



Norfolk Public Schools
The cornerstone of a proudly diverse community

Learning in Place




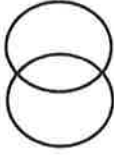
Third Grade

Student Name

Social Studies Learning in Place Plans

Grade 3 Week 1

Textbook Access: <https://student.efiveponds.com/> Username: Norfolks Password: 235105

Monday March 23	Tuesday March 24	Wednesday March 25	Thursday March 26	Friday March 27
<p>Audio version of textbook available online.</p> <p>Create a chart with definitions, examples, and illustrations for each of the following terms: (You can use textbook pg 136-137 to help you)</p> <ul style="list-style-type: none"> • natural resources • human resources • capital resources 	<p>Audio version of textbook available online.</p> <p>Create a chart with definitions, examples, and illustrations for each of the following terms: (You can use textbook pg 136-137 to help you)</p> <ul style="list-style-type: none"> • producers • goods • services 	<p>Audio version of textbook available online.</p> <p>Look at the drawing at the top of pg 112 of your textbook.</p> <p>1) On a sheet of paper, write down two goods or services you see in the drawing.</p> <p>Read and answer the following questions on your paper.</p> <p>2) Read the title and subtitle.</p> <p>How many people lived in ancient Rome at its peak?</p> <p>Read the introduction paragraph and the section titled From Tree to Boat.</p> <p>3) Why couldn't the Romans do much farming?</p> <p>4) What natural resource was used to build ships?</p> <p>5) What did they trade in ancient Rome?</p>	<p>Audio version of textbook available online.</p> <p>Read section The Art of Crafts on pg 113 of your textbook.</p> <p>Answer the following question on a sheet of paper.</p> <p>1) If I went shopping in ancient Rome, what kind of stores would I see? What kind of products could I buy?</p> <p>Read section Rich and Poor on pg 113.</p> <p>2) Why did ancient Romans need jobs?</p> <p>3) What kind of jobs did they have?</p> <p>Read the purple section on the right of pg 113.</p> <p>4) Write down one fact you learned from this section.</p>	<p>Audio version of textbook available online.</p> <p>A model is a miniature version of something. Look at the scale model of ancient Rome on pg 113. Compare this model to this picture of Norfolk or another city you have seen. What is the same? What is different? Create a Venn diagram to compare and contrast the pictures.</p>  

Social Studies Learning in Place Plans

Grade 3 Week 2

Textbook Access: <https://student.efiveponds.com/> **Username:** Norfolk **Password:** 23510S

Monday March 30	Tuesday March 31	Wednesday April 1	Thursday April 2	Friday April 3
<p>Audio version of textbook available online.</p> <p>Historical Question: How did the location of Rome affect their ability to farm, fish, and trade?</p> <p>Look at the map on page 106 of your textbook. This map shows the area around the city of Rome. Notice the many mountains and the water around the Italian Peninsula. (see pg 52-53 for more pictures)</p> <p>Use the map and what you know about the area around Rome to answer the Historical Question on a sheet of paper. Support your answer using evidence from the map. Farming, fishing, and trading should all be discussed.</p>	<p>Audio version of textbook available online.</p> <p>Use your textbook to help you create a cause and effect graphic organizer or chart. Write the effects for the following causes:</p> <ol style="list-style-type: none"> Many Romans earned their living by fishing or trading at nearby ports. The ancient Romans needed crops they could not grow themselves. Ancient Romans needed containers to hold food and drink. The city was large and people across the city needed food. The ancient Romans built roads to connect land. 	<p>We have studied examples of how the environment in Ancient Rome led to many adaptations. Use your cause and effect graphic organizer from yesterday to help you write a one-paragraph summary of how Romans were able to adapt to their environment.</p>	<p>Illustrate the land and contributions of Ancient Rome. Use these pictures to create a chart or Venn Diagram that shows connections between Ancient Rome and a different world culture you have learned about this year. (Ancient Egypt, Ancient China, or Ancient Greece)</p> <p>Look back at previous chapters in your textbook to help you.</p>	<p>Pretend you are interviewing a person who lived in Ancient Rome during its peak. Write an interview between you and the person including your questions and their answers. Be sure to give them a name and ask questions about where they live, famous Roman architecture they have seen or visited, and how they get the things they need to survive.</p>

Social Studies Learning in Place Plans

Grade 3 Week 3

Textbook Access: <https://student.efiveponds.com/> **Username:** NorfolkS **Password:** 23510S

Monday April 6	Tuesday April 7	Wednesday April 8	Thursday April 9	Friday April 10
<p>Look at the Africa Continent page. Answer the following questions on a sheet of paper.</p> <p>1) Notice the large map of Africa in the center. The continent is separated into different countries. Are you surprised there are so many countries on the continent of Africa? Why or why not?</p> <p>2) Find the country of Mali. Look at the Map Legend. What is a major city in Mali? How does the mapmaker let you know it is an important city?</p> <p>3) Find a country in Africa that has the capital city labeled. Write down the country and the capital city.</p>	<p>Use the paragraphs on the Africa Continent Page to help you answer the following questions on a sheet of paper.</p> <p>1) How big is the continent of Africa when compared to the other continents?</p> <p>2) What is culture?</p> <p>3) What types of things do a groups of people have in common if they share the same culture?</p>	<p>The author of the Africa Continent page uses another text feature to help you learn about Africa. Symbols of cameras are placed on the map to show you where the images around the map belong.</p> <p>Answer the following questions on a sheet of paper.</p> <p>1) Look at Camera One under the paragraph. Find camera one on the map. The caption says, "Durban is a busy coastal city in South Africa." What is a coastal city? Use the map to help you figure it out.</p> <p>2) Find Camera Two on the page and on the map. Read the caption. What is the climate and land like in Timbuktu?</p>	<p>Look at the map on the Africa Continent page. Answer the following questions on a sheet of paper.</p> <p>1) How many rivers do you see on the map?</p> <p>2) Which river is close to Egypt?</p> <p>3) Think back to what you learned about ancient Egypt this year. How did the Nile River help the people survive? You may use your textbook to help you.</p>	<p>Audio version of textbook available online.</p> <p>Look at the map of Africa on page 26 of your textbook. Answer the following questions on a sheet of paper.</p> <p>1) How is this map different than the map on the Africa Continent page?</p> <p>2) What landforms do you see on this map?</p> <p>3) Look at the colors on the map. Why is some of the land green and some brown? What do these colors represent?</p>

AFRICA

Africa is the second largest continent on Earth. It is also the second most populated continent. With so many people and 53 different countries, it is no wonder that Africa is home to many different cultures. A **culture** is a way of life that is shared by a group of people. The group often shares things such as beliefs, religion, language, food, and clothing.

Durban is a busy coastal city in South Africa. There are many large cities such as this one in Africa.

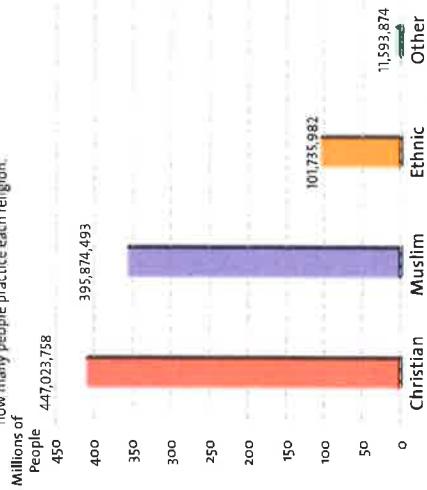


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©eMapshop

BAR GRAPH

A bar graph helps you compare information. It uses bars of different heights to represent different amounts. The bar graph below shows the major religions practiced in Africa. The name of each religion is shown at the bottom of each bar. The number of people in millions is shown on the left. Place a ruler at the top of each bar and follow the edge to the number on the left to see how many people practice each religion.



Timbuktu in Mali was once an important center of trade in Africa. Today the population of this hot desert city is about 32,000. Drifting sands threaten the water supply and vegetation. World organizations are helping the city to solve these problems.

Millions of Africans follow the religion of Islam. People who practice Islam are called Muslims. Mosques, like the one pictured here, serve as places of worship for Muslims.



Much of northern Africa is made up of the hot Sahara desert. People who live there still use camels to travel and to move goods because they can survive for several days without water.

MAP LEGEND

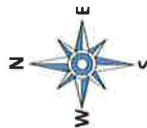
- Capital city
- Other city
- International border



0 400 800 mi



One inch equals 435 miles.



41

NPS Learning in Place

Mathematics

Grade 3



	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Time Study Guide Elapsed Time	Time Study Guide Time	Practice Problems 3.9	Envision Textbook page 396	Envision Textbook page 398
Week 2	Practice Problems 3.8	Understanding Perimeter	Perimeter of Common Shapes	Understanding Area	Estimating and Measuring Area
Week 3	Measurement Study Guide	Practice Problems 3.7	Practice Problems 3.10	Temperature	Envision Textbook page 402

SOL 3.9 Study Guide

Elapsed Time

Learning Goals

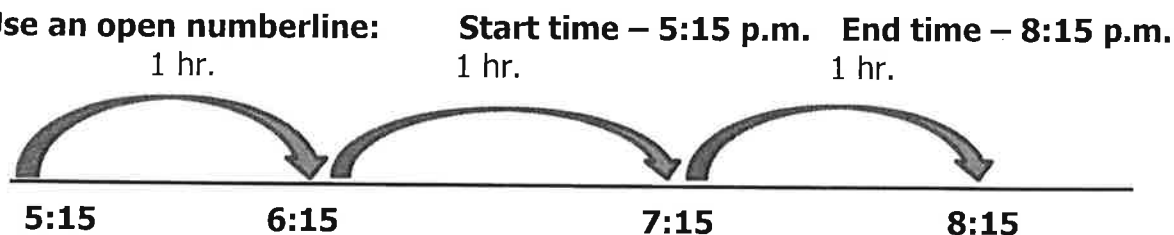
- SOL 3.9 The student will a) tell time to the nearest minute, using analog and digital clocks;
b) solve practical problems related to elapsed time in one-hour increments within a 12-hour period; and c) identify equivalent periods of time and solve practical problems related to equivalent periods of time.

Problem:

A picnic started at 5:15 p.m. and ended at 8:15p.m. How long did the picnic last?

Strategy:

Use an open numberline:



$$1 \text{ hr.} + 1 \text{ hr.} + 1 \text{ hr.} = 3 \text{ hr.}$$

1.First, draw a numberline and list the start time. **2.** Hop in time frames that are easy to chunk. List the current time on the bottom and the time passed on the top. **3.** When finished add all of the time passed (the top) to find out the total of time elapsed.

60 seconds = 1 minute

60 minutes = 1 hour

24 hours = 1 day

7 days = 1 week

365 days = 1 year (every 4 years there are 366 days called a leap year)

12 months = 1 year

Vocabulary:

Elapsed Time	The time that goes by while an event is occurring.	A picnic started at 5:15 p.m. and ended at 8:15p.m. How long did the picnic last?
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Practice at Home

- Many questions require students to read a clock, a skill learned in previous grades. Have an analog clock or watch in your home so that your child can practice telling time.
- Use everyday tasks to help your child practice elapsed time. For example, "I started making dinner at 4:55. We ate at 5:55. How long did it take to make dinner?" or "Practice started at 6:00 and ended at 8:00. How long were you at practice?"

1. What time will it be in 60 minutes?

- A.) 9:35
- B.) 10:35
- C.) 11:07
- D.) 11:35



2. What time is 2 hours past 1:15?

- A.) 11:15
- B.) 12:15
- C.) 2:15
- D.) 3:15

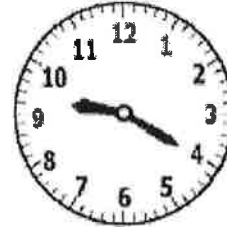
3. A game ended at the time shown on the clock.



It started 4 hours earlier. What time did the game start?

- A.) 3:45
- B.) 1:45
- C.) 9:45
- D.) 7:45

4. The Washington family started cleaning their garage one morning at the time shown on the clock.



They stopped for lunch at 1:20 P.M. the same day. What is the total amount of time that passed between the time the Washington family started cleaning and the time they stopped for lunch?

- A.) 5 hours
- B.) 2 hours
- C.) 4 hours
- D.) 3 hours

5. Seth left home at the time shown on the clock to go to the science museum.



Seth stayed at the science museum for 5 hours. He left the museum at –

- A.) 1:20 p.m.
- B.) 3:05 p.m.
- C.) 2:20 p.m.
- D.) 9:40 p.m.

6. Austin played football for 3 hours. The clock below shows what time Austin stopped playing football.



What time did Austin start playing football?

- A.) 10:30 a.m.
- B.) 11:30 a.m.
- C.) 4:30 p.m.
- D.) 3:30 p.m.

7.

Alex worked for 5 hours raking leaves. How many minutes are equivalent to 5 hours?

- ☐ A 500 minutes
- ☐ B 300 minutes
- ☐ C 150 minutes
- ☐ D 120 minutes

8.

Meegan finished lunch at the time shown on the clock below.



Which is CLOSEST to the time shown on the clock?

- A 12:01
- B 12:07
- C 1:01
- D 1:07

9.



Which of these shows the same time as the clock above?

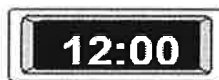
A



B



C

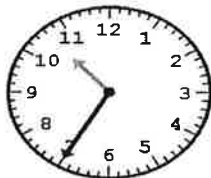


D



10. What time does the clock read?

- A.) 10:07
- B.) 10:35
- C.) 11:07
- D.) 11:35



11. Jim worked for 5 hours raking leaves. How many minutes are equivalent to 5 hours?

12. On a clock, the hour hand is the (longer / Shorter) hand.

13. What is another way of writing "quarter after ten?"

- A 9:45
- B 10:10
- C 10:15
- D 10:25

14. James spent 60 minutes at soccer practice. How many hours long was soccer practice?

15. What time does the watch show?



Use the calendar to answer problems 16-20.
16.

2018 MARCH						
SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Janie takes gymnastics every Saturday.
Name the dates she will go to her lessons?

17. Joe's birthday is the 4th Thursday of this month. What is the date?

- A.) March 27 C.) March 15
B.) March 22 D.) March 29

18. If the date is March 12th, what date would it be in two weeks?

19. If today is Monday, March 19, what is tomorrow?

20.) How many Tuesday's are in the month of March?

SOL 3.9 Study Guide

Time

Name: _____

Date: _____

Learning Goals

3.9 The student will identify equivalent periods of time, including relationships among days, months, and years, as well as minutes and hours.

Vocabulary/ Explanations:

60 seconds = 1 minute	60 minutes = 1 hour	24 hours = 1 day
7 days = 1 week	365 days = 1 year (every 4 years there are 366 days called a leap year)	12 months = 1 year
About 30 days = 1 month		
Quarter past – 15 minutes after an hour	Quarter past 3 is 3:15	
Quarter til – 15 minutes before the next hour	Quarter til 5 is 4:45	
Half past – 30 minutes after an hour	Half past 8 is 8:30	

Practice at Home

Many questions require students to read a clock, a skill learned in previous grades. Have an analog clock or watch in your home so that your child can practice telling time. Periodically throughout the day ask the student to tell the time on the analog clock.

What time does the clock read?



3:07

Students need to know the relationships between periods of time.

Example:

A movie lasts 2 hours. How many minutes long was the movie?

1 hr = 60 mins

1 hr = 60 mins

Total minutes 120 mins

Sample Questions

1. What time does the clock read?

- A. 10:07
- B. 10:35
- C. 11:07
- D. 11:35



2. Jim worked for 5 hours raking leaves. How many minutes are equivalent to 5 hours?

3. On a clock, the hour hand is the (longer / Shorter) hand.

4. What is another way of writing “quarter after ten?”

- A 9:45
- B 10:10
- C 10:15
- D 10:25

5. James spent 180 minutes at traveling to his grandmother's house. How many hours long was the trip to his grandmother's house?

6. Henry lived in California for 36 months. How many years did Henry live in California for?

7. What time does the watch show?



Use the calendar to answer problems 7-10.

7. Janie takes gymnastics every Saturday. Name the dates she will go to her lessons?

2018 MARCH						
SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

8. Joe's birthday is the 4th Thursday of this month. What is the date?

A. March 27 C. March 15

B. March 22 D. March 29

9. If the date is March 12th, what date would it be in two weeks?

10. On Friday, March 2nd, Pamela told Jack she wanted to have a hiking club party on Friday, March 9th. Which of the below is accurate?

A Pamela wanted to have the party that week.

B Pamela wanted to have the party last week.

C Pamela wanted to have the party the next day.

D Pamela wants to have the party in a week.

11. If today is Monday, March 19, what is tomorrow?

3.9 The student will

- a) tell time to the nearest minute, using analog and digital clocks;
- b) solve practical problems related to elapsed time in one-hour increments within a 12-hour period; and
- c) identify equivalent periods of time and solve practical problems related to equivalent periods of time.

1 Which clock best shows 7:48?



2 Directions: Write your answer in the box.

What time is shown on this clock?



3 Which shows the same time as this clock?



4 Directions: Write your answer in the box.

A movie started at this time:



It ended at this time:



How long was the movie?

- 5 Kristen arrived at the beach at 12:45 p.m. She left at 5:45 p.m.
What was the total amount of time Kristen was at the beach?

A eleven hours
B seven hours
C five hours
D four hours

- 6 Anna stopped reading her book at 3:05. She read for one hour.
What time did Anna start reading?

F 4:05
G 4:00
H 3:10
J 2:05

- 7 Directions: Write your answer in the box.

Evan started playing baseball at 8:30.



He played for 2 hours. What time did Evan stop playing baseball?

- 8 Meghan went to camp for two weeks. How many days was she at camp?

A 60 days
B 52 days
C 14 days
D 7 days

- 9 Directions: Write your answer in the box.

Lauren went on a trip for 21 days. How many weeks was she on her trip?

- 10 Directions: Circle each box you want to select. You must select all correct answers.

Mark all of the periods of time that are equivalent to one year.

17 weeks	6 months	365 days
7 days	4 weeks	12 months

Lesson

17-2

Understand that time can be measured to the minute and read on a clock by skip counting by 5s and counting on by 1s.

Time to the Minute

How do you tell time to the nearest minute?

The clock shows the time a train is scheduled to arrive at Pinewood Station. What time is the train scheduled to arrive? Give the time in digital form and in two other ways.



Guided Practice*

Do you know HOW?

In 1 and 2, write the time shown on each clock in two ways.

1.



2.



Do you UNDERSTAND?

3. **Reasoning** In the example above, why is 42 minutes past 12 the same as 18 minutes to 1? Explain.

4. The clock below shows the time that an airplane landed. Write the time in two ways.



Independent Practice

In 5–7, write the time shown on each clock in two ways.

5.



6.



7.



Lesson

17-3

Understand It!
There are relationships that make it possible to change between any two units of time.

Units of Time

How can you change units of time?

The class is growing a plant from a seed. The project will last for 5 weeks. How many days are in 5 weeks? The picture shows how long the seed has been growing. How many hours is this?

8 days growth



Relating Units of Time

1 week (wk) = 7 days

1 day (d) = 24 hours

1 hour (h) = 60 minutes

Guided Practice

Do you know HOW?

For 1–3, copy and complete to change the units.

1. 8 weeks = days
2. 2 days = hours
3. How many days are in 2 weeks, 4 days?

Do you UNDERSTAND?

4. In the example above, why do you multiply the number of weeks by 7?
5. At the end of the first week, the class had worked on the science experiment for 6 hours. How many minutes did the class work on the experiment?

Independent Practice

For 6–15, copy and complete to change the units.

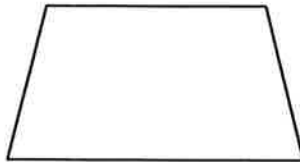
6. 3 hours = minutes
7. 5 days = hours
8. 4 hours = minutes
9. 7 weeks = days
10. 3 weeks = days
11. 7 days = hours
12. How many hours are in 3 days, 5 hours?
13. How many minutes are in 5 hours, 10 minutes?
14. How many days are in 10 weeks?
15. How many hours are in 9 days?

3.8 The student will estimate and

- a) measure the distance around a polygon in order to determine its perimeter using U.S. Customary and metric units; and
- b) count the number of square units needed to cover a given surface in order to determine its area.

1 Directions: Write your answer in the box.

Use your centimeter ruler to help answer the question. What is the perimeter of this polygon?



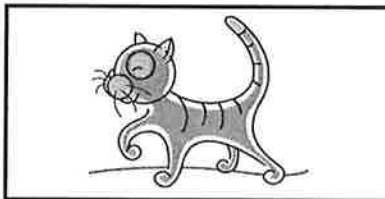
2 Use your inch ruler to help answer the question. What is the perimeter of this square?

- A 4 inches
- B 3 inches
- C 2 inches
- D 1 inch



3 Directions: Write your answer in the box.

Sally wants to put a border around her picture. Use your inch ruler to find the perimeter of her picture to determine the amount of border she will need.



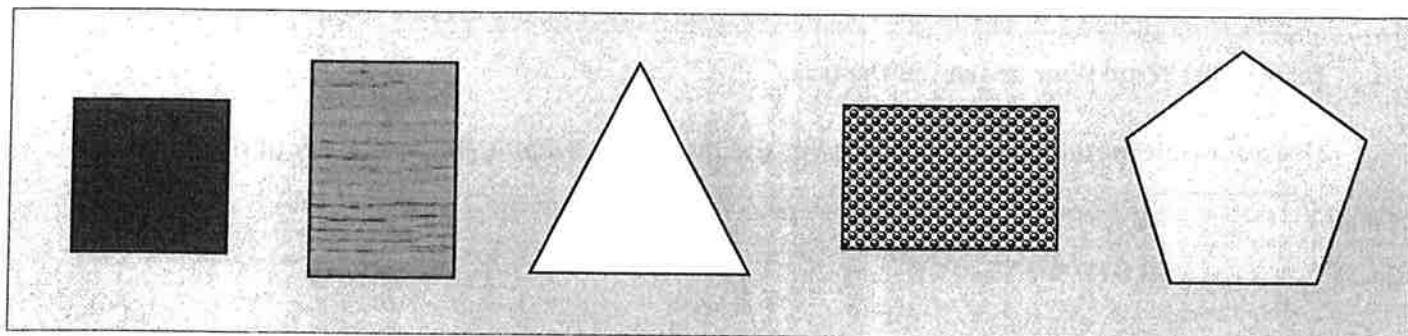
4 Use an inch ruler to find the perimeter of this dollar bill.



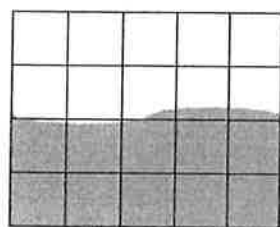
- F 12 inches
- G 8 inches
- H 4 inches
- J 2 inches


5 Directions: Circle each shape you want to select. You must select all correct answers.

Mark each shape that has a perimeter of 10 centimeters.



6 Roxane is covering her pool with plastic. The shaded part shows how much she has covered.



Key:  = 1 square yard

About how much more plastic does she need to cover her pool?

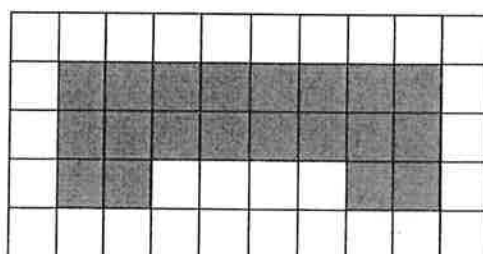
- A 1 square yard
- B 6 square yards
- C 10 square yards
- D 18 square yards

7 Directions: Write your answers in the boxes.



What are the area and perimeter of the shaded figure?

Area:

Perimeter:

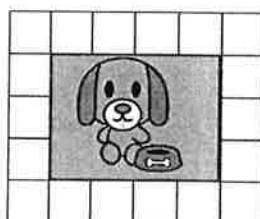



Key

 = 1 square unit
 1 unit

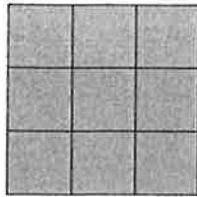
8 What is the area of the dog picture?


- F 30 square inches
- G 24 square inches
- H 18 square inches
- J 12 square inches



Key:  = 1 square inch

- 9 Meghan wants to make a rug that is 3 feet long and 3 feet wide.

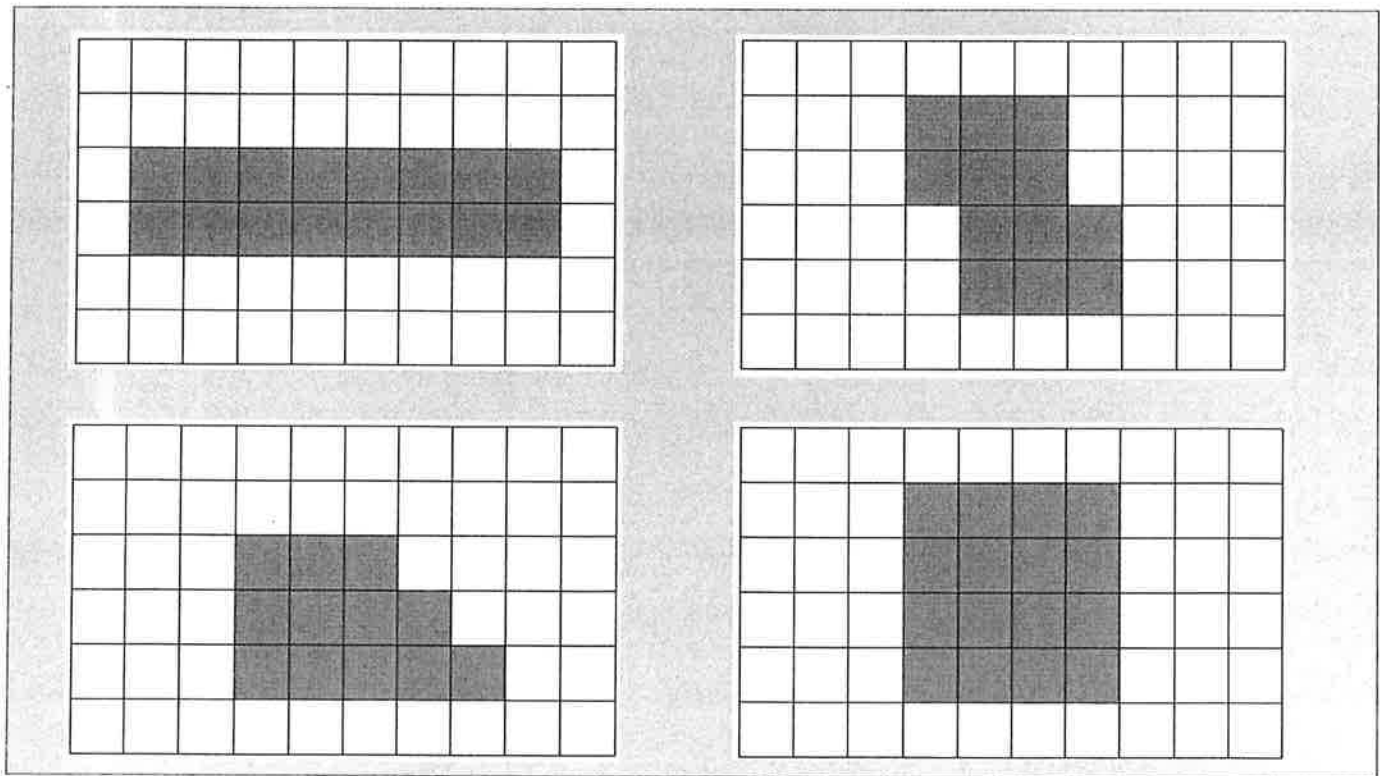


Key:  = 1 square foot



How much material will she need?

- A 12 square feet
 - B 10 square feet
 - C 9 square feet
 - D 6 square feet
- 10 Directions: Circle each figure you want to select. You must select all correct answers.

Look at the shaded figures on the grids. Mark each figure that has a perimeter of 16 units and an area of 12 square units.



Key

 = 1 square unit
 1 unit

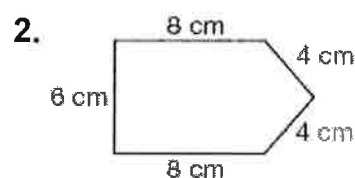
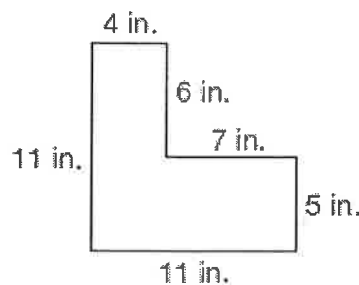
Understanding Perimeter

The **perimeter** of a figure is the distance around it.

The perimeter is found by adding the lengths of the sides.

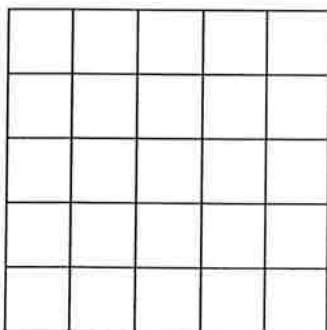
$$4 \text{ in.} + 6 \text{ in.} + 7 \text{ in.} + 5 \text{ in.} + 11 \text{ in.} + 11 \text{ in.} = 44 \text{ in.}$$

The perimeter of the figure is 44 inches.

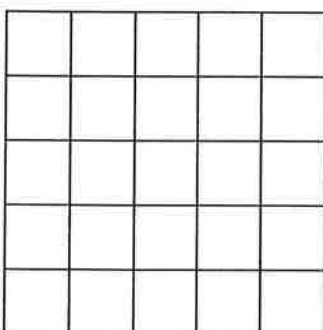


Draw a figure with the given perimeter.

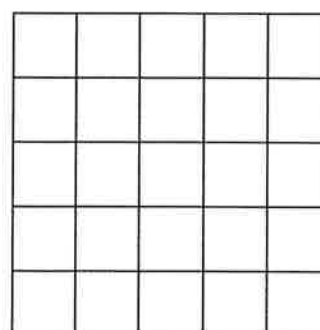
4. 6 units



5. 10 units



6. 10 units



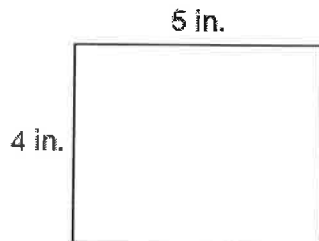
7. **Number Sense** A rectangle has a length of 5 yards and a width of 3 yards. What is its perimeter? Explain your answer.

Perimeter of Common Shapes

Use the properties of these common shapes to determine the missing side lengths. Then find the perimeter.

Rectangle

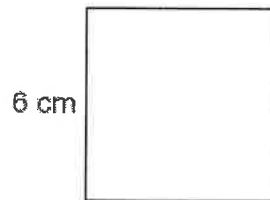
Two pairs of sides have the same length.



$$4 \text{ in.} + 5 \text{ in.} + 4 \text{ in.} + 5 \text{ in.} = 18 \text{ in.}$$

Square

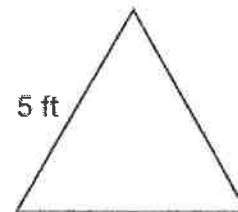
All 4 sides have the same length.



$$6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} = 24 \text{ cm}$$

Equilateral Triangle

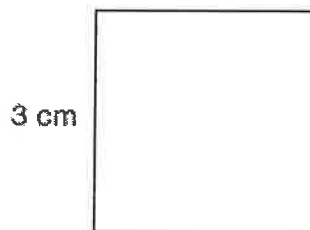
All 3 sides have the same length.



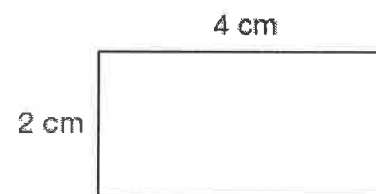
$$5 \text{ ft} + 5 \text{ ft} + 5 \text{ ft} = 15 \text{ ft}$$

Find the perimeter of each polygon.

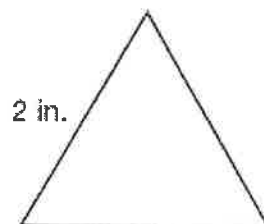
1.



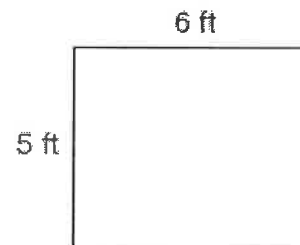
2.



3.



4.

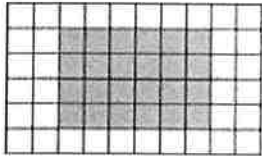


5. **Reasonableness** Can two different size squares have the same perimeter? Explain.

Understanding Area

The **area** of a figure can be found in two ways.

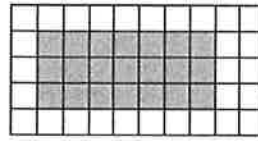
A **square unit** is a square with sides that are each 1 unit long.



$\square = 1$ square inch

Count the square units in the shaded rectangle. There are 24 squares shaded. So, the area of the rectangle is 24 square inches.

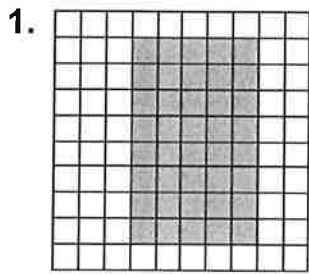
You can think of the grid squares as an array.



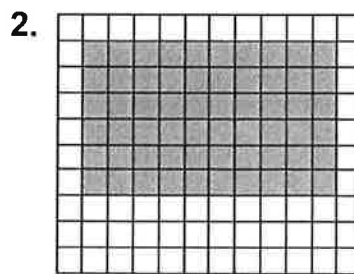
$\square = 1$ square centimeter

Each row has 7 squares. There are 3 rows, so multiply $3 \times 7 = 21$. The area of the rectangle is 21 square centimeters.

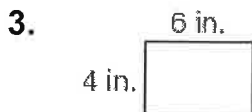
Find the area of each figure.



$\square = 1$ square inch



$\square = 1$ square meter



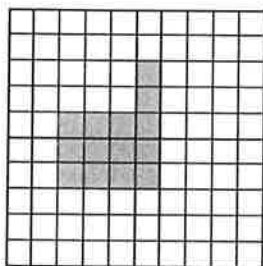


5. **Reasonableness** Can two different size rectangles have the same area? Explain.

Estimating and Measuring Area

Two types of irregular figures can be placed on a grid.

If the shape completely fills the squares, count the squares.



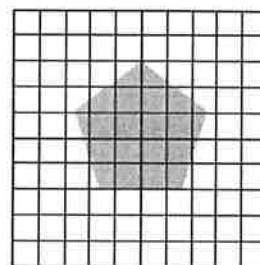
□ = 1 square inch

Count the squares by column or row.
Let's add the columns from left to right.

$$3 + 3 + 3 + 5 = 14$$

The area is 14 square inches.

If the shape does not completely fill the squares, estimate the number of whole squares.



□ = 1 square inch

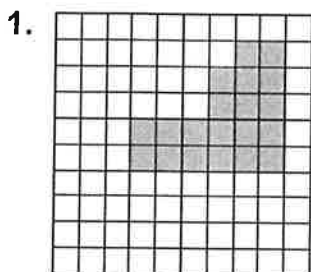
Count the whole squares that are filled.
There are 12 whole squares.

Estimate the number of whole squares made from the partial squares. About 5 whole squares could be made.

$$12 + 5 = 17$$

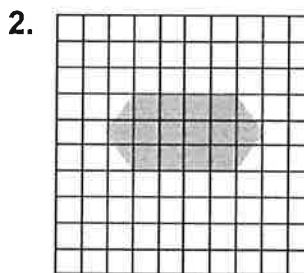
The area is about 17 square inches.

Find the area.



□ = 1 square foot

Estimate the area.



□ = 1 square centimeter

3. **Writing to Explain** How can you estimate the area of a circle on a grid?

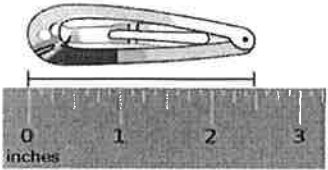
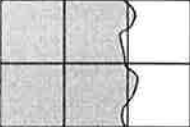
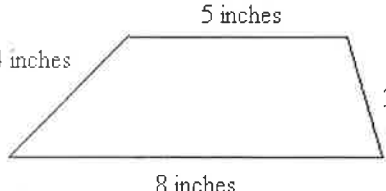


3.7a/b, 3.8, 3.10 Study Guide

Measurement –Length, Volume, Area, Perimeter, Temperature

Learning Goals

- 3.7 a) length to the nearest $\frac{1}{2}$ inch, inch, foot, yard, centimeter, and meter;
 b) liquid volume in cups, pints, quarts, gallons, and liters;
- 3.8 a) measure the distance around a polygon in order to determine perimeter; and
 b) count the number of square units need to cover a given surface in order to determine area.
- 3.10 The student will read temperature to the nearest degree from Celsius thermometer and Fahrenheit thermometer. Real thermometers and physical models of thermometers will be used.

Vocabulary

Length	<p>how far an object is from end to end (1/2 inch, inch, foot, yard, centimeter, meter)</p> <p>When estimating length, choose the best unit of measure.</p> <p>A pencil would be measured in <i>centimeters</i> or <i>inches</i></p> <p>A person would be measured in <i>feet</i></p> <p>The length of the playground would be measured in <i>yards</i> or <i>meters</i></p>	<p>The hairclip Measures to 2 $\frac{1}{2}$ inches</p> 
Area	<p>The amount of space covered by something (i.e. carpet)</p>	<p>The shaded part covers about 4 units</p> 
Perimeter	<p>The distance around something. (i.e. fence)</p> <p>**20 inches of yarn would be needed to outline the perimeter of the trapezoid</p>	<p>The total length of all sides is 20 inches</p> 
Thermometer	<p>a tool that is used to measure temperature.</p>	
Volume	<p>Amount of liquid needed to fill a container How much milk you put in your cereal would be measured in <i>cups</i>. <i>Pints, liters, and quarts</i> may be used to measure somewhat larger containers (less than a gallon). Large containers, such a bathtubs or swimming pools, should be measured in <i>gallons</i>. When measuring volume, read the measurements on the side of the measuring cup. They are written as fractions.</p>	

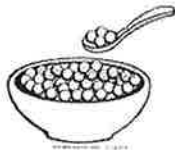
Which is CLOSEST to the height of the flagpole in the picture below?



- A. 1 inch
- B. 2 inches
- C. 3 inches
- D. 4 inches

Breanna poured milk in her cereal bowl.
About how much milk did she use?

- A 1 gallon
- B 2 quarts
- C 2 pints
- D 1 cup



About how high is a door?

- A 7 feet
- B 7 inches
- C 7 yards
- D 7 centimeters

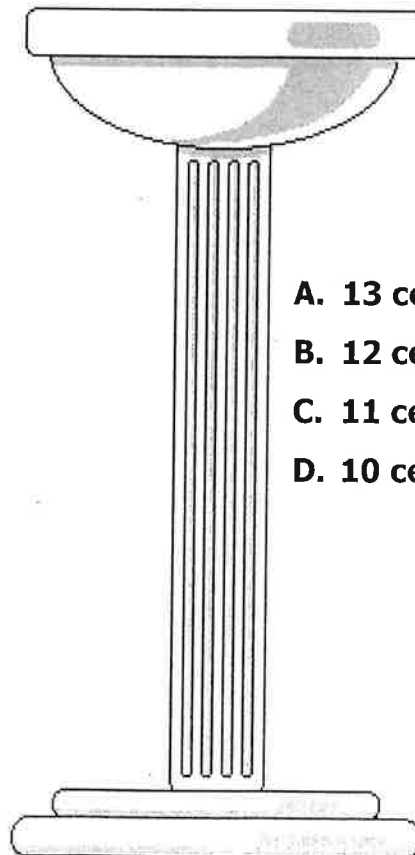


Which is CLOSEST to the amount of water
Shelby's watering can will hold when full?



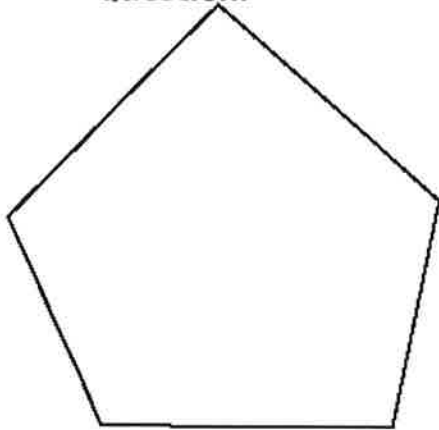
- A. 1 inch
- B. 1 pint
- C. 1 cup
- D. 1 gallon

Use your centimeter ruler to help you
answer this question.
Which is CLOSEST to the height of the
birdbath in the picture below?



- A. 13 centimeters
- B. 12 centimeters
- C. 11 centimeters
- D. 10 centimeters

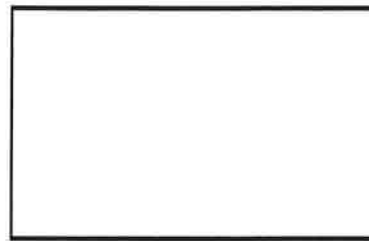
Use your centimeter ruler to help you answer this question.



Which is CLOSEST to the distance around this figure?

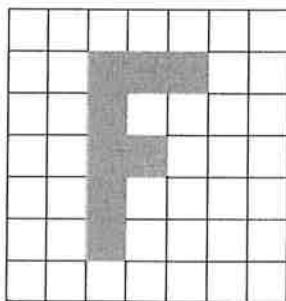
- A 12 centimeters
- B 15 centimeters
- C 18 centimeters
- D 20 centimeters

Use your centimeter ruler to help you answer this question. What is the distance around this figure?



- A 12 centimeters
- B 16 centimeters
- C 18 centimeters
- D 20 centimeters

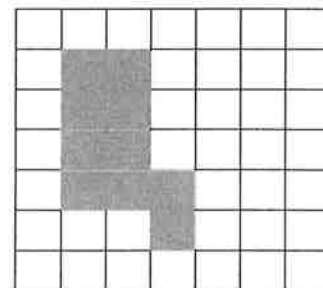
Each small square on the grid is 1 square unit.



What is the area of the shaded F? _____

What is the perimeter of the shaded F? _____

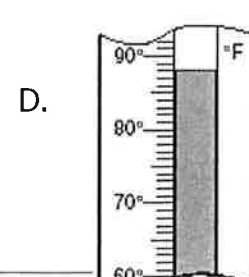
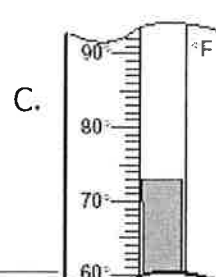
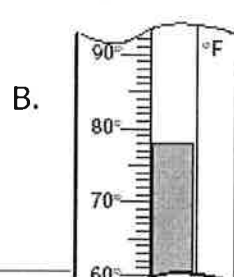
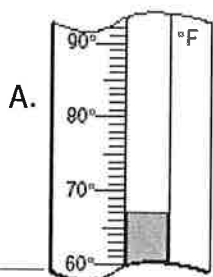
Each small square on the grid is 1 square unit.



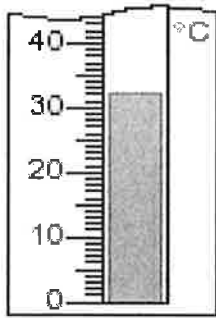
What is the area of the shaded figure? _____

What is the perimeter of the shaded figure? _____

Which thermometer shows 78°F?



Which is closest to the temperature shown on this thermometer?



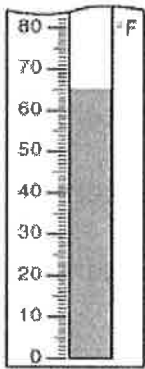
A 28°

B 32°

C 35°

D 40°

15. Which is closest to the temperature shown on this thermometer?



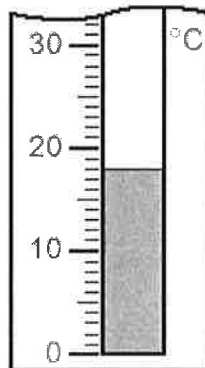
A 69 ° F

C 60 ° F

B 65 ° F

D 58 ° F

Which is CLOSEST to the temperature shown on this thermometer?



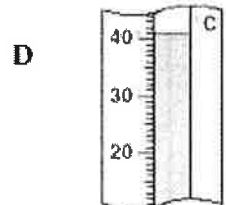
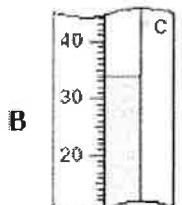
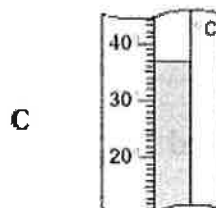
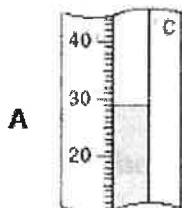
A 10°C

B 20°C

C 25°C

D 28°C

Which of the following thermometers shows CLOSEST to 37 degrees Celsius?

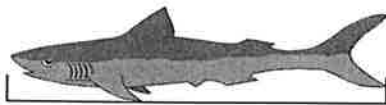


3.7 The student will estimate and use U.S. Customary and metric units to measure

- a) length to the nearest $\frac{1}{2}$ inch, inch, foot, yard, centimeter, and meter; and
- b) liquid volume in cups, pints, quarts, gallons, and liters.

1 Directions: Write your answer in the box.

Measure the length of the shark to the nearest centimeter.

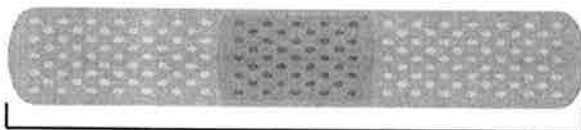


2 About how long is a pencil?

- A 20 centimeters
- B 20 meters
- C 20 yards
- D 20 miles

3 Directions: Write your answer in the box.

Measure the length of the Band-Aid to the nearest half inch.



4 Directions: Write your answer in the box.

Measure the length of the car to the nearest centimeter.



5 Directions: measure the length of the rectangle to the nearest half inch.



6 What is the length of the glue stick to the nearest half inch?

- F $2\frac{1}{2}$ inches
- G 3 inches
- H $3\frac{1}{2}$ inches
- J 4 inches



7 Erica's father filled a bucket like this bucket with water. About how much water did he use?

- A 3 cups
- B 3 liters
- C 3 quarts
- D 3 gallons



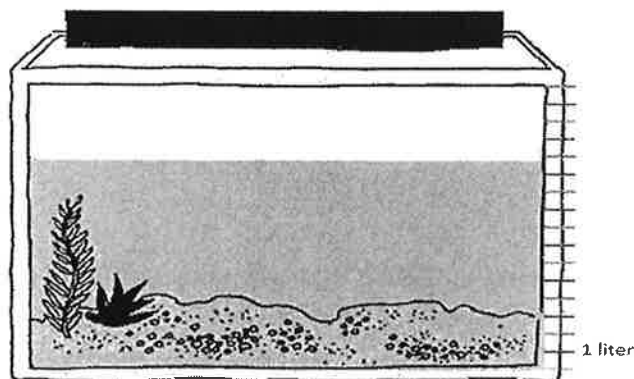
8 Directions: Write your answer in the box.

Molly poured some water in the 4-cup jar below. How many cups of water did Molly pour in the jar?



9 Which measurement is the closest to the amount of water in the fish tank?

- F 10 liters
- G 12 liters
- H 14 liters
- J 16 liters



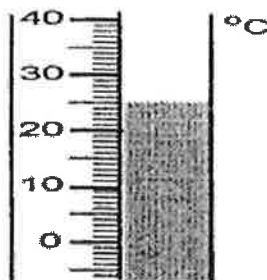
10 About how much will this glass hold?

- A 1 cup
- B 1 pint
- C 1 quart
- D 1 gallon



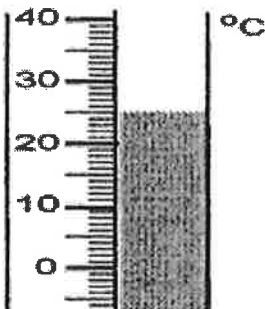
1 What scale is this thermometer?

- A Customary
- B Celsius
- C Kelvin
- D Fahrenheit



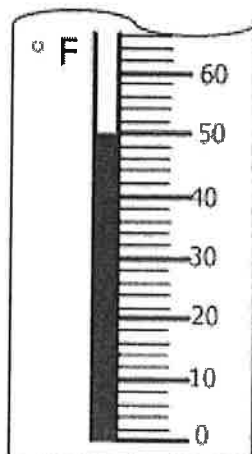
2 Which is closest to the temperature shown on this thermometer?

- F 35°C
- G 30°C
- H 25°C
- J 20°C



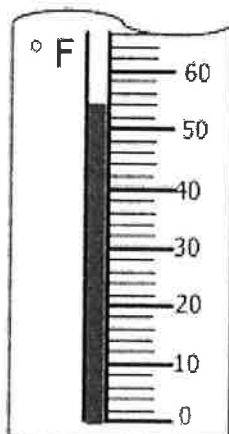
3 Which is closest to the temperature shown on this thermometer?

- A 60°F
- B 50°F
- C 40°F
- D 30°F



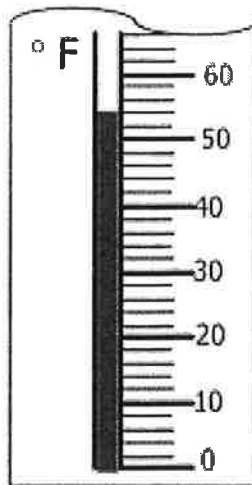
4 What scale is being used on this thermometer?

- F Customary
- G Celsius
- H Kelvin
- J Fahrenheit



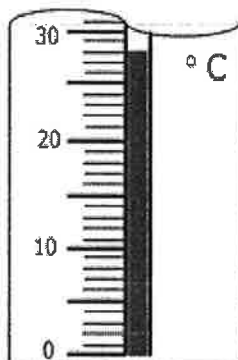
5 Which is closest to the temperature shown on this thermometer?

- A 52°F
- B 54°F
- C 56°F
- D 58°F



6 Which is closest to the temperature shown on this thermometer?

- F 38°C
- G 33°C
- H 28°C
- J 23°C



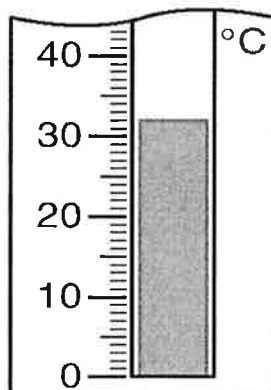
7 Which is closest to the temperature shown on this thermometer?

- A 50°F
- B 60°F
- C 70°F
- D 80°F



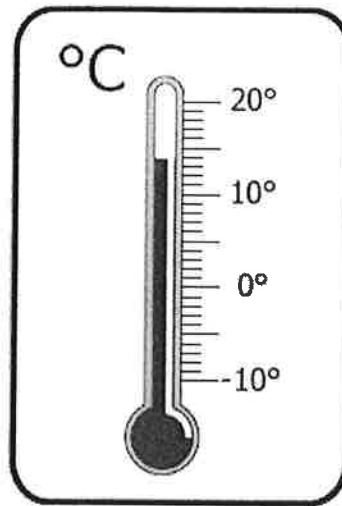
8 Which is closest to the temperature shown on this thermometer?

- F 22°C
- G 32°C
- H 42°C
- J 52°C



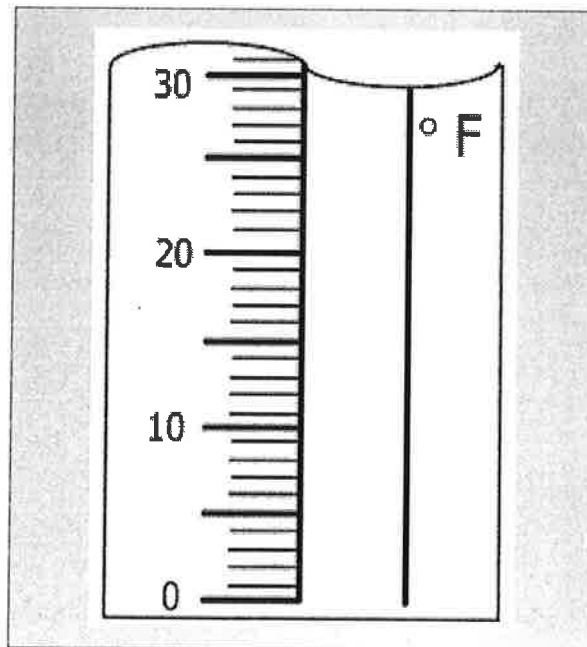
9 Which is closest to the temperature shown on this thermometer?

- A 12°C
- B 14°C
- C 18°C
- D 20°C



10 Directions: Shade the thermometer to show the temperature.

The weatherman said that the temperature outside was 18 degrees Fahrenheit. Show 18°F on this thermometer.



Temperature

Temperature can be measured in degrees Fahrenheit ($^{\circ}\text{F}$) and degrees Celsius ($^{\circ}\text{C}$).

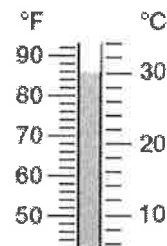
Water freezes at 32°F and boils at 212°F .

Water freezes at 0°C and boils at 100°C .

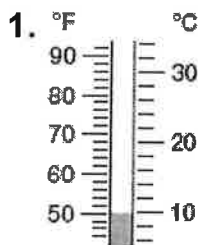
To read a thermometer, find where the bar ends.
Each mark represents 2° on each scale.

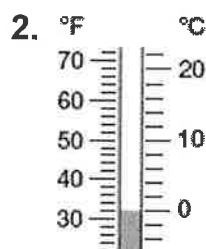
The temperature is three marks
above 80°F , or 86°F .

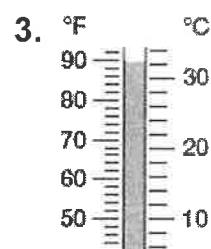
The temperature is 30°C .



Write each temperature in $^{\circ}\text{F}$ and $^{\circ}\text{C}$.







Estimation Choose the better temperature for each activity.

4. jogging

20°C or 40°C

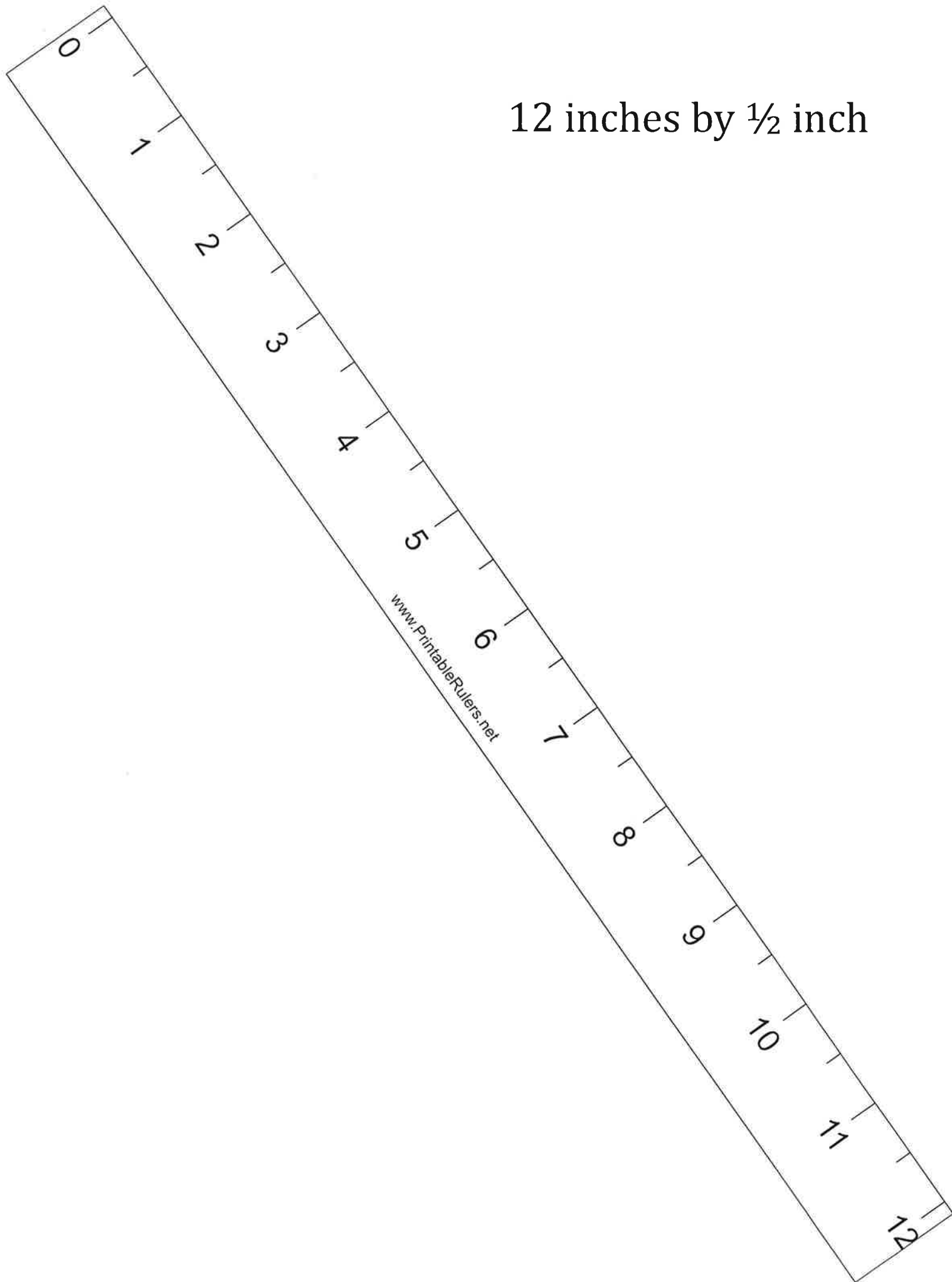
5. sledding

20°F or 60°F

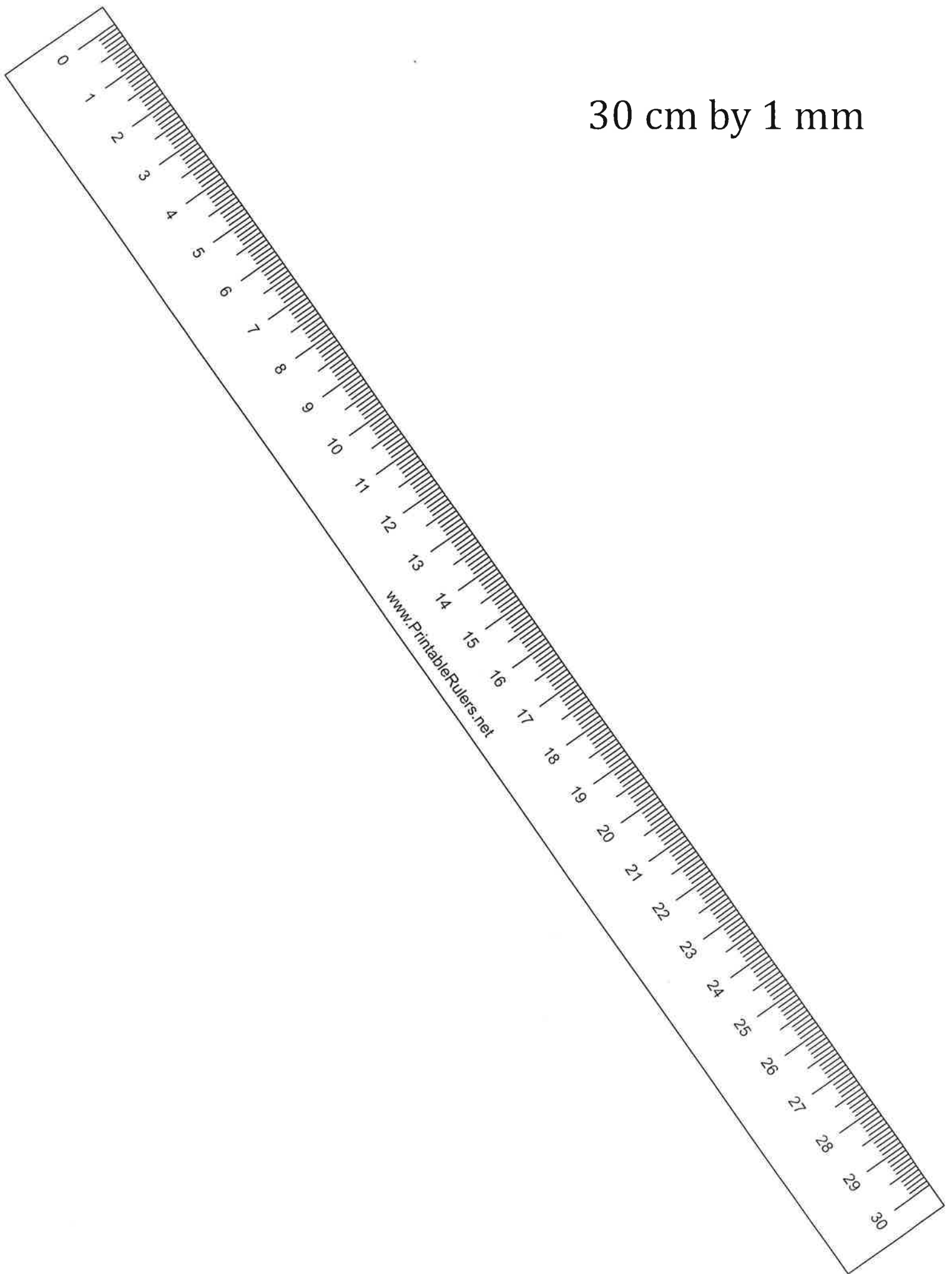
6. swimming

40°F or 80°F

12 inches by $\frac{1}{2}$ inch



30 cm by 1 mm



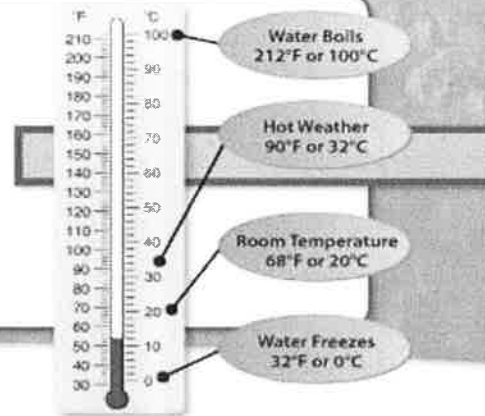
Lesson 17-5

Understand III
Temperatures can be read in degrees Fahrenheit or in degrees Celsius.

Temperature

How are temperatures measured?

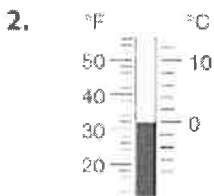
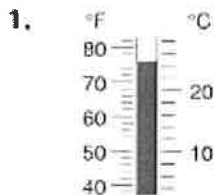
A thermometer is a tool that measures temperature on the Fahrenheit or Celsius scale. Degrees Fahrenheit ($^{\circ}\text{F}$) and degrees Celsius ($^{\circ}\text{C}$) are units that are used to measure temperature.



Guided Practice*

Do you know HOW?

In 1 and 2, write each temperature in $^{\circ}\text{F}$ and in $^{\circ}\text{C}$.

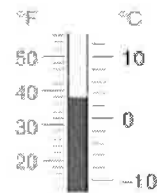


Do you UNDERSTAND?

3. Look at the thermometer above. Would you swim outside if the temperature was 28°C? Explain.

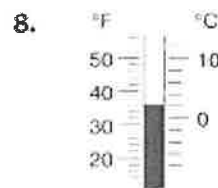
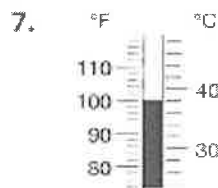
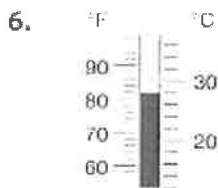
4. **Writing to Explain** Which is the better temperature for bicycling outside, 15°F or 50°F? Explain.

5. Mateo needs to wear a coat to go outside today. The thermometer shows the temperature. What is the temperature in degrees Fahrenheit?



Independent Practice

In 6–8, write each temperature in $^{\circ}\text{F}$ and $^{\circ}\text{C}$.



Norfolk Public Schools

Science Learning in Place Plan – Grade 3

Week 1

Monday	Tuesday	Wednesday	Thursday	Friday
Grade 3 Science Fusion Textbook Pages Unit 7 Lesson 1				
<p>What is the Water Cycle? pg. 289</p> <ul style="list-style-type: none"> Engage Your Brain! Active Reading <p>Water Moves All Around pg. 290-291</p> <ul style="list-style-type: none"> Active Reading Do the Math! 	<p>Three Forms of Water pg. 292-293</p> <ul style="list-style-type: none"> Active Reading Where is the Water? 	<p>Changing States pg. 294-295</p> <ul style="list-style-type: none"> Active Reading Finding evaporation and Condensation 	<p>The Water Cycle pg. 296-297</p> <ul style="list-style-type: none"> Active Reading The Sun and the Water Cycle 	<p>Students will complete:</p> <ul style="list-style-type: none"> Sum It Up! pg. 298 Word Play pg. 299 Apply Concepts pg. 300

Week 2

Monday	Tuesday	Wednesday	Thursday	Friday
Grade 3 Science Fusion Textbook Pages Content to Review				
<p>What Do you See? pg. 6-7</p> <ul style="list-style-type: none"> Active Reading Look for a Question <p>Getting Answers pg. 8-9</p> <ul style="list-style-type: none"> Active Reading Predict 	<p>Investigating Answers pg. 10-11</p> <ul style="list-style-type: none"> Active Reading Question 	<p>Students will complete:</p> <ul style="list-style-type: none"> Sum It Up! pg. 12 Word Play pg. 13 Apply Concepts pg. 14 	<p>Communicating Data pg. 36-37</p> <ul style="list-style-type: none"> Active Reading Question Question Question <p>How to do it! pg. 38-39</p> <ul style="list-style-type: none"> Active Reading Question 	<p>Why Graphs? pg. 40-41</p> <ul style="list-style-type: none"> Do the Math! <p>Students will complete:</p> <ul style="list-style-type: none"> Sum It Up! pg. 42 Word Play pg. 43 Apply Concepts pg. 44

Week 3

Monday	Tuesday	Wednesday	Thursday	Friday
Grade 3 Science Fusion Textbook Pages Unit 4 Lesson 5 & Unit 6 Lesson 1				
<p>People and the Environment pg. 188</p> <ul style="list-style-type: none"> Engage Your Brain! Write an Effect 	<p>How Can We Help? pg. 190-191</p> <ul style="list-style-type: none"> Helpful or Not Helpful? 	<p>Students will complete:</p> <ul style="list-style-type: none"> Sum It Up! pg. 192 Word Play pg. 193 <p>Apply Concepts pg. 194</p>	<p>The Effects of Pollution pg. 256-257</p> <ul style="list-style-type: none"> Active Reading What's the Cause? 	<p>Reduce, Reuse, and Recycle pg. 258-259</p> <ul style="list-style-type: none"> Active Reading Do the Math!



Essential Question

What Is the Water Cycle?

Engage Your Brain!

Find the answer to the following question in this lesson and record it here.

You can see mist above the lake's surface. Where did it come from?

Active Reading

Lesson Vocabulary

List the terms. As you learn about each one, make notes in the Interactive Glossary.

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Compare and Contrast

Many ideas in this lesson are connected because they explain how things compare and contrast. Active readers stay focused on comparisons and contrasts when they ask themselves, How are these things alike? How are they different?



Water Moves All Around

If you were in a spaceship looking down at Earth, you would see that most of Earth is covered by water.

Active Reading As you read this page, find and underline two examples of fresh water.

Almost all water on Earth is in the oceans. Ocean water is **salt water**, which contains salt, of course! It is too salty for us to drink. However, many life forms live in salt water.

Only a tiny part of Earth's water is fresh water. **Fresh water** has very little salt in it. We need fresh water to drink. Many plants and animals need fresh water, too. Rivers and lakes contain fresh water, but most of Earth's fresh water is frozen!

Ocean water

Water is needed for life. About three-fourths of Earth is covered by water. Most of that water is in the oceans.

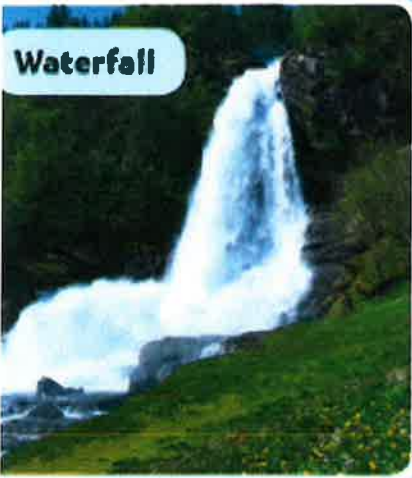
Fresh water
wa
wa
fre

Icebergs in an ocean



Icebergs are made of fresh water. Most of Earth's fresh water is frozen in glaciers at the South Pole. That's why it's important to conserve the fresh water that is not frozen.

Waterfall



Fresh water flows in this waterfall. Much of Earth's fresh water is above ground, but some fresh water is underground.

Lake



This lake contains fresh water. Lakes provide drinking water to many animals. Most plants need fresh water. Many kinds of fish, frogs, snails, and other animals live in and around fresh water.

Do the Math!

Find the Fraction

Only 3 out of every 100 liters of water on Earth is fresh water. What fraction of Earth's water is fresh water?



Three Forms of Water

Water is a kind of matter. It can exist as a solid, a liquid, or a gas.

Active Reading When things are contrasted, you find out ways they are different. Draw boxes around three things that are being contrasted.

Ice is solid water. Icebergs are small chunks of ice in the ocean. Glaciers are huge blocks of ice. Some glaciers are as big as whole countries! Most of Earth's fresh water is ice.

Ice melts to make liquid water. Liquid water is found in the ocean, rivers, streams, ponds, and even underground.

When water exists as a gas, it is called *water vapor*. Water vapor is in the air we breathe. You cannot see water vapor.

Water can exist as a solid, a liquid, or a gas.



States of Water



Water vapor

Air is a mixture of gases. One of these gases is water vapor. You can't see water vapor. The space between the clouds has water vapor in it.



Liquid water

Liquid water fills the ocean, lakes, and streams. Clouds are made of small droplets of liquid water. Fog, mist, and falling rain are also liquid water.



Ice

This glacier is an example of ice. Earth's solid water. Glaciers cover land that is close to the North Pole and the South Pole. They also cover some mountains.

Where Is the Water?

1. Where can you find water vapor in nature?

2. Where can you find liquid water in nature?

3. Where can you find solid water in nature?



Changing States

Water changes state. For example, liquid water can change to ice and to water vapor. What causes water to change state?

Active Reading Find sentences that contrast two things. Draw a line under each sentence.

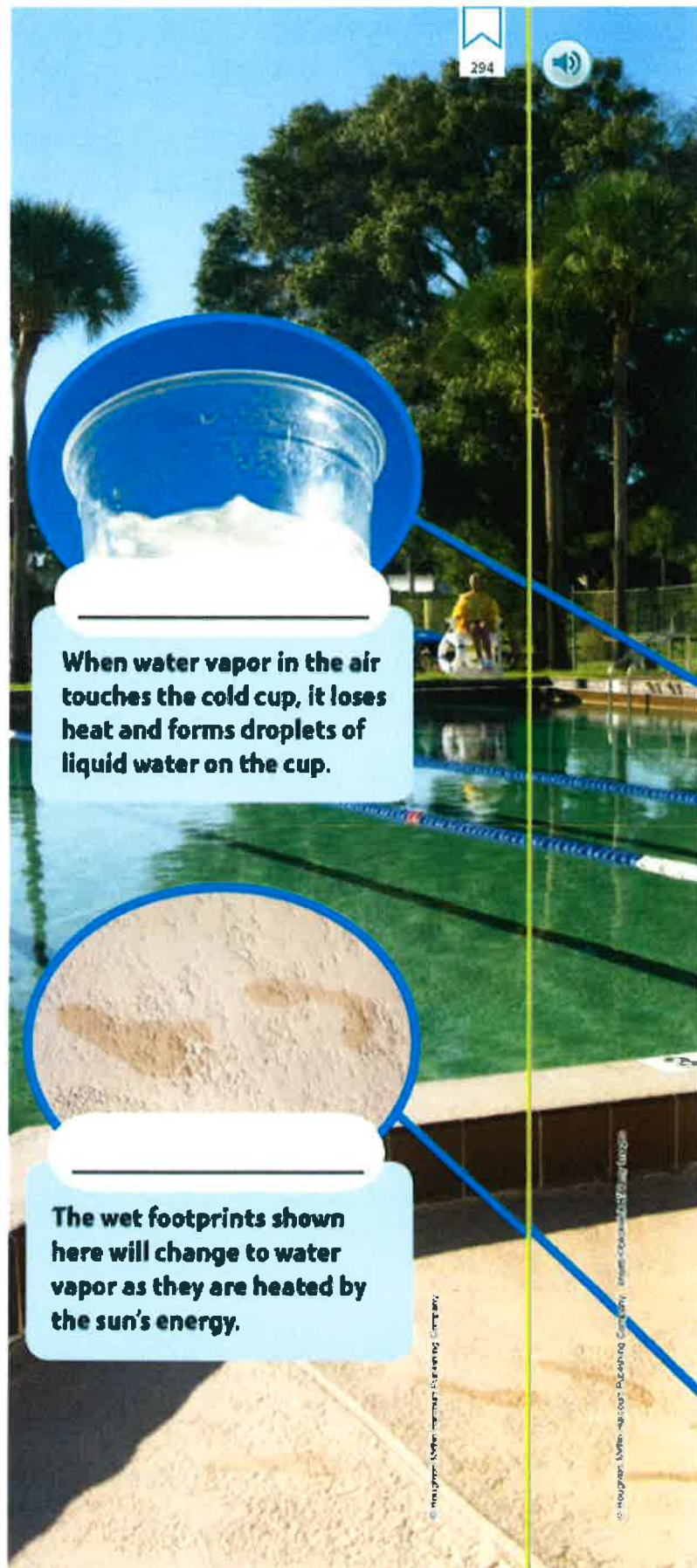
Water changes state when it is heated or cooled. When enough heat is added to ice, it becomes liquid water. This change of state is called *melting*. The reverse of melting is *freezing*.

When liquid water gains enough heat, it evaporates to become water vapor.

Evaporation is the change of state from a liquid to a gas.

When water vapor loses enough heat, it changes back to liquid water. The change of state from a gas to a liquid is called **condensation**. Condensation and evaporation are opposite processes.

For water vapor to condense, it needs something to condense on. Even the drops of water in clouds have condensed on tiny pieces of dust.



Finding Evaporation and Condensation

Look at the photos on these pages. Label the photos as either condensation or evaporation.



After a cool night, you may wake up to find water droplets called dew covering the grass. This happens when water vapor in the air that is directly above the cool ground forms water droplets on the grass.



The Water Cycle

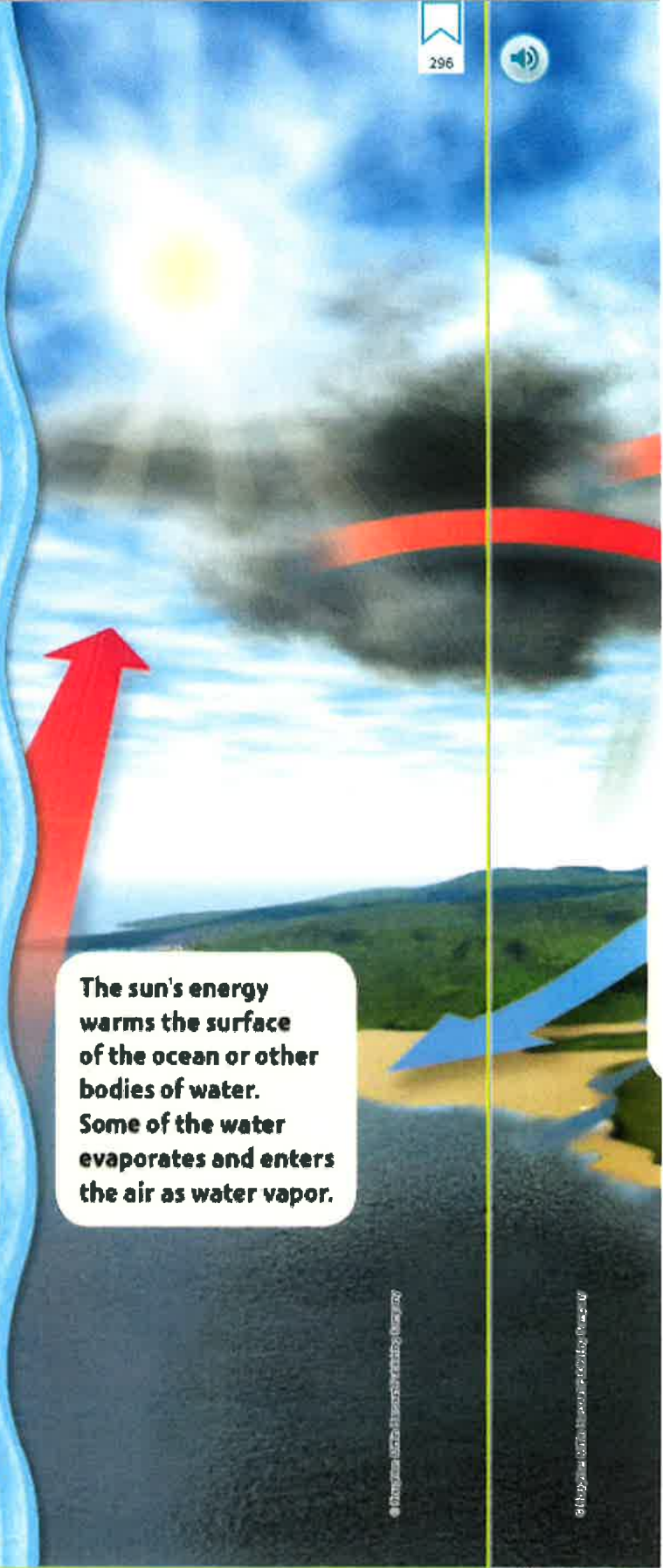
Water is always moving. In fact, water moves continuously from Earth's surface to the atmosphere and back to Earth.

Active Reading A cause tells why something happens. Draw one line under each cause.

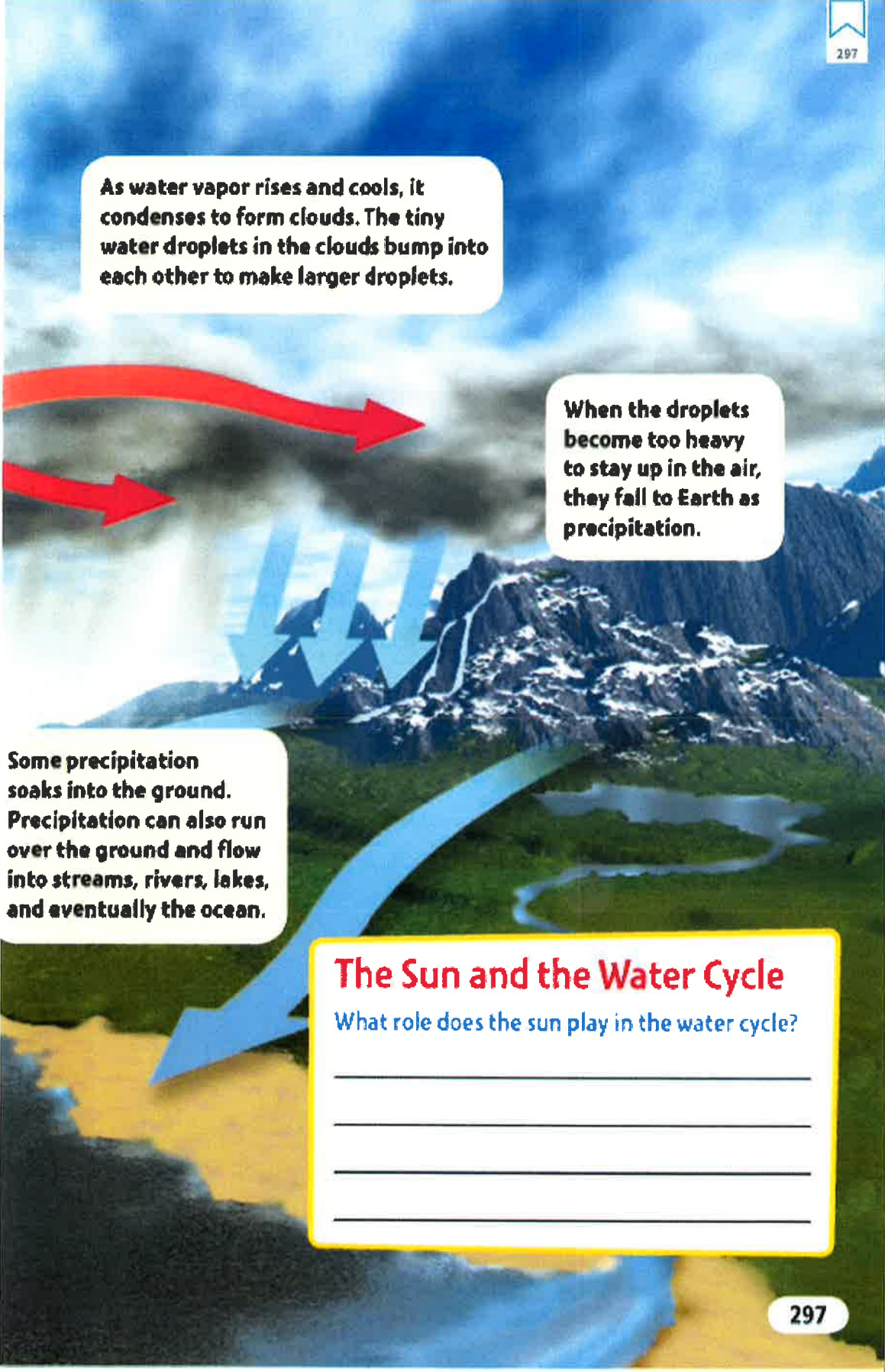
The sun heats the ocean. This causes water to evaporate and become water vapor. The water vapor mixes with other gases and moves high up in the air.

As the water vapor rises, it cools. If it loses enough heat energy, it condenses to form water droplets in clouds. This water can fall back to Earth as **precipitation**. Precipitation can be rain, sleet, snow, or hail. The type of precipitation that falls depends on the temperature of the air around it.

After water falls, it moves across land. Some water flows underground. This is **groundwater**. Groundwater and surface water flow back to the ocean. More water in the ocean is heated and evaporates again. This never-ending movement of water between Earth's surface and the air is called the **water cycle**.



The sun's energy warms the surface of the ocean or other bodies of water. Some of the water evaporates and enters the air as water vapor.



As water vapor rises and cools, it condenses to form clouds. The tiny water droplets in the clouds bump into each other to make larger droplets.

When the droplets become too heavy to stay up in the air, they fall to Earth as precipitation.

Some precipitation soaks into the ground. Precipitation can also run over the ground and flow into streams, rivers, lakes, and eventually the ocean.

The Sun and the Water Cycle

What role does the sun play in the water cycle?



Sum It Up!

When you're done, use the answer key to check and revise your work.

Complete the graphic organizer using details from the summary below.

Water is matter. It can exist as a solid, a liquid, or a gas. When water is a solid, it is called ice. When water is a liquid, it is called water. When water is a gas, it is called water vapor.

Water changes state when it warms or cools. For example, when heat is added to ice, ice changes state to become liquid water. If even more heat is added, liquid water becomes water vapor.

Main Idea

Water can exist in three states: solid, liquid, and gas.

**1**Detail: _____

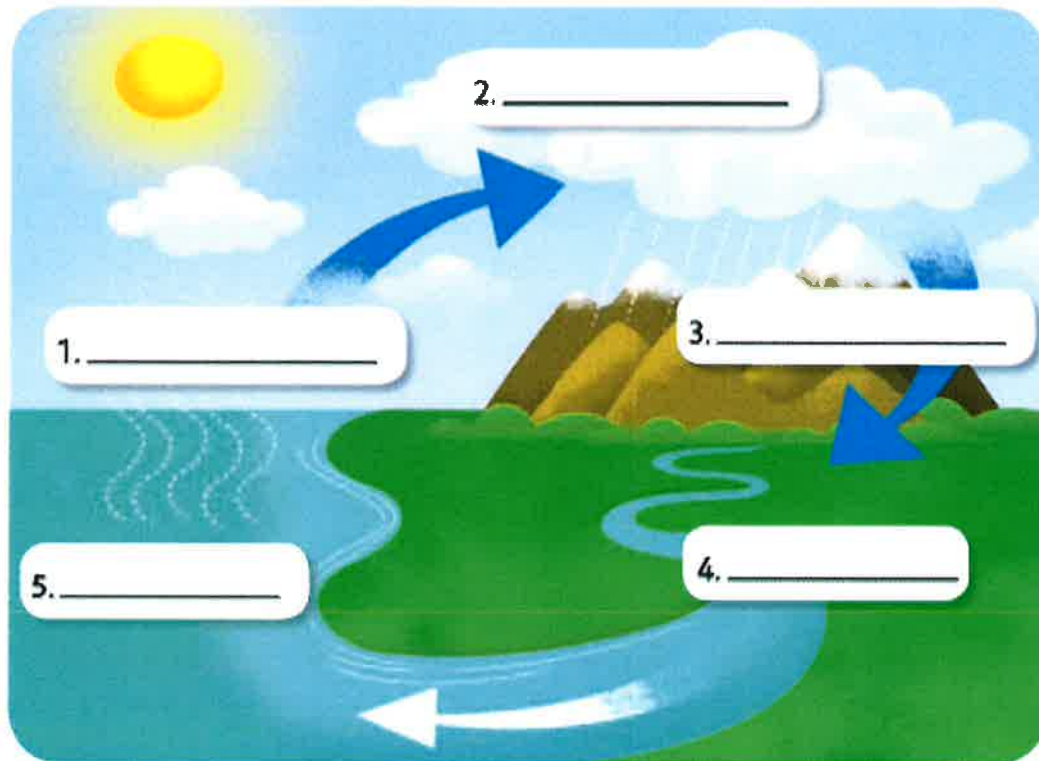
_____**2**Detail: _____

_____**3**Detail: _____



Apply Concepts

- 2** Look at the picture of the water cycle. Add labels to show three processes that are part of the water cycle. Label the salt water and the fresh water.



- 3** What gives water the energy it needs to move around the world in the water cycle?
- _____



Take It Home!

Share what you have learned about the water cycle with your family. With a family member, look around for places where processes from the water cycle are taking place.



What Do You See?

So you want to think like a scientist? Let's get started. Try making some observations and inferences!

Active Reading As you read these two pages, find and underline the definition of **observe**.

Look at the pictures on this page. What do you see? When you use your senses to notice details, you **observe**.

Things you observe can start you thinking. Look at the picture of the small sailboat. You see that it has more than one sail. Now look more closely. The sails are different shapes and sizes.

You might infer that the shape or size of the sails affects how the boat moves. When you **infer**, you offer an explanation of what you observed. You might infer that each sail helps the boat move in a different way.

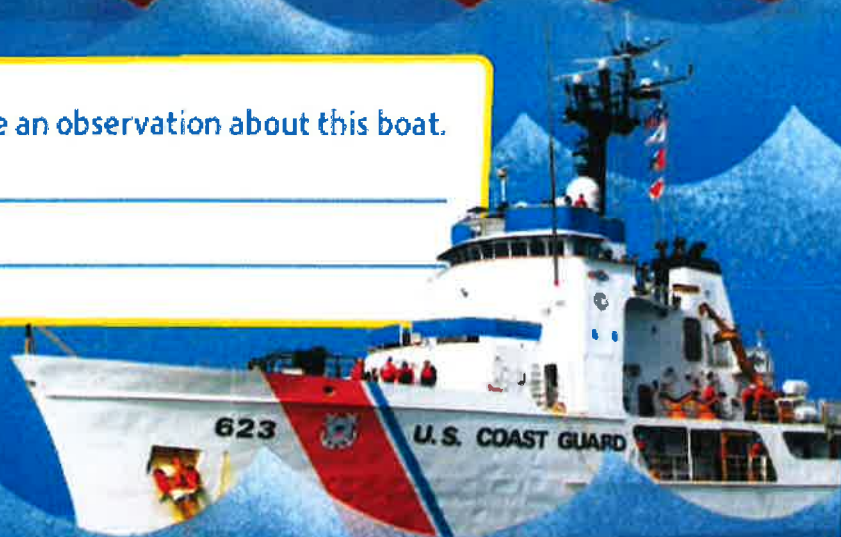
Make an observation about this boat.



Make an observation about this ship.

CONTAINER SHIP

Make an observation about this boat.



Write an inference based on this observation:
"I can see the wind blowing this sail."



Investigating Answers

There are many steps a scientist may take during an investigation. Some do all five described here.

Active Reading As you read these two pages, number the sentences that describe Onisha's experiment to match the numbered steps in the circles.

1

Ask a Question

What causes things to change? This is the kind of question you can answer with an investigation.

2

Hypothesize

A **hypothesis** is a statement that could answer your question. You must be able to test a hypothesis.

Predict and Plan an Investigation

Predict what you will observe if your hypothesis is correct. **Identify the variable** to test, and keep other variables the same.

3

What Onisha Did ...

Onisha thought about rafts floating down a river. She asked a question, "Does the size of a raft affect the amount of weight it can carry?"

Onisha **hypothesizes** that a bigger raft can carry more weight. Then she predicted, "I should be able to add more weight to a bigger raft than to a smaller raft." Onisha planned an investigation called an experiment. Outside of science, experimenting means trying something new, such as a new recipe. In science, an **experiment** is a test done to gather evidence. The evidence might support the hypothesis, or it might not. In her experiment, Onisha built three model rafts that differed only in their number of planks. She carefully put one penny at a time onto each raft until it sank. She recorded her results and drew a conclusion.

Variable

The factor that is changed in an experiment is called a **variable**. It's important to change only one variable at a time.

4

Experiment

Now do the experiment to test your hypothesis.

Draw Conclusions

Analyze your results, and **draw a conclusion**. Ask yourself, "Do the results support my hypothesis?" Share your conclusion with others.

5



► What was the variable in Onisha's experiment?



Sum It Up!

When you're done, use the answer key to check and revise your work.

Write words from the lesson that match the pictures.



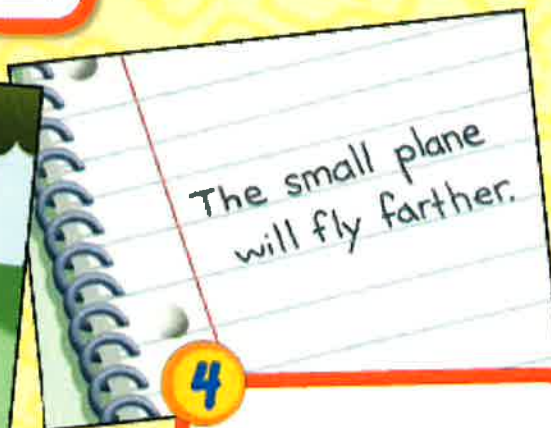
1



2



3



4

Use what you learned from the lesson to fill in the sequence below.

observe

5

6

7

Name _____

Word Play

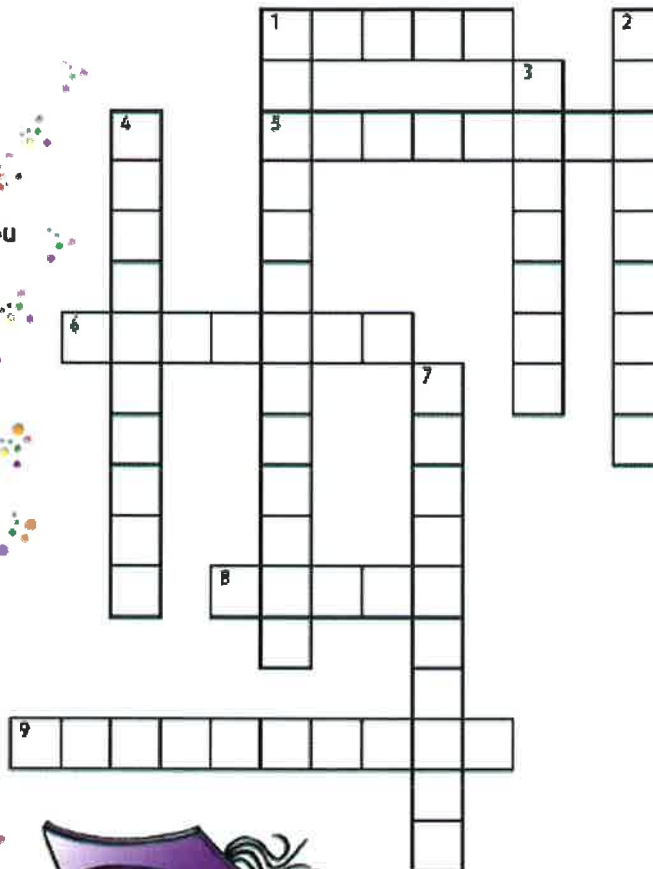
1 Use the words in the box to complete the puzzle.

Across

1. You do this when you make a conclusion after observing.
5. the one factor you change in an experiment
6. to make a guess based on what you know or think
8. something that is like the real thing—but not exactly
9. a statement that will answer a question you want to investigate

Down

1. Scientists plan and carry one out to answer their questions.
2. Scientists ask these about the world around them.
3. You do this when you use your five senses.
4. an investigation in which you use variables
7. You draw this at the end of an investigation.



experiment* infer* questions investigation* variable* hypothesis*
predict* model observe* conclusion

* Key Lesson Vocabulary



Communicating Data

Scientists record and display data so others can understand it. There are many ways and many tools to do this.

Active Reading As you read these two pages, circle a sentence that tells the main idea.

How can I communicate my results?

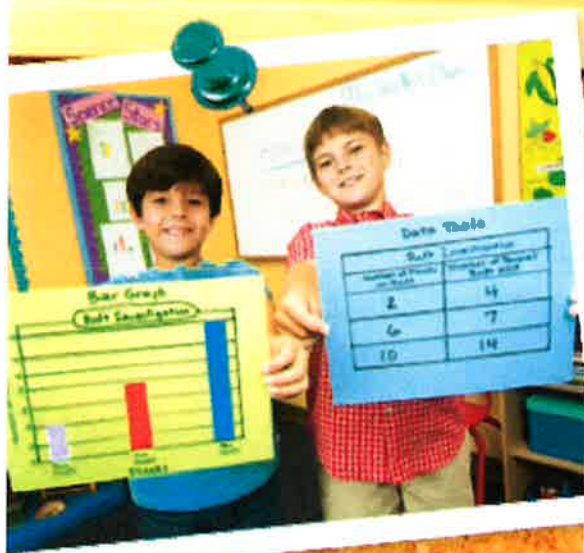


Models can help us understand things that are too big, small, or dangerous to do or observe.

► You want to find how high different kinds of balls bounce. You test each ball 20 times. How will you record and display your measurements?

After you **gather data**, you can share, or **communicate**, it with others in different ways. How can you **record data**? To show how birds get seeds from a feeder, you can use a camera. If you observe how a dog cares for her puppies, write in a journal.

Sometimes scientists use charts and graphs to help **interpret and display data**. A **chart** is a display that organizes data into rows and columns. A **data table** is a kind of chart for recording numbers. A **bar graph** is used to compare data about different events or groups. Bar graphs make it easier to see patterns or relationships in data.



These students made a bar graph and a data table to compare results.

Maps like this world map, help to show the relationships between different objects or ideas.

► You want to show kinds of weather in different places. How could you display this information?

► You want to show the different layers that make up Earth's crust. What could you use?



How To Do It!

What are some ways to display data? You can use data tables, bar graphs, and line graphs. How can students use displays to show what they observed in the butterfly garden?

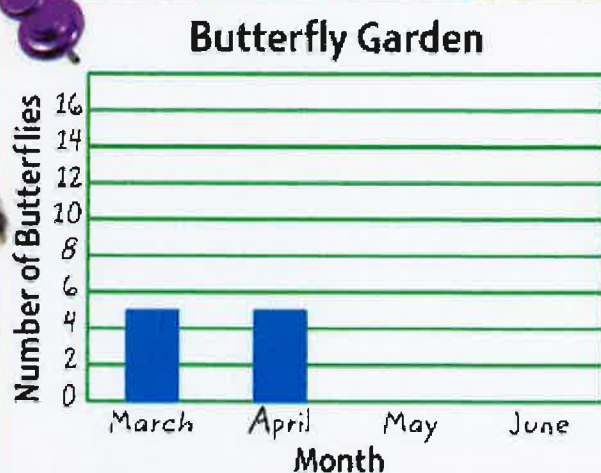
Active Reading As you read these two pages, draw boxes around two clue words that signal a sequence, or order.



DATA TABLE

Month	Number of Butterflies
March	5
April	5
May	9
June	14

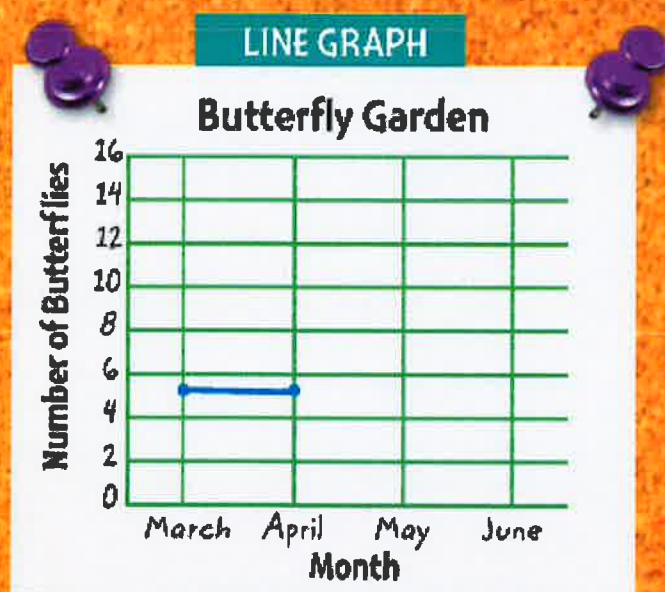
BAR GRAPH



How do you create a graph? First, look at the data table. Each column has a heading telling what information is in that column. Now, look at the graphs. Did you notice that the same headings are used to name the parts of the graphs?

On the graphs, look at the line next to the heading "Number of Butterflies." It looks like a number line, starting at zero and getting larger. It shows the number of butterflies.

To complete the bar graph, find the name of a month along the bottom. Then, move your finger up until you reach the number of butterflies for that month. Draw a bar to that point. To complete the line graph, draw points to show the number of butterflies for each month. Then, connect the points.



► Now it's your turn. Use the data table to help you complete the graphs for the months of May and June.



Why Graphs?

Sharing information with others is important to scientists. How do graphs help us share?

I can share these results with other scientists. They can repeat the experiment to see if they get different results.

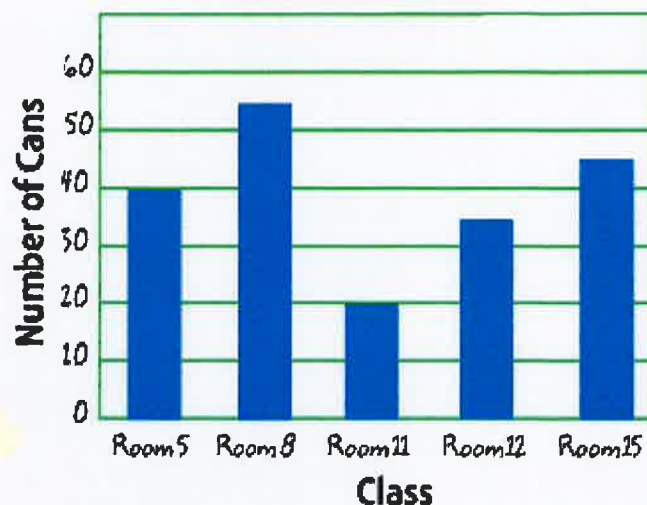
Why did you use a graph instead of a data table?

A graph helps you see information quickly and recognize patterns.

DATA TABLE

Class	Number of Cans
Room 5	40
Room 8	55
Room 11	20
Room 12	35
Room 15	45

BAR GRAPH



Do the Math!

Interpret a Graph

Students collected evidence about a canned food drive in a data table. They organized the data in a graph.

1. Use the data table to find which class brought the least number of cans.

2. Use the graph to find which class brought the greatest number of cans.

3. Which was easier to use, the data table or the graph? Why?

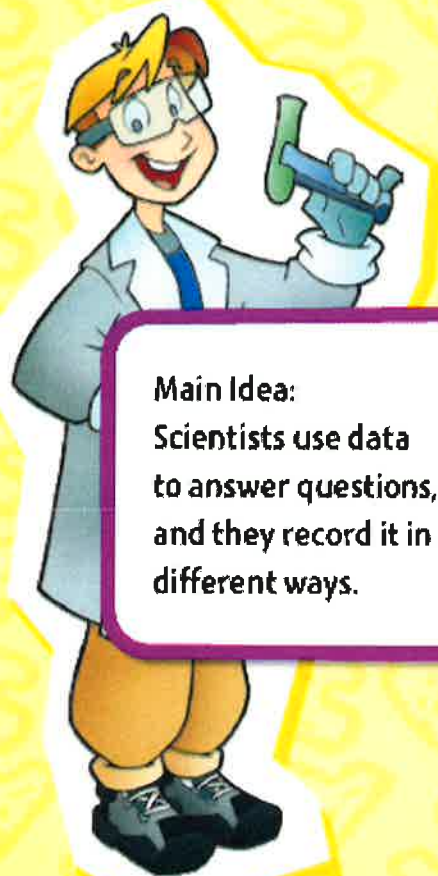


Sum It Up!

When you're done, use the answer key to check and revise your work.

Use information in the summary to complete the graphic organizer.

During investigations scientists record their observations, or data. When other scientists ask, "How do you know?", they explain how their data supports their answers. Observations can be shared in many ways. Data in the form of numbers can be shown in data tables and bar graphs. Data can also be shared as models, maps, or in writing.



Main Idea:
Scientists use data
to answer questions,
and they record it in
different ways.

1

Detail: Scientists use their
data to answer other scientists'
questions.

2

Detail:

3

Detail:

Name _____

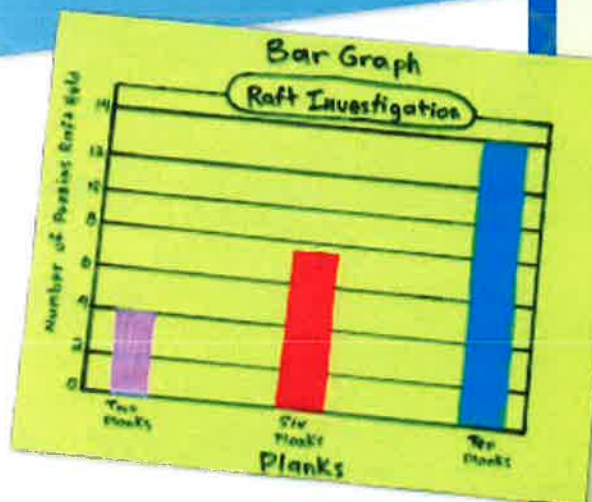
Word Play

Find the correct meaning and underline it.

- 1 **Data**
 - tools used to measure
 - steps in an investigation
 - pieces of scientific information
- 2 **Evidence**
 - a kind of graph
 - how much space something takes up
 - the facts that show if a hypothesis is correct
- 3 **Data table**
 - a chart for recording numbers
 - the number of planks on a raft
 - a piece of furniture used by scientists
- 4 **Bar graph**
 - a chart for recording numbers
 - a graph in the shape of a circle
 - a graph that shows how things compare
- 5 **Communicate**
 - take a photograph
 - share data with others
 - collect and record data

Data Table

Raft Investigation	
Number of Planks on Raft	Number of Berries Raft Held
2	4
6	7
10	14





Apply Concepts

Read the paragraph and answer questions 6–7.

One morning, your dad walks you and your sister to the school bus stop. When you get there, you wonder, "Has the bus come yet?"



6

What evidence would support the idea that the bus has not arrived yet?

7

What evidence would support the idea that the bus had already come?

8

Your friend brags that he can throw a baseball 100 meters. What evidence would prove this?



Share with your family what you have learned about recording evidence. With a family member, identify something you want to observe. Then decide how to record your data.

People and the Environment

Can you change the environment?
You can and you do! People change the environment every day.

Active Reading As you read these two pages, find and underline two ways that people change the environment.

People can change the environment by using resources. Trees are cut down to build houses. Rocks and stones are dug up to make roads.

People can change the environment by causing pollution. The exhaust from cars and trucks can pollute the air. Trash can pollute water and land.

People sometimes cause events that usually happen naturally. When people are careless, they can start wildfires. Habitats can be lost when people build dams. In some places, new dams can even cause floods.

People build large dams to control the flow of water. The flow of water is controlled so cities and towns receive just the right amount.



Reservoirs collect the water that is held back by a dam. People boat, swim, and fish in the reservoir.



Write an Effect

For each cause, write an effect.



Campers forget to put out their campfire.





Workers build a new road through the forest.





Garbage trucks collect people's trash.





How Can We Help?

Ecosystems change over time. Some changes are natural. Some changes are caused by people. How can people affect the environment in positive ways?



Adding plants to sand dunes can help prevent erosion.

There are many things we can do to help the environment. Turning off a dripping faucet helps conserve water. Turning off lights you are not using helps save energy. If we use less energy, we need fewer resources from the environment.

We can also clean up the environment by cleaning up pollution. We can make smart choices to reduce the amount of trash we throw away. What can you do to help?

Helpful or Not Helpful?

Circle *yes* if the activity helps the environment and *no* if it does not.



polluting the water

yes

no



cleaning up litter

yes

no



recycling

yes

no



bicycling

yes

no



polluting the air

yes

no



planting trees

yes

no



Sum It Up!

When you're done, use the answer key to check and revise your work.

The table below summarizes this lesson. Complete the table.

Environmental Changes Affect Living Things

People Affect Living Things	Natural Events Affect Living Things
1. People can cause natural events like _____.	4. Fire forces animals to leave, but it also makes space for _____.
2. People can cause _____ of air, water, and land habitats.	5. Plants and animals are made sick by _____.
3. One way people can help plants and animals survive is to _____.	6. A beaver building a dam is an example of how animals affect the _____.
	7. Natural events caused by water or lack of it include _____, _____, and _____.



Name _____

Word Play

- 1 Fill in the missing letters in each word. You will use each of the letters in the box.

A B E F G I I
N O O R R S T

1. ___RO___IO___
2. D___U___H___
3. HA___T___T
4. ___L___OD
5. F___E

Fill in the blanks with the correct word from above.

6. When rising water causes a _____, animals have to move to dry land.
7. Shorelines and beaches are worn away by _____.
8. A change in the environment can cause an animal to lose its _____.
9. One positive effect of _____ is that some pinecones only open after being heated.
10. When there is not enough rain, _____ can hurt crops.



Apply Concepts

2 Write the missing cause or effect for each picture.



Cause: flood

Effect:



Cause: wildfire

Effect:



Cause: drought

Effect:



Cause: trash

Effect:



Cause: one plant uses too

many resources

Effect:



Cause:

Effect: land is flooded

3 Write three ways you could help protect a beach habitat.



Share what you have learned about environments with your family. Talk about how you can change the environment in positive ways.

The Effects of Pollution

What's that smell? Pollution can make the air, land, and water smell awful. Some of the ways we use natural resources can be harmful.

Active Reading As you read this page, underline all the causes of pollution.

Smoke from this factory mixes with the air. This makes the air harmful to breathe.

What is pollution? **Pollution** is harmful substances in the environment. Smoke in the air is pollution. So are chemicals in water and garbage on land.

What causes pollution? Pollution often results from people using natural resources. Burning fossil fuels, such as gasoline in cars and coal for energy, can cause air pollution. Land pollution is caused when people don't put trash where it belongs. When chemicals and wastes get into water, they cause water pollution.

What's the Cause?

Write one sentence to show how people caused each type of pollution shown.

Land Pollution





Water Pollution





Air Pollution





Reduce, Reuse,

People need natural resources to survive, but we have to use them responsibly. You can help by remembering the “3 Rs”—reduce, reuse, and recycle.

Active Reading As you read this page, underline ways to reduce, reuse, and recycle.

To *reduce* means to use less of something. There are many ways to use fewer natural resources. You can use both sides of a piece of paper, for example. To conserve fossil fuels, you could ride a bike instead of riding in a car. And you could turn off the lights when you leave a room.

When you *reuse* something, you use it again. You can take a reusable bag to the grocery store. And you can use a refillable water bottle.

When you *recycle* something, it is made into a new product. Glass, aluminum cans, paper, plastic bottles, and yard waste can all be recycled. Even the oil from cars can be recycled!

Recycling keeps billions of pounds of material from being thrown in the trash.



Recycle



Glass can be recycled. After glass is recycled, it can be used again.

Crushed glass from the blue bottle is combined with more crushed glass. The glass is then heated. This makes it easy to form into new shapes.

When glass is recycled, it may not be used for the same purpose. Some of the glass in this vase came from the blue bottle.

Do the Math!


Solve a Story Problem

Akeem uses 9 sheets of paper each day. To reduce, he decides to use each sheet of paper 3 times instead of 1 time. How many sheets of paper will he use each day now? _____

NPS Learning in Place English Grade: Third Grade



	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Read <i>A Mr. Rubbish Mood from Judy Moody Saves the World</i> Vocabulary, Background, and Comprehension pp. 10-13 Complete practice book pg.3 Think about what you read on page 12. Write a paragraph to explain how to compost to someone who has never composted before.	Read <i>A Mr. Rubbish Mood from Judy Moody Saves the World</i> pp. 14-28 Make a list of all the things you throw away or recycle in one day. Choose one of the items and decide if you can reduce or reuse it. Write an explanation of how you would do that.	Reread <i>A Mr. Rubbish Mood from Judy Moody Saves the World</i> pp. 14-28 Complete practice book pg. 8 Who is more convincing in the story, Judy or her family? Write a paragraph to defend your opinion and use examples from the text.	Read <i>Saving the Rain Forest</i> pp. 30-32 Write a letter to the editor of a newspaper that tells readers why the rain forests are in danger and three ways they can help.	Read <i>Saving the Rain Forest</i> pp. 30-32 What is one thing that you can do to help the environment? Write a paragraph explaining your idea and why it would help.
Week 2	Read <i>The Albertosaurus Mystery Vocabulary, Background, and Comprehension</i> pp. 38-41 Complete practice book pg. 17 Using as many of the Vocabulary in Context words on pp 38-39, create a paragraph telling what you already know about dinosaurs. Make sure the paragraph makes sense.	Read <i>The Albertosaurus Mystery</i> pp. 42-58 Make a list of questions that you have about dinosaurs after reading the story. You should have at least 5 questions that cannot be answered in the story.	Reread <i>The Albertosaurus Mystery</i> pp. 42-58 Complete practice book pg. 22 From the text you can conclude that the albertosaurs lived together. Write a paragraph to defend this conclusion using clues from the story.	Read <i>Finding Fossils For Fun</i> pp. 60-62 After reading about people who are hunting for fossils, do you think you would like to be a fossil hunter? Write a paragraph explaining why or why not.	Reread <i>Finding Fossils For Fun</i> pp. 60-62 Using what you have read in <i>The Albertosaurus Mystery</i> and <i>Finding Fossils For Fun</i> , write a how to paper explaining how to hunt for fossils. Make sure you do not leave out any steps.
Week 3	Read <i>A Tree is Growing Vocabulary, Background, and Comprehension</i> pp. 68-71	Read <i>A Tree is Growing</i> pp. 72-94 Imagine that a tree could talk. Create a list of	Reread <i>A Tree is Growing</i> pp. 72-94 Complete practice book pg.36	Read <i>Poems About Nature</i> pp. 96-98 In what ways are you like a tree? In what ways are you different from a tree?	Reread <i>Poems About Nature</i> pp. 96-98 Write a poem about a tree following the style of your favorite poem

	<p>Complete practice book pg.31</p> <p>Using as many of the Vocabulary in Context words on pp 68-69, create a paragraph telling what you already know about trees. Make sure the paragraph makes sense.</p>	<p>questions that you would ask a tree. Make sure you have at least 5 questions.</p>	<p>Draw a picture of a tree that is near your home or school. Label the parts of the tree using words from the story.</p>	<p>Complete a Venn diagram answering these questions.</p> 	<p>from "Poems About Nature." Make sure you use words that help the reader see, hear, smell and feel the tree.</p>
Read 14.2	<p>Read a book of choice and record it on the reading log each day.</p>				
Materials	<p>Access to the books is in the NPS link.</p> <p>If you have your book at home: Journeys Textbook Volume2 and Journeys Practice Book Volume 2</p> <p>Reading Log</p> <p>Book of choice to read each day</p> <p>Paper/pencils</p>				

READ 14.2 READING LOG

[illegible]

Author's Purpose

A Mr. Rubbish Mood
Introduce Comprehension:
Author's Purpose

Read the selection below.

Have you heard of the three *R*'s? They are reduce, recycle, and reuse. To reduce means to make less of something. You can reduce the amount of trash you throw away by doing a few simple things. Use both sides of a sheet of paper. Keep leftover food in containers instead of wrapping them in foil or plastic. Use batteries that you can recharge.

You can recycle many things, too. Remember to recycle your magazines and comic books. Recycle plastic milk jugs, metal soda cans, and glass bottles and jars.

The things you recycle are turned into new items. Recycled paper is used to make newspapers, cereal boxes, and wrapping paper. Glass you recycle gets turned into new glass jars and bottles.

Try to reuse things, too. Do you have a shirt that is too small? You can give it to someone younger. You can also cut it up and use it as a rag. There are many ways to reduce, recycle, and reuse items. Use the three *R*'s to help protect our planet.

Complete the Inference Map to show details in the selection that help you infer the author's theme. Write complete sentences.

Detail	Detail	Detail
Theme		

Author's Purpose

A Mr. Rubbish Mood**Deepen Comprehension:**
Author's Purpose

Read the selection below.

You break a wheel off your skateboard. You get take-out in plastic containers. What do you do next? You may throw these things in the trash. Think before you do!

Do you know what happens to an item after you throw it away? A garbage collector picks up your trash. The trash may get taken to a landfill. Most landfills are lined with a thick plastic or clay. Then trash is dumped on top. There are many problems with landfills. One problem is that we are running out of room! When a landfill is full, it is difficult to find land for a new one. Would you want to live next to a smelly landfill?

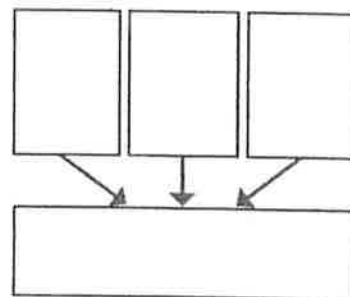
You may ask, "What about burning the trash?" If you burn the trash, you wouldn't need a lot of land for a dump. But once again, there are problems. Burning trash creates a lot of smoke and harmful chemicals. This leads to air pollution.

What is the best way to solve the trash problem? Recycle, reduce, and reuse in order to make less trash!

Use an Inference Map to determine the author's theme. Then use it to help you answer the questions below.

1. Why did the author write this text?

2. What is the author's viewpoint about trash? Use details from the selection to support your answer.



Conclusions

**The Albertosaurus
Mystery****Deepen Comprehension:**
Conclusions**Read the selection.****Frozen Dinosaurs**

When you think of dinosaurs, do you think about hot places? Do you think about steamy forests and hot grasslands? Most scientists used to think that way, too. However, scientists have found dinosaur fossils in the coldest places on Earth, near the north and south poles.

The first polar dinosaurs were found in 1960. Scientists still have questions about these creatures. Did they live in the cold weather all year, or only for part of the year? How did dinosaurs survive in the cold? Was it as cold near the poles then as it is today?

Small and Speedy

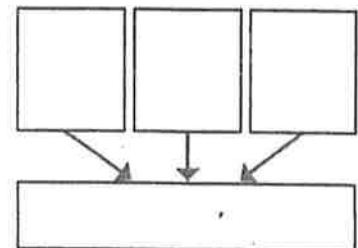
Many of the dinosaurs found in cold climates were only two feet tall or smaller. They had large eyes, perhaps so they could see well during the long winter nights. They ate plants, and they ran fast on two feet. Some other polar dinosaurs were meat-eaters, though.

Searching for Clues

Scientists are searching for more clues about cold-weather dinosaurs. It is hard to dig for fossils in frozen places. But it is also hard to stop a scientist from wanting to know more. By looking at cold-weather dinosaur fossils, we may learn more about how dinosaurs lived.

On a separate sheet of paper, use an Inference Map to write details and a conclusion about the text. Then answer the question about making a generalization.

1. What generalization can you make about dinosaurs?



Text and Graphic Features

A Tree Is Growing
Introduce Comprehension:
Text and Graphic Features

Read the passage and study the text and graphic features.
Then complete the Column Chart.

A Forest of Green Giants

The tallest forests in the world are in California. They are forests of big redwood trees. Many of the redwoods are taller than a thirty-story building!

The Hunt for the Tallest Trees

Michael Taylor and Chris Atkins hunt for tall trees as a hobby. For years, they have traveled through California measuring trees. In 2006, the two men found the three tallest trees ever measured.

Naming the Old Giants

The trees that Taylor and Atkins found are over *two thousand years old!* The men named one of the trees Helios, after the Greek god of the sun. They named the shortest one of the group Icarus after a boy in a Greek story. The boy flew too close to the sun. The father of Helios was named Hyperion. That is the name the tree hunters gave to the tallest tree in the world.

Tree	Height
Hyperion	379 feet
Helios	375 feet
Icarus	371 feet

Feature	Location	Purpose

Text and Graphic Features

Read the selection and study the text and graphic features.

A Tree Is Growing
Deepen Comprehension:
Text and Graphic Features

A River Giant

The Amazon River of South America is the largest river in the world. It is a little shorter than the Nile River, but it carries far more water to a much larger area of land than the Nile does.

Water for Millions

Hundreds of streams and smaller rivers are part of the Amazon River system. The river passes through six countries and provides water and a shipping route to almost half of South America!

Did You Know?		
• The Amazon flows 4,000 miles from Peru to the Atlantic Ocean.	• It pours nearly 400 billion gallons of water into the ocean each day.	• There are no bridges that cross the Amazon River.

Use a Column Chart with the headings **Feature**, **Location**, and **Purpose** to help you understand the text and graphic features. Then answer the questions.

1. How is the information about bridges connected to the main idea of the article?

2. Based on the article and the text and graphic features, what conclusions can you draw about the Nile River?
