answers the question _____.

Circle the comma and conjunction in the compound sentences below. Underline the subjects once and the predicates twice on **both sides** of the comma and conjunction.

4. Bats have the ability to fly, but they are not members of the bird family.

5. Bats have five fingers, and their fingers are as long as their arm bones.

Choose the sentence that is correct.

6. O Bat's are the only mammals that are able to fly.
   O Bats are the only mammals that are able to fly.

7. O Skin is stretched over a bat's arm and fingers to form wings.
   O Skin is stretched over a bats arm and fingers to form wings.

8. O Flexible bat wings allow more maneuverability than a bird's wing.
   O Flexible bat wings allow more maneuverability than a birds wing.

Focus Skill: Adverbs + Review

Name _____ **Date** _____

Week 22: Day Three-Teacher-Directed Lesson

Based on your class discussion of the differences between the words *good* and *well*, choose the correct word (good or well) to complete each sentence.
Be prepared to support the reason for your choice.

1. The word _____ is an adjective that modifies nouns.
2. The word _____ is an adverb that modifies verbs.

3. A bat's wing is designed _____ for weaving and diving.

4. The bat is a _____ hunter and effectively gets its insect prey.

5. The expression "blind as a bat" is not true. Bats see _____.

6. Bats are able to hunt _____ at night by using *echolocation*.

7. Since bats cannot see to hunt at night, they send out high-pitched sounds. These sounds bounce off surfaces and give bats _____ information to guide them. Echolocation is similar to a ship's sonar.

8. What three questions do adverbs answer? _____

Choose the word that is an <u>adverb</u> in each sentence.
If you identify the verb, you can more easily locate the adverb.

9. Bats hibernate nearby other bats in a colony to survive the winter.

O hibernate O nearby O colony

10. They cluster closely together to maintain their body heat.

O closely O together O maintain

11. During warm weather bats return faithfully to roost in the same location each day.

O return O faithfully O same

Write the title correctly.

12. amazing flying mammals (magazine article)

Focus Skill: Adverbs + Review

Name _____ **Date** _____

Week 22: Day Four

Choose the correct word (good or well) to complete each sentence.
Be prepared to support the reason for your choice.

1. The word _____ is an adjective that modifies nouns.
2. The word _____ is an adverb that modifies verbs.

3. Desert bats help the saguaro cactus in a _____ way. When they feed on the nectar of the flowers, they pollinate the cactus.

4. Bats socialize _____. They like to "hang out" together in caves.

5. Bracken Cave in Texas is a _____ place to see bats. As the largest known bat colony in the world, it is home to 20 million Mexican free-tailed bats during summer months.

Choose the correct comparative or superlative adverb.

6. Bats kill mosquitoes _____ than chemical sprays.

   O successfully O most successfully O more successfully

7. Bat contacts with humans are _____ than people imagine.

   O frequent O less frequent O the least frequent

Write this conversation sentence correctly on the line below.

Circle one: **Magic Five in the Front** **Magic Six in the Back** **Interrupted Eight**

8. Travis asked can we go to visit Bracken Cave

_____

Combine the two short sentences below to form a compound sentence.
Circle the comma and conjunction in the compound sentence.

9. The supply of insects is reduced in the winter.
   Bats hibernate in order to survive.

_____

_____

Week 23: Mini-Lesson - Pronoun-Antecedent Agreement

Name _____ **Date** _____

Teacher-Directed Lesson

What is an Antecedent?

Don't let the Latin word *antecedent* (an-ta-see'dent) scare you! Antecedents are really quite simple. The word *antecedent* is another name for the *noun(s)* that the *pronoun* refers back to and replaces.

He is a pronoun that refers back to Jack.

The noun *Jack* is the antecedent.

- Draw a box around the pronoun. Underline the antecedent.
- Write the word ***antecedent*** above the noun(s) that the pronoun refers to.
- Draw an arrow from the pronoun to the antecedent.

antecedent

Ex: My hair is very curly, and it is impossible to control.

antecedents

Ex: Logan and I plan to present the PowerPoint we created.

1. Mom's favorite sweatshirt is missing. It was left at the library.

2. Alexis hit the snooze button, so she missed out on breakfast.

3. Ryan and Sam have soccer games on Saturday. They begin at noon.

4. Mom and Dad usually walk after dinner, but they stayed home tonight.

Hint: You will find two examples below.

5. Grace framed her gymnastics medals. She earned them during meets.

Name _____ **Date** _____

Teacher-Directed Lesson **P.2**

Pronouns and Antecedents Need to Match

When you choose a pronoun to replace an antecedent, it needs to match. This is called pronoun-antecedent agreement.

Some pronouns are singular. **Singular Pronouns:** I, you, he, she, it
Some pronouns are plural. **Plural Pronouns:** we, you, they

Ex 1: **Evan** went to the bike shop. _____ shopped for a new bike.

The antecedent **Evan** is one person, so the antecedent is singular.
Choose a singular pronoun to match a singular antecedent.
Look at the list of singular pronouns above to find a match.

Ex 2: **Evan and Ike** went to the bike shop. _____shopped for new bikes.

The antecedents **Evan and Ike** include two people; they are plural.
Choose a plural pronoun to match plural antecedents.
Look at the list of plural pronouns above to find a match.

*Do you have sharp eyes? After you have completed each sentence above by adding the matching pronoun, look for **three** ways the sentences are different.

- Complete each sentence with a pronoun from the lists above.
- Draw a box around the pronoun. Underline the antecedent/antecedents.
- Write the word ***antecedent*** above the noun(s) that the pronoun refers to.
- Draw an arrow from the pronoun to the antecedent.

antecedents

Ex A: Zoey and Dylan are great writers. They use amazing word choice.

1. Mitchell likes tacos, and _____ fixes them for dinner.

2. Sophia and I went to the birthday party, and _____ took the same present!

3. Which sentence has a singular antecedent? _____

4. Which sentence has plural antecedents? Ex. A, _____

Focus Skills: Pronoun Use/Antecedent Agreement/Case + Review

Name _____ **Date** _____

Week 23: Day One

Place each pronoun in the correct category.
Place the pronoun *you* in both categories.

they I you he she we it

Singular Pronouns	Plural Pronouns

- Complete each sentence with a pronoun from the choices above.
- Write **singular pronoun** or **plural pronoun** below to tell what kind you chose.

Ex: Gabrielle wrote a poem, and *she* submitted it to a magazine.
singular pronoun

1. I love summer and fall. _____ are my favorite seasons.

2. Dad washed and waxed his car. _____got spotted during the rainstorm.

3. Andy and I play chess, and _____ have a match this Sunday.

4. Marcus is having a birthday, and _____ is turning eleven.

Substitute a pronoun for a noun to improve the sentence fluency.
Write the new sentences on the lines provided.

5. Whales and dolphins are mammals. Whales and dolphins can stay under water for 20 minutes. Whales and dolphins come to the surface to breathe.

_____

_____

6. Motocross racing is exciting. Motocross racing requires concentration. Motocross racing requires quick thinking.

_____

_____

Focus Skills: Pronoun Use/Antecedent Agreement/Case + Review

Name _____ **Date** _____

Week 23: Day Two-Teacher-Directed Lesson

Which Pronoun? I or Me

1. How do you decide whether to use the pronoun ***I*** or ***Me***?

Remember this test: Take the other person out of the sentence.

Ex: Kim invited Tia and __I / me__ to come to her party.

2. Who is the other person?

Kim invited <u>you</u> and one <u>other person</u> (Tia) to come to her party.

Take your THUMB and cover up the name (***Tia*** + ***and***) in the sentence.

The sentence now reads: "Kim invited __I / me__ to come to her party."

It is easy to pick the correct answer for both sentences:

"Kim invited **<u>me</u>** to come to her party." (correct)

"Kim invited Tia and **<u>me</u>** to come to her party." (correct)

- Put parenthesis around (the other person + the word ***and***) in each sentence.
- Cover them with your thumb.
- Finally, circle the correct pronoun for each sentence.

Ex: (Isabella and) (I) / me enjoy playing softball.

1. Jacob and __I / me__ belong to the Boy Scouts.
2. Please choose Ella and __I / me__ to take down the flag.
3. Aiden and __I / me__ worked on a gymnastics routine today.
4. Brianna and __I / me__ helped Uncle Charlie paint the doghouse.
5. The coach usually picks Lucas and __I / me__ to play halfback.
6. Can you take Brooklyn and __I / me__ to get new tennis shoes?
7. My mother and __I / me__ like to bake brownies.

Focus Skills: Pronoun Use/Antecedent Agreement/Case + Review

Name _____ **Date** _____

Week 23: Day Three

Choose the sentence that is correct.

1. O "May Tony and I help you staple papers?" asked Matt.
   O "I would appreciate your help" answered Mrs. Lujan.
   O The Lincoln Fun Run is tomorrow, "added Avery."
   O "I can't believe how many people signed up," Said Caleb.

2. O Tony, Matt and Caleb looked at the registration forms.
   O First they separated them into piles.
   O The earliest race the adult 5K, already had 62 entrants.
   O This afternoon banners, signs, and tables would be set up.

3. O In the morning, runners would stream in before the sun came up.
   O In the morning runners would stream in before the sun came up.

4. O At all of the aid stations, prepared teams would support runners.
   O At all of the aid stations prepared teams would support runners.

Read the following passage and notice the underlined numbered items.
Follow the directions below.

Mom decided to get new backpacks for <u>Ethan and I</u>. (5) Our old ones were pretty pathetic. We had a 30 dollar limit, and Mom let <u>us</u> (6) choose.

<u>Me and Ethan</u> (7) both found great backpacks and had money left for ice cream.

- Write the correct answers for numbered items from the passage on the lines below.
- If the item is incorrect, write it correctly on the numbered line below.
- If the item is correct, write OK on the numbered line below.

5. _____

6. _____

7. _____

Focus Skills: Pronoun Use/Antecedent Agreement/Case + Review

Name _____ **Date** _____

Week 23: Day Four-p.1

DLI STUDENT REFERENCE: PRONOUN CASES (FORMS) 5-23

Subject Pronouns **Possessive Pronouns** **Object Pronouns**

Understanding the three different *cases* or forms of pronouns can help you to decide which pronoun to use. Each form of pronoun has a specific use.

Pronouns are words that can replace nouns. Since they serve as "noun substitutes," they can be used in the same ways that nouns can be used in a sentence:

as **the subject**, **to show possession**, or as **an object in the sentence.**

Subject Pronouns

When a pronoun is the **subject** of the sentence, you must select a pronoun from this group of subject pronouns: ***I, you, he, she, it, we, they or who.***

He attended the musical performance on Saturday. (**He** is a subject pronoun.)
I chose a mixed-breed dog from the animal shelter. (**I** is a subject pronoun.)

Hint: If the pronoun is near the front of the sentence, it will usually be a subject pronoun.

Possessive Pronouns

When a pronoun is used to **show possession** in a sentence, you must select a pronoun from this group of possessive pronouns:
my/mine, your/yours, his, her/hers, its, our/ours, their/theirs or whose.

Tina groomed **her** dog each month. (The possessive pronoun ***her*** is placed before the noun *dog*.)
The winning ticket was **mine.** (The possessive pronoun ***mine*** can stand alone.)

Object Pronouns

When a pronoun is an **object** in the sentence, you must select a pronoun from this group of object pronouns: ***me, him, her, it, you, us, them, or whom.***

Object pronouns are most often used in a prepositional phrase or after an action verb.

Andrew brought the books to **her.** (The pronoun ***her*** is the object of the preposition.)
Will you invite **me** to the party? (The pronoun ***me*** is used following the action verb *invite*.)

Note: When you are trying to decide whether to use the pronoun ***I*** or ***me,*** you must decide if the pronoun is a subject of the sentence or an object in the sentence.

Focus Skills: Pronoun Use/Antecedent Agreement/Case + Review

Name _____ **Date** _____

Week 23: Day Four-p.2

- Circle the pronouns in each sentence.
- The number in parentheses tells how many pronouns to find in each sentence.
- Record the pronouns you find in the correct column in the chart below.

Use the DLI STUDENT REFERENCE: PRONOUN CASES (FORMS) as a source of information as you complete the items below.

Ex: (3) (We) invited Tyler to take (his) dog to the dog park with (us.)

1. (2) The swim coach signaled my friend and me to dive in the pool.
2. (2) Tim and Ian invited their friends to go swimming with them.
3. (2) Julia and I watched Tristan put on his rollerblades.
4. (2) A friendly dog wrapped its leash around Mom and me.
5. (2) They often ask us to cat sit in the summer.
6. (3) We will plan to take our car to the dealer to repair it.
7. (2) Who is going to be the first to sign my yearbook?
8. (2) I want to go to the movie with them.
9. (2) It was slimy, green, and had red stripes on its tail.
10. (3) Would you and Tim help me find my dog?

	Subject Pronouns	Possessive Pronouns	Object Pronouns
Ex:	We	his	us
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Week 24: Mini-Lesson-Sentence Combining—Creating an Appositive

Name_____ **Date**_____

Teacher-Directed Lesson

Combining Sentences by Creating an Appositive

Appositives are words or phrases that are included in the sentence that rename a noun or pronoun and add more information. An appositive is considered an "interrupter" because it stops the flow of the sentence.

When the information provided by an appositive is not necessary to understand the sentence, it is set apart with commas. Depending upon its location in the sentence, one or two commas are needed to set off the appositive.

1-Creating a sentence with an **appositive** is one way to combine two sentences.

Two sentences: England was deeply in debt after the French and Indian War.
England was the victor of the French and Indian War.

Combined Sentence: England, **the victor**, was deeply in debt after the French and Indian War.

2-Remember an appositive can appear at the beginning, middle, or end of a sentence.

Two sentences: England decided to raise money by taxing the colonists.
The colonists were residents in the American colonies.

Combined Sentence: England decided to raise money by taxing the colonists, **residents in the American colonies.**

3- Circle the noun in each combined sentence that the appositive tells more about.

Combine two sentences below into one sentence.
Use information from the second sentence to create an appositive.

1. Citizens living in England elected representatives to vote on these taxes. Taxes are money for the government's needs.

_____

_____

2. Angry colonists couldn't elect a representative or express their opinions. Colonists were residents of the American colonies.

_____

_____

What are appositives? _____

Focus Skill: Sentence Combining–Creating an Appositive + Review

Name_____ **Date**_____
Week 24: Day One

- Combine two sentences below into one sentence.
- Use information from the second sentence to create **an appositive.**
- In each combined sentence circle the noun that the appositive tells more about.

1. Letters took months to travel 3,000 miles by ship to King George.
   The letters were pleas for changes.

2. George Grenville devised one new tax after another to impose on colonists.
   George Grenville was England's Prime Minister.

3. Loyalists believed they should pay taxes to England and support the King.
   One-fifth of the residents in the colonies were Loyalists.

4. Patriots believed that no taxes should be charged unless they could vote.
   Patriots were two out of every five colonists

5. The Sons of Liberty began holding secret meetings and planning opposition.
   The Sons of Liberty were strong-minded Patriots in Boston.

Focus Skill: Sentence Combining–Creating an Appositive + Review

Name_____ **Date**_____

Week 24: Day Two

- Combine two sentences below into one sentence.
- Use information from the second sentence to create **an appositive.**
- In each combined sentence circle the noun that the appositive tells more about.

1. In June of 1767 a new tax was ordered on paper, glass, paint, and tea by Charles Townshend.
   Charles Townshend was the official responsible for England's treasury.

_____

_____

_____

2. Townshend imposed a tax on important daily necessities.
   These daily necessities were items that colonists imported from England.

_____

_____

If there is an error in an underlined section, make the correction in the space above.
If there is no error, write OK above the underlined word or phrase.

When this new tax was imposed on daily necessitys, the conflict between England and the Patriots escalated. Since colonists didnt manufacture these items in the colonys , this tax was especially painful. Importing these essentials from England was necessary. Colonists staged a boycott a planned protest, and vowed not too by any of these items. This boycott made England loose money. England was determined to control the unruly colonists. Thay sent British warships loaded with soldiers to the port of boston.

Circle the informational text structure of this passage.

Description Sequence Compare/Contrast Cause/Effect Problem/Solution

Focus Skill: Sentence Combining--Creating an Appositive + Review

Name_____ **Date**_____
Week 24: Day Three-Teacher-Directed Lesson

"Use Your Manners"- A Test for Deciding Pronoun Order

RULE: Always put the other person's name **FIRST.**

Do you remember when you invited someone to play after school, and your mother told you to offer a snack **to them first before you had one?** Putting the other person first is just good manners. Putting the other person's name first before your name is also good grammar.

Ex: I and Addy take piano lessons from Mrs. Cole. (incorrect)
Ex: Addy and I take piano lessons from Mrs. Cole. (correct-Addy's name is first.)
Ex: Sam took me and Lance to the movie. (incorrect)
Ex: Sam took Lance and me to the movie. (correct-Lance's name is first.)

Circle the correct choice in the items below.

1. The coach chose (Lindsay and me / me and Lindsay) to play goalie.
2. (Me and Abe / Abe and I) are earning money for drama camp.
3. The substitute asked (me and my friend / my friend and me) to help.
4. (Curtis and I / I and Curtis) play string instruments.
5. (Lucy and I / I and Lucy) are cousins.
6. Auntie said (Me and Sidney / Sidney and I) could babysit for Tyler.
7. Our gym teacher chose (me and Anna / Anna and me) for team captains.
8. Mom helped (Dustin and me / me and Dustin) finish our PowerPoint.

Write the titles correctly.

9. (magazine article) clean energy solutions

10. (name of magazine) our planet

Focus Skill: Sentence Combining–Creating an Appositive + Review

Name_____ **Date**_____
Week 24: Day Four

1. Name the coordinating conjunctions: FANBOYS.

_____

2. What four parts are needed to make a **compound sentence**?

_____

- Combine the pairs of sentences below to create **compound sentences.**
- Use a comma/coordinating conjunction to join the two sentences and circle them.
- You may use a pronoun to replace a noun in the second independent clause.

3. Patriots were becoming more unruly with each new tax.
   England sent more soldiers to control the protests.

_____

_____

_____

4. These soldiers needed food and places to stay.
   England ordered colonists to provide living quarters in their homes for soldiers.

_____

_____

_____

- Underline appositives if they are present in the sentences below.
- Add commas if they are necessary.
- Circle the noun or pronoun that the appositive tells more about.

5. Many soldiers were sent to Boston the headquarters of the Sons of Liberty.

6. The Sons of Liberty vocal Patriots objected to soldiers living in their homes.

7. By 1770 there was one soldier for every six residents in the city of Boston.

8. Many Loyalists citizens loyal to the King became nervous for their safety.

9. Patriots had tarred and feathered several Loyalist tax collectors employees of the King.

Focus Skills: Either/Or-Neither/Nor Agreement+Contractions+Review

Name_____ **Date**_____
Week 25: Day One-Teacher-Directed Lesson

Verb Agreement with Either/Or - Neither/Nor Sentences

Which VERB is correct?

Ex 1: Either my cousins or Uncle Matt (**has**/have) the day off.

Ex 2: Either Uncle Matt or my cousins (has/**have**) the day off.

In the examples above, two verbs are presented.
The verb in **bold type** is correct.

RULE
In a sentence that has more than one noun in the subject, joined by **or** or **nor**, choose the verb that agrees with the **closest** noun.

*Choosing the correct verb becomes trickier since one of the nouns in the subject is singular (Uncle Matt), and the other noun in the subject is plural (my cousins).

- Underline the two nouns in the subject of each sentence below.
- Circle the word **or** or **nor** that joins the nouns.
- Circle the correct verb to agree with the closest noun.

Ex: Either Dad (or) the girls (is/(are)) going to set the table.

1. Either the coach or the players (is/are) choosing the location for the party.
2. Either the players or the coach (is/are) choosing the location for the party.
3. Neither the teacher nor the students (has/have) lunch right now.
4. Neither the students nor the teacher (has/have) lunch right now.
5. Neither the supervisor nor the workers (is/are) attending the meeting.
6. Neither the workers nor the supervisor (is/are) attending the meeting.

Focus Skills: Either/Or-Neither/Nor Agreement+Contractions+Review

Name_____**Date**_____
Week 25: Day Two-Teacher-Directed Lesson

Pronoun Agreement with Either/Or - Neither/Nor Sentences

Which PRONOUN is correct?

Ex 1: Either the musicians or the director forgot (**his/her** - their) sheet music.

Ex 2: Either the director or the musicians forgot (his/her – **their**) sheet music.

In the examples above, two choices of pronouns are presented.
The pronoun in **bold type** is correct.

RULE
In a sentence that has more than one noun in the subject,
joined by **or** or **nor**, choose the pronoun that agrees with the **closest** noun.

*Choosing the correct pronoun becomes trickier since one of the nouns in the subject is singular (the director) and the other noun in the subject is plural (the musicians).

- Underline the two nouns in the subject of each sentence below.
- Circle the word **or** or **nor** that joins the nouns.
- Circle the correct pronoun to agree with the closest noun.

Ex: Neither the coach nor the players brought (his/their) warm clothes.

1. Neither Sophia nor the girls lost (her/their) enthusiasm.
2. Neither the girls nor Sophia lost (her/their) enthusiasm.
3. Neither the dog nor the cats ate all of (its / their) pet treats.
4. Neither the cats nor the dog ate all of (its / their) pet treats.
5. Either the teacher or the students practiced (his/their) parts in the play.
6. Either the students or the teacher practiced (his/their) part in the play.

Focus Skills: Either/Or-Neither/Nor Agreement+Contractions+Review

Name_____ **Date**_____
Week 25: Day Three

Contractions- The use of contractions is common to everyday speech and informal writing. When a word group is shortened to form a contraction, letters are left out. An apostrophe shows the location of the missing letter(s).

Complete the chart below.
Highlight or circle letters in the original words that do not appear in the contraction.

ORIGINAL WORDS		CONTRACTION
Ex: are	not	aren't
1. would	not	
2.		they're
3. we	will	
4.		should've
5. of the	clock	
6.		you're
7. I	have	
8. *cannot		

*Both spellings, *cannot* and *can not,* are acceptable. *Cannot* is more common.

- Underline the two nouns in the subject of each sentence below.
- Circle the word **or** or **nor** that joins the nouns.
- Circle the correct verb or pronoun to agree with the closest noun.

9. Neither the singer nor the fans showed (his/their) desire to end the concert.

10. Either the performers or the director (is/are) taking a break now.

11. Neither the fox nor the kits played (her/their) outside games today.

Combine two sentences below into one sentence.
Use information from the second sentence to create **an appositive.**
Circle the noun in the combined sentence that the appositive tells more about.

12. Many works of Michelangelo can be seen in Florence.
Florence is an historic Italian city.

_____

_____

Focus Skills: Either/Or-Neither/Nor Agreement+Contractions+Review

Name_____ **Date**_____

Week 25: Day Four

- Underline the two nouns in the subject of each sentence below.
- Circle the word **or** or **nor** that joins the nouns.
- Circle the correct verb or pronoun to agree with the closest noun.

1. Neither Mother nor the children wanted to miss (her/their) favorite show.

2. Either the players or the coach will claim (her/their) team's trophy.

3. Neither the farmer nor the cows (like / likes) 100-degree days.

4. Either the lion or the lionesses (is / are) likely to pursue the gazelle.

What is the **rule** for choosing a verb or pronoun in an either/or-neither/nor sentence?

5._____

_____

Combine two sentences below into one sentence.
Use information from the second sentence to create **an appositive.**
Circle the noun in the combined sentence that the appositive tells more about.

6. Amelia Earhart was awarded the U. S. Distinguished Flying Cross.
   Amelia Earhart was the first aviatrix to fly solo across the Atlantic Ocean.

_____

_____

_____

Underline the contraction in each sentence.
Write the word or words from which the contraction was made.

7. Felicia can't wait for her party to start. _____ (tricky)

8. Mom said, "They'll love your theme." _____ _____

9. "I'm hoping we will be ready," said Dad. _____ _____

Focus Skill: Openers (Introductory Elements) + Review

Name_____ **Date**_____

Week 26: Day One-Teacher-Directed Lesson

Examine each sentence below.
- Use information from the Openers (Introductory Elements) chart as you work.
- Draw a box around the opener and the comma.
- Underline the subject once and the predicate twice in the sentence.
- Write the type of opener (introductory element) on the line provided.

Ex: (In the shadow) (of the massive peak), a carpet of flowers bloomed.

Type of opener: series of prepositional phrases - 5 or more words

1. Braden commented, "Luke and Levi are next in line."

   Type of opener: _____

2. Finally, Mom got some microwave popcorn!

   Type of opener: _____

3. Riley, I am ready for the next spelling word.

   Type of opener: _____

4. On the front of the door, Tom spotted the note from Mr. Rush.

   Type of opener: _____

5. No, Gabriel isn't coming to practice tonight.

   Type of opener: _____

6. An amazing engineering feat, the Statue of Liberty stands in New York.

   Type of opener: _____

7. Well, I definitely like the color of the paint.

   Type of opener: _____

8. A willing helper, Alexis pitched in to load the canned goods.

   Type of opener: _____

Focus Skill: Openers (Introductory Elements) + Review

Name_____ **Date**_____

Week 26: Day Two

Examine each sentence.
- Use information from the Openers (Introductory Elements) chart as you work.
- Draw a box around the opener and the comma.
- Underline the subject once and the predicate twice in the sentence.
- Write the type of opener (introductory element) on the line provided.

1. Gavin announced, "I have saved enough money for a snowboard."

   Type of opener: _____

2. Unfortunately, my favorite hockey stick is broken.

   Type of opener: _____

3. Serena, the cafeteria has pizza or lunch.

   Type of opener: _____

4. A long-time baseball fan, my uncle loved the Yankees.

   Type of opener: _____

Choose the sentence that is correct.
Be ready to tell why each sentence is correct or incorrect.

5.
- O At last my science project is complete.
- O Wyatt you have, your dentist appointment today.
- O Cautiously, I opened my brother's bedroom door.
- O Yes I do plan to go to the class at the museum next week.

6.
- O "I think an opener introduces a sentence." said Liam.
- O Taylor added, "It kind of prepares the reader for what is coming."
- O "Why do you think you need a comma after an opener?" asked Eli?
- O Maya said, I think it just shows that the main sentence is starting."

7.
- O Bright and early in the morning, Pam and Gloria.
- O Holding a paint brush in one hand and a bucket of paint in the other.
- O Years of sun, rain, and snow.
- O The cottage looked renewed.

Focus Skill: Openers (Introductory Elements) + Review

Name_____ **Date**_____

Week 26: Day Three-Possible Pairs Activity

Note: Following the "Do You Need a Comma?" activity, use DLI STUDENT REFERENCE-COMMA USAGE: PREPOSITIONAL PHRASES from Week 17 as a reference for the questions below.

Complete this sentence to help you remember whether a prepositional phrase needs a comma.

1. If it's _____ and it comes_____, it needs a comma!

Choose the sentence that is correct.

2. O On Tuesday I plan to visit Uncle Cliff.
   O On Tuesday, I plan to visit Uncle Cliff.

3. O At the top of the ridge, the lone wolf howled.
   O At the top of the ridge the lone wolf howled.

Underline the prepositional phrase(s) in each sentence below; circle the preposition(s). Add a comma if it is needed. **Explain** why you did or did not add a comma.

4. After lunch in the office the staff ate birthday cake.

_____

_____

5. The staff ate birthday cake after lunch in the office.

_____

_____

- Underline the prepositional phrase(s) in each sentence below.
- Circle the preposition(s) and write the letter **O** above the objects.
- Add a comma if it is needed. **Explain** why you did or did not add a comma.

6. Grandma can't reach the items above the refrigerator.

   Explain_____

7. In the evening after dinner Dad and Joe take a walk.

   Explain_____

8. At dusk I like watching the stars appear.

   Explain_____

Focus Skill: Openers (Introductory Elements) + Review

Name_____ **Date**_____
Week 26: Day Four

MILD Interjections are openers. They require a comma.

Use a comma after a mild interjection.

"**Well,** I think I will finish the rest of the cleaning tomorrow," said Mom.

"**Oh,** I guess I forgot that step," said Jacob.

"**Okay,** we are ready for lunch," Marta announced.

Examples of mild interjections: please, all right, oh, well, okay, hummm, oh boy, and ah

- Examine the sentences below; **some** of them have openers.
- Use your student reference, and add commas if they are needed.
- If an opener is present, identify the type of opener on the line.

1. "Mrs. Thomas I will wait right here," said Tim. _____
2. "Nobody has turned in their field trip notes," said Pat. _____
3. "Oh I see that I need some more staples," said Arturo. _____
4. On the crest of the wave the surfer changed his course. _____
5. "Okay I noticed an improvement," remarked Sid. _____
6. An example to her team Marissa was a good sport. _____
7. **If it's** _____ **and it comes**_____**, it needs a comma!**

Underline the prepositional phrase in each sentence below; circle the preposition. Add a comma if it is needed. **Explain** why you did or did not add a comma.

8. In the morning my brother is grumpy.

_____

_____

9. My brother is grumpy in the morning.

_____

_____

Week 27

DLI STUDENT REFERENCE: FORMING SINGULAR AND PLURAL POSSESSIVE NOUNS 5-27

HOW ARE THEY DIFFERENT?

Singular Noun-boy
This singular noun is used if there is one boy in the sentence. (Notice that the boy does not own anything in the sentence.)

Ex: Mrs. Kim saw a boy on the playground.

Singular Possessive Noun-boy's
This singular possessive noun is used when **one** boy owns something in the sentence.

Ex: Mrs. Kim saw the boy's jacket on the playground.

Plural Noun-boys
This plural noun is used when there is more than one boy in the sentence. (Notice that the boys do not own anything in the sentence.)

Ex: Mrs. Kim saw **several** boys on the playground.

Plural Possessive Noun-boys'
This plural possessive noun is used when **more than one** boy owns something in the sentence.

Ex: Mrs. Kim saw **several** boys' jackets on the playground.

FORMING POSSESSIVE NOUNS - REGULAR NOUNS

Singular possessive nouns-Create the singular possessive form of a regular noun by adding TWO things to the noun: **an apostrophe and *s***.

Ex: cat-cat**'s** girl-girl**'s** friend-friend**'s** coach-coach**'s**

Plural possessive nouns- Create the plural possessive form of a regular noun by doing the following: simply add **an apostrophe after the final *s***.

Ex: cats-cats' girls-girls' friends-friends' coaches-coaches'

FORMING POSSESSIVE NOUNS - IRREGULAR NOUNS

Singular possessive nouns-The singular possessive form for an irregular noun is formed in the same manner as a regular noun by adding TWO things to the noun: **an apostrophe and *s*.**

Ex: child-child**'s** man-man**'s** woman-woman**'s**

Plural possessives nouns-The plural possessive form for an irregular noun is formed differently. Start with the plural spelling of the noun and do the following: **add an apostrophe and *s*.**

Ex: children-children**'s** men-men**'s** women-women**'s**

Focus Skill: Singular and Plural Possessive Nouns + Review

Name _____ **Date** _____

Week 27: Day One

- Rewrite each phrase using a singular or plural possessive noun.
- Be prepared to share your reasons for choosing a singular or plural possessive.
- Draw an arrow from the possessive noun to the item that is owned.
- Include the *adjective* in your answer. (Notice the adjective *all* in the example.)

Example: the tires of *all* the bikes — *all* the bikes' tires

1. frames of *many* pictures _____
2. solo of the lead singer _____
3. performances of *four* dancers _____
4. What is the name of the type of noun that shows that two or more people or animals own something? _____

Combine these sentences using a comma and a coordinating conjunction. (FANBOYS)
Circle the comma/conjunction in the new compound sentence.

5. In the 1960s there was a race between the Soviets and Americans. Both countries wanted to put a man on the Moon first.

_____

_____

_____

Add commas if they are needed in the sentences below.
Be prepared to explain why commas **are** or **are not** needed.

6. In 1959 the Soviets successfully landed an unmanned craft on the Moon.
7. Next President John Kennedy set a goal for a manned landing by 1970.
8. Over the next ten years the United States made many trials.
9. On July 16 1969 the Apollo 11 was launched from Cape Canaveral Florida.
10. Neil Armstrong walked on the Moon on July 20 1969 achieving the goal.
11. He said these words "That's one small step for man, one giant leap for mankind."
12. The crew spent a total of two and a half hours on the Moon's surface.

Note: Experts disagree on whether to capitalize the names of the Earth, Moon, and Sun. NASA Document SP-7084: *A Handbook for Technical Writers and Editors* was used as the definitive source for capitalization rules for the names of celestial bodies in this week of instruction.

Focus Skill: Singular and Plural Possessive Nouns + Review

Name _____ **Date** _____

Week 27: Day Two

Circle the word that makes the sentence correct. Use the strategy of covering the apostrophe and everything to the right of it to determine the correct answer in each sentence below. Be prepared to tell what belongs to the possessive nouns.

1. To walk on the (Moons/Moon's) surface required much preparation.

2. The (astronauts/astronaut's/astronauts') critical oxygen supply was provided by their spacesuits.

3. The (spacesuits/spacesuit's) design included both cooling and heating components.

4. Pressure was controlled by (spacesuits/spacesuit's) to protect the (astronaut's/astronauts') bodies.

5. Astronauts wore weighted boots because of reduced gravity on the (Moons/Moon's/Moons') surface.

6. The Apollo 11 (crews/crew's) accomplishments were finalized by placing an American flag on the (Moon's/Moons') surface.

7. Record the numbers of the sentences above that used the following:
   singular possessive nouns _____
   plural possessive nouns _____
   plural nouns _____

Choose the sentence that is correct.

8. O "My dad calls me a space nut!" exclaimed Nathan
   O Jaxon replied, "I think I agree with him".
   O "Well," commented Nathan, I do love all things related to space."
   O Jaxon replied, "I think your dad is a space nut, too."

9. O "The Apollo computers had less power than a cellphone." said Sam.
   O "It's pretty amazing, added Tad, "to see all they accomplished."
   O Sam remarked, "We are going to visit the Kennedy Space Center."
   O "Is the authentic Apollo 11 capsule there?" Asked Tad.

10. Label each **Five in the Front** conversation sentence above with a number **5.** Label **Six in the Back** with **6** and **Interrupted Eight** sentences with **8.**

11. Write this song title correctly.

    rocket man

Focus Skill: Singular and Plural Possessive Nouns + Review

Name _____ **Date** _____

Week 27: Day Three

Circle the word that makes the sentence correct. Use the strategy of covering the apostrophe and everything to the right of it to determine the correct answers below.

1. In America in the 1950s, (pilot's/pilots') suits were made from rubber and were stiff and bulky for movement.

2. The NASA (scientist's/scientists') goal was to create a space suit that would protect Apollo astronauts and give them freedom of movement.

3. The Apollo (spacesuits/spacesuit's) design did not include a jet pack.

Underline the verb or verb phrase twice in the sentences below.
Draw an arrow from the verb to the adverb that modifies it.

4. Designers carefully planned spacesuits with oxygen, water, air-conditioning, and heating.

5. Visors on astronauts' helmets always protected them from bright sunlight.

Circle the comma/conjunction if present in the sentences below.
Tell whether each sentence is simple or compound. Be prepared to explain why.

6. An EMU is a modern spacesuit, and it includes features for jet propulsion.

   O simple sentence O compound sentence

7. An EMU provides for comfort, mobility, and costs a mere 12 million dollars!

   O simple sentence O compound sentence

Complete this sentence to help you remember whether a prepositional phrase needs a comma.

8. **If it's _____ and it comes_____, it needs a comma!**

Add two back-to-back prepositional phrases to the short sentence below to expand it. Place the prepositional phrases **before** the main clause. *Add a comma if necessary.

(Neil Armstrong walked.)

9. _____

Focus Skill: Singular and Plural Possessive Nouns + Review

Name _____ **Date** _____

Week 27: Day Four

Choose the correct word for each sentence.

(astronauts astronaut's astronauts')

1. NASA built chair-like manned maneuvering units for _____.
2. An _____ mobility in space is impressive in an MMU.
3. All of the _____ communications are supported with radios.
4. "No one can doubt an _____ courage," said Nathan.

Tell whether the figurative language in each sentence is simile or metaphor. Underline the two things being compared.

5. A spacesuit is like a tiny spaceship for one.

   O simile O metaphor

6. An astronaut is a miniature rocket ship inside a larger spacecraft.

   O simile O metaphor

Underline the verb or verb phrase twice in the sentences below. Draw an arrow from the verb to the adverb that modifies it.

7. NASA often selected pilots as astronauts.

8. Current space exploration primarily focuses on unmanned missions.

Complete this sentence to help you remember whether a prepositional phrase needs a comma.

9. **If it's _____ and it comes _____, it needs a comma!**

Add back-to-back prepositional phrases to the short sentence below to expand it. Place the prepositional phrases **before** the main clause. *Add a comma if necessary.

(America achieved our goal.)

10. _____

Week 28

DLI STUDENT REFERENCE: CAPITALIZATION 5-28

Nationalities/Languages/Proper Adjectives

a. Use a capital letter if the nationality is used alone: **the French.**

The **French, British, Dutch,** and the **Spanish** had colonies in America.

b. Use a capital letter when referring to a language: **French.**

I take **Spanish,** but my brother takes **French.**

c. Use a capital letter if the nationality is used as a **proper adjective** to tell *what kind*. In the following examples notice that the adjective is capitalized (Greek myths), but the noun is not capitalized (myths).

French bread **Mexican** food **Greek** myths **Swiss** cheese
Italian car **Roman** architecture **Spanish** novel

Organization Names- Capitalize every important word in the name of an organization or charity. Exception: do not capitalize the article ***the*** unless it appears as the first word of a sentence about the organization.

Ex: the American Red Cross the Boy Scouts of America (correct)

Ex: The American Red Cross The Boy Scouts of America (incorrect)

Capitalize the Names of Products

Brand Names-If a brand name stands alone like *Cannon, Dell,* or *Adidas,* it is capitalized.

Product Names- When the brand name precedes the common noun to name a specific product such as *Cannon copier, Dell computer, or Adidas shoes*, only the brand name is capitalized and the common noun is not.

Caution: If you open your cupboard, you will find that many in charge of marketing a company's products have incorrectly used all capital letters on the packages you buy, probably to make the product names stand out.

Correct: Kraft macaroni and cheese
Incorrect: Kraft **M**acaroni and **C**heese

Official Names– Some products have official names. These official names are capitalized. Often they are also registered and display the registration symbol along with their official names.

Ex: *Frappuccino®, Mountain Dew®,* and *Peanut Buster®Parfait.*