UCPS
UNION COUNTY PUBLIC SCHOOLS

March 2020

Hello Parents,

We hope that this letter finds you doing well. In an effort to help our students keep their skills sharp, we have provided packets of optional activities for your child to work on from home. These packets are full of review material for your child and will not need to be returned to school.

UCPS is also offering many other resources on our EmpowerED Family Portal on our website. Check them out at www.ucps.k12.nc.us/domain/2917.

Stay safe and healthy!

Marzo 2020

Hola padres

Esperamos que todos se encuentren bien. En un esfuerzo para ayudar a nuestros estudiantes a mantener sus habilidades académicas, hemos creado paquetes de actividades opcionales para que su hijo pueda trabajar en casa. Estos paquetes están llenos de material de repaso para su hijo. No es necesario que su hijo los devuelva a la escuela.

UCPS también ofrece muchos otros recursos en nuestro Portal Familiar Empoderado en nuestro sitio web. Véalos en www.ucps.k12.nc.us/domain/2917 .

¡Esperamos que sigan seguros y de buena salud!

Additional Print Resources - March 2020
Week 2 - 5th Grade

Parent/Guardian Instructions:

You will find learning opportunities for reading, math, science, and social studies below. These lessons and activities are intended to provide you with 30-40 minutes of learning support **per subject** for each day. All materials listed in the learning calendar below are provided in these additional print materials. For reading and math, you will find lesson materials as well as "apply it" materials. "Apply it" materials are in the form of games, reader's responses, etc. Some math activities may require items such as counters. You may use materials commonly found at home (ie: buttons, cereal, beans, playing cards, beads, etc.).

Reading

Day 6	Day 7	Day 8	Day 9	Day 10
Lesson: Lesson 8 - (page 27-28) Read the poem "Summer Night." Complete the Write activity. Challenge: Choose someone in your house to talk to about what you know about themes and how they can help you understand poetry. Refer to the Learning Target at the bottom of page 28 for help.	**Lesson:** Practice Assessment - (page 29-31) Read "Climbing Mount Whitney." Complete questions #23-26.	**Lesson:** Lesson 15 - Using Context Clues (page 32-33) Read the introduction and complete the guided and independent practice activities. **Apply It:** Read your independent text. Choose 3 words that you can determine the meaning of based on context clues. Create a 3 column chart to document the word you chose, the meaning you determined, and the evidence in the text that supported it.	**Lesson:** Lesson 11, part 1 - Unfamiliar Words (page 34-35) Read the introduction. Complete the Think and Talk activities. **Apply It:** Continue reading your independent text from Day 8 or choose a new text. Choose 3 new words to determine the meaning based on context clues. Add these words, meanings, and evidence in the text to your chart from yesterday.	**Lesson:** Lesson 11, part 2 - Here, Pyggy Pyggy (page 36-37) Read the "Here, Pyggy Pyggy." Complete the Think and Talk activities. **Apply It:** Read your independent text. Find a sentence with a word that you can determine the meaning of based on context clues. Write that sentence down and underline the word you will define. Then, rewrite that sentence and replace the underlined word with a word meaning or synonym to show the difference.

Math

Day 6- Adding and Subtracting Decimals	Day 7 - Adding and Subtracting Fractions with Unlike Denominators	Day 8- Adding and Subtracting Fractions with Mixed Numbers	Day 9-Word Problems with Fractions	Day 10- Fractions as Division
Lesson: • Choose 5 problems to complete on page 14 "Adding Decimals" and 5 problems to complete on page 15 "Subtracting Decimals" • Complete page 16 "Estimation with Decimals" to apply adding and subtracting decimals in word problems. **Apply It:** Decimals Sums and Differences	**Lesson:** Choose 5 problems from page 23 and 5 problems from page 25 to complete. Use another sheet of paper to show your work in pictures, models or words. **Apply It:** Add and Subtract Fractions *Materials Needed for Game* • *Make Your Own Dice (number cube)- from Week 1*	**Lesson:** Choose 5 problems from page 24 and 5 problems from 26 to complete. Use another sheet of paper to show your work in pictures, models or words. **Apply It:** Use Fraction Vocabulary	**Lesson:** Complete pages 27-28. Apply your understanding of adding and subtracting mixed fractions to word problems. Use the space to show your work. **Apply It:** Estimate Fraction Sums and Differences *Materials Needed for Game* • *Make Your Own Dice (number cube)* • *12 game markers in one color* • *12 game markers of a different color (examples: colored candy, construction paper pieces, blocks, coins)*	**Lesson:** Complete the following problems on page 29: Problems 1, 3, 4 and 7 **Apply It:** Fractions as Quotients

Science

Days 6-10
Complete three activities of your choice from the "Ecosystems" Choice Board. Use the knowledge you have previously learned this year about Ecosystems to help you complete these activities. If you have access to the internet, you may research additional information as needed to assist you.

Read

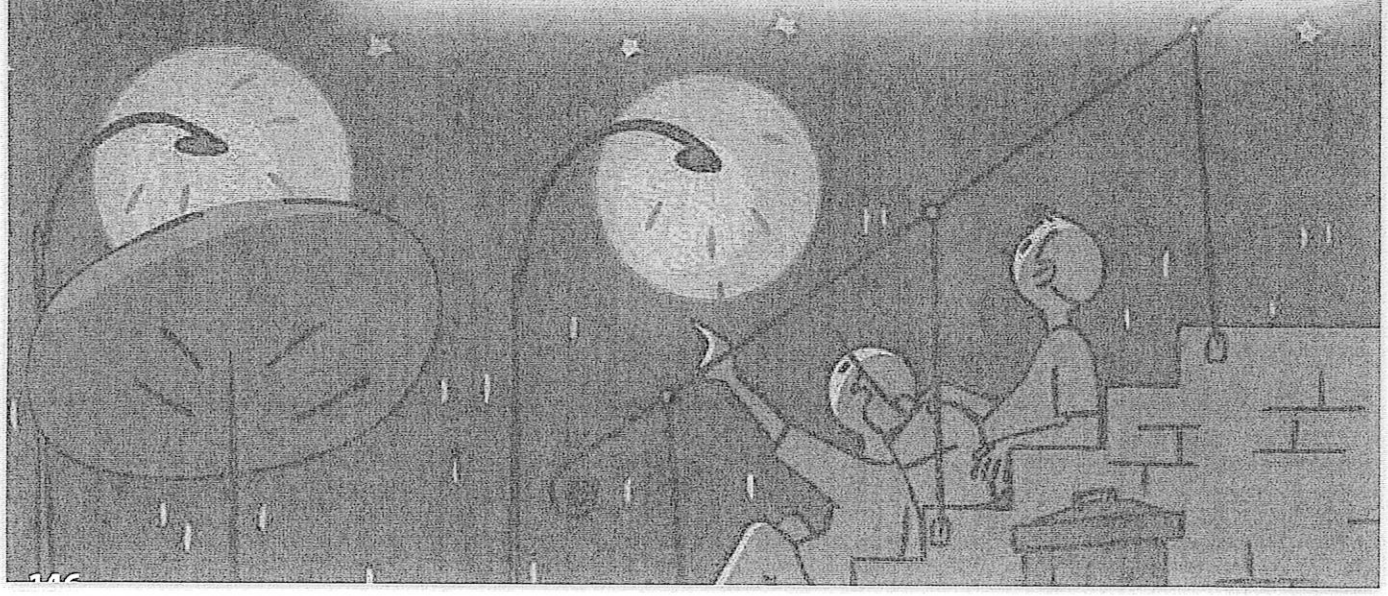
Genre: Lyric Poem

WORDS TO KNOW
As you read, look inside, around, and beyond these words to figure out what they mean.
- **hovering**
- **vaster**

SUMMER NIGHT

by Bianca Cappeletta

The city is full of streetlights, stoplights, floodlights
making it hard to see the stars
But Ben and Louie are out this summer night at ten PM
in front of their apartment building, peering up at the sky anyway.
Ben asks if that's the constellation Orion hovering over there just
above that billboard
Louie shrugs because he doesn't know for sure
He asks how many light-years to the edge of the universe
and what's beyond the edge when you get there
if you could get there (which you probably can't, but if you *could*)
Ben says he doesn't know for sure either
It's a vast place, the universe, but what's beyond it must be vaster still
And they know they should go inside and get ready for bed
but it's too wonderful out here below the faint glow of the stars
and they just can't



Write Use what you learned from reading "Summer Night" to answer the following question.

5 **Short Response** What is the theme of the poem "Summer Night"? Use details from the poem to support your answer.

Learning Target

In this lesson, you used details from poems to identify their themes. Explain why this activity is important for understanding poetry in general.

Writing and Research

This is a rough draft of an essay. It has some mistakes. Read the essay. Then answer the questions that follow.

Climbing Mount Whitney

California's Mount Whitney is the highest mountain in the United States, outside of Alaska. Mount Whitney is 14,496 feet high. That's high, but not so high that it can't be climbed by a fit hiker. I read all about it in a library book, Climbing Mount Whitney. Last summer I reached the summit of Mount Whitney. Yes you can also do it, but you'll need some preparation.

First of all, get in shape. The best training is climbing lower mountains or hills. Cycling, running, and walking up stairs are also good practice. Occasionally do some activity like biking or inline skating for a really long time. Try skating for 30 or 40 miles, or take a bike ride of four to five hours. Then try it with a backpack!

Lack of oxygen at high elevations makes it harder to breathe. Get used to this by spending some time at high elevations just before you climb. If you do this, you avoided the headaches and cramps that can trouble climbers at high elevations.

Go On

Now that you're in shape and used to the height, rest. The day before your climb, take it easy. The night before your climb, eat a dinner of spaghetti, rice, or noodles. Finally, climbing day is here! You're rested and ready. Eat a light breakfast. Then put on your sneakers, get your water and snacks, and head for the trail. Take it slow and steady. By the end of about eight hours, you will had reached the top of Mount Whitney. At that moment you'll be looking down on every other person in the continental United States. Wow, what could be cooler than that?

Read this sentence from the essay.

I read all about it in a library book, Climbing Mount Whitney.

What is the correct way to write the title of the book?

A 'Climbing Mount Whitney'

B "*Climbing Mount Whitney*"

C *Climbing Mount Whitney*

D "Climbing Mount Whitney"

24 Read this sentence from the essay.

Yes you can also do it, but you'll need some preparation.

Which of the following should replace the underlined part to make the sentence correct?

A Yes—you can also do it

B Yes, you can also do it,

C Yes you can also do it

D Yes! you can also do it,

25 Read this sentence from the essay.

If you do this, you avoided the headaches and cramps that can trouble climbers at high elevations.

On the lines below, rewrite the sentence with the correct verb tense for the underlined word.

_____

_____

_____

26 Read this sentence from the essay.

By the end of about eight hours, you will had reached the top of Mount Whitney.

How should the underlined part be corrected?

A reached

B had been reaching

C have reached

D will have reached

Go On

Lesson 15

Using Context Clues

Introduction

You can use context clues to figure out the meaning of an unfamiliar word. The chart below gives examples of different types of context clues.

Type of Clue	Example
Definition	Superfoods, or natural foods that may prevent disease, have become popular.
Cause/Effect	Some superfoods, such as blueberries and red beans, contain antioxidants. These can help remove harmful substances from the human body.
Comparison	Some experts look dubiously on claims about superfoods, but other experts believe strongly that these foods can improve health.

Context clues can also help you figure out words with more than one meaning. For example, the table below has two sentences with the word *source*. What does *source* mean in each sentence? You can use the underlined context clues to figure out which meaning of *source* is being used.

Sentence	Context Clues	Definition
Choosing high-sugar drinks can be a source of health problems.	A problem has a cause. Therefore, the source of a problem is its cause.	the cause of something
The website MyPlate.gov is a source for facts about food choices.	A website can have information such as facts. Therefore, a source is something that gives information.	something that gives information

The sentences before and after the sentence with an unfamiliar word can also hold context clues.

Guided Practice

Determine the meanings of *fleeting*, *empirical*, and *panacea*. Then underline the words or phrases that helped you determine their meaning.

HINT The phrases *as a result of*, *because of*, and *thanks to* all signal cause-and-effect relationships. Words such as *but*, *too*, *also*, and *as well as* all indicate comparisons.

Some fads are **fleeting**, but more than a few people feel that superfoods are here to stay. The idea of superfoods isn't new, but the amount of **empirical** information we have about them is. Scientific observations and tests offer some evidence that certain foods can help people stay healthy. Nobody claims that these foods are a **panacea**—nothing can guarantee perfect health or cure every disease—but they can be part of a sensible diet.

Independent Practice

For numbers 1 and 2, read the paragraph. Then answer the questions.

For centuries, people in coastal areas of China and Japan have harvested a superfood found in marine environments. Recent studies show that eating seaweed protects against infection. It also might reduce the risk of serious diseases and extend peoples' life spans. If true, these would be important benefits.

1 What does the word marine mean in this paragraph?

- **A** very nutritious
- **B** dark blue in color
- **C** having to do with the ocean
- **D** member of the armed forces

2 Which two words from the paragraph help you understand the meaning of marine?

- **A** "China" and "Japan"
- **B** "coastal" and "seaweed"
- **C** "centuries" and "people"
- **D** "superfood" and "studies"

For numbers 3 and 4, read the paragraph. Then answer the questions.

Closer to home, you can find superfoods right in your garden or local store. Think "crisp and crunchy." Cabbage, broccoli, cauliflower, and kale detoxify harmful substances. As a result, they may help to prevent some forms of cancer. These veggies also are low in calories and have lots of vitamins A, C, and K.

3 What does the word detoxify mean in this paragraph?

- **A** to move in a wide circle
- **B** to chew food slowly
- **C** to make a difficult decision
- **D** to remove bad effects

4 Which two words from the paragraph help you understand the meaning of detoxify?

- **A** "crisp" and "crunchy"
- **B** "prevent" and "cancer"
- **C** "veggies" and "substances"
- **D** "calories" and "vitamins"

Lesson 11
Unfamiliar Words

Learning Target

Figuring out the meanings of unfamiliar words will help you better understand the texts you read and discuss in school.

Read When you read, you probably come across words you do not know. Some of these unfamiliar words may be **academic vocabulary**, or general words that are found in a variety of subjects you study in school. Other words may be found only in a particular **subject area**, such as science, social studies, or economics. A subject area can have many topics. For example, money is one **topic** in the subject area of economics.

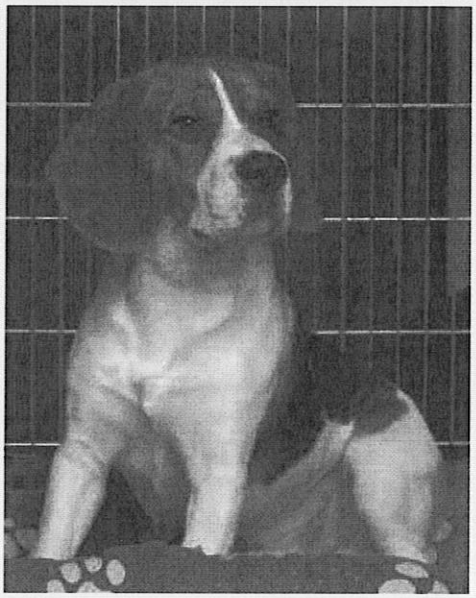
Read the poster below. Underline any words you might not know.

The Westfield Animal Shelter Needs Your Help!

We have outgrown our space here. Can you help us build a new shelter to protect our pets?

Please make a donation to the Westfield Animal Shelter today. Even a small amount of money will help. Once we raise $10,000, we'll be able to begin construction.

We at the shelter will be grateful for your generosity in giving. The animals will thank you for your kindness. Remember that each act of benevolence counts!



Think Use the chart below to help determine the meanings of unfamiliar words. The word's context has been provided for you. In the "Possible Meaning" column, write what you think the word means. Then go back to the text, find **context clues** that tell you about the word's meaning, and write them in the "Clues" column.

Unknown Word	Context	Possible Meaning	Clues
Shelter	"... build a new shelter to protect our pets?"		
Donation	"Please make a donation ..."		
Benevolence	"... each act of benevolence counts!"		

Talk Share your chart with a partner.

- Did you come up with similar meanings?
- Did you find the same clues to the words' meanings?
- Are there any school subjects for which figuring out words is especially important? If so, which subjects?

Academic Talk

Use this word and these phrases to talk about the text.

- **academic vocabulary**
- **subject area**
- **topic**
- **context clues**

Here, Pyggy Pyggy

by Gail Hutter

1 The first time you heard about or saw a piggy bank, you might have wondered: Why a pig? Why not some other animal? Wouldn't a bear or a wolf be a more appropriate guard of a person's money? To understand how the pig became the animal of choice for a small, personal bank, we need to peer into the past—all the way back to England in the Middle Ages.

2 During the Middle Ages, people in England used dishes, pots, and bowls made of clay. Clay was an ideal substance for such objects because it was cheaper than metal and easier to shape than wood. One type of orange-colored clay was particularly inexpensive and easy to mold into shapes. The name of this clay was "pygg."

3 So pygg was used to make common household objects—but what's the connection between pygg and piggy banks? Hundreds of years ago, banks did not exist as they do today, but people still needed to keep their coins in a place from which they could be easily removed. So, they put them into pygg jars, which later became known as "pygg banks." In the 1800s, some inventive potters began making pygg banks in the form of a pig with a slot in the back. Not only were these "piggy banks" more pleasing to look at than regular jars, potters could charge more money for them. Thus the piggy bank was born.

4 For centuries, most piggy banks were made of clay and could be opened only by shattering them. Today's piggy banks are made from clay, metal, glass, or plastic, and most contemporary piggy banks have a hole in the bottom for taking out money easily. Most people agree that the hole in the bottom was a good addition to the piggy bank. Otherwise, every time you retrieved your money, you'd have to spend some of it on a new piggy bank.

Close Reader Habits

Are there any unfamiliar words or phrases in this article? When you reread, **underline** context clues that can help you figure out what they mean.

Explore **What context clues can help you understand unfamiliar words and phrases in the text?**

Look for context clues in the same sentence or nearby sentences.

Think

1 Complete the chart below by telling the context of each unfamiliar word or phrase, its possible meaning, and the clues that led you to that definition.

Unfamiliar Word or Phrase	Context	Possible Meaning	Clues
Peer into the past (paragraph 1)			
Inventive potters (paragraph 3)			
Contemporary (paragraph 4)			
Retrieved (paragraph 4)			

Talk

2 Use context clues to determine why clay was an "ideal substance" for making certain objects.

Write

3 **Short Response** Define the phrase ideal substance. Support your definition with context clues from the passage. Use the space provided on page 194 to write your answer.

HINT First, define *ideal substance*. Then explain how clay fit that definition.

Adding Decimals

Name: _____

Circle all the problems with sums less than 5.
Then find the exact sums of only the problems you circled.

1 0.24 + 4.25 _____

2 4.8 + 0.16 _____

3 2.31 + 2.075 _____

4 2.31 + 2.7 _____

5 0.909 + 4.09 _____

6 3.99 + 1.109 _____

7 2.675 + 2.325 _____

8 3.775 + 0.225 _____

9 2.06 + 2.933 _____

10 2.6 + 2.933 _____

11 1.809 + 3.091 _____

12 3.01 + 1.991 _____

13 1.83 + 3.1 + 0.1 _____

14 0.012 + 3.79 + 1.101 _____

15 2.6 + 2.04 + 0.099 _____

16 What strategies did you use to solve the problems?

Subtracting Decimals to Hundredths

Name: _____

The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1 7.5 − 1.2 _____

2 10.75 − 4.13 _____

3 20.2 − 14.8 _____

4 6.12 − 0.7 _____

5 41.5 − 33.25 _____

6 15.9 − 8.92 _____

7 105.53 − 99.28 _____

8 9.46 − 3.68 _____

9 74 − 65.9 _____

10 5.05 − 0.56 _____

11 31.27 − 23.67 _____

12 256.4 − 248.38 _____

13 12 − 4.39 _____

14 1,280.01 − 1,272.77 _____

15 500.2 − 494.94 _____

Answers

6.25	5.26	6.62	8.1	7.6
4.49	8.25	7.61	6.98	5.42
7.24	5.4	8.02	5.78	6.3

Using Estimation with Decimals

Name: _____

Solve the problems.

1 Lori needs at least 12 liters of water to fill a water cooler. She has a container with 4.55 liters of water, a container with 3.25 liters of water, and a container with 4.85 liters of water. Does she have enough water? Use estimation only to decide. Explain why you are confident in your estimate.

2 Nia wants the total weight of her luggage to be no more than 50 kilograms. She has three suitcases that weigh 15.8 kilograms, 17.42 kilograms, and 16.28 kilograms. Is the total weight within the limit? Use only estimation to decide. Explain how you know your estimate gives you the correct answer.

3 Omar measures one machine part with length 4.392 centimeters and another part with length 6.82 centimeters. What is the difference in length? Use estimation to check your answer for reasonableness.

***Ready*® Center Activity 5.19 ★★**

Decimal Sums and Differences

What You Need

- Recording Sheet

Check Understanding

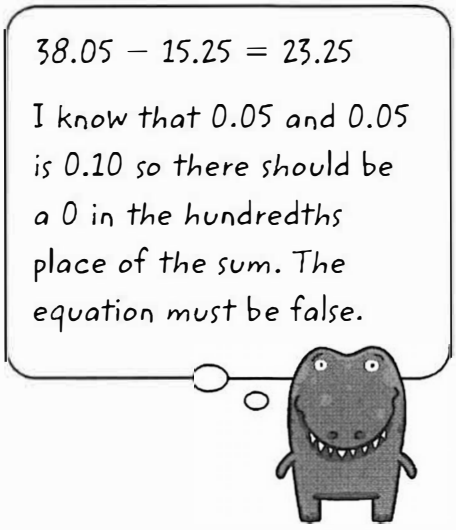
Find the sum or difference.

19.98 + 4.06

130.78 − 54.05

What You Do

1. Take turns. Choose an equation from the equation bank.
2. Use number sense, estimation, or mental math to decide if the equation is true or false. Explain your reasoning to your partner.
3. Your partner checks your work by simplifying both sides of the equation.
4. Write the equation in the correct column on the **Recording Sheet.**
5. Continue until all of the equations are written in the correct column.



Go Further!

Work with your partner. For each *False* equation, make it a *True* equation by adjusting the operation or a number. Rewrite the equation using the correct answer.

***Ready*® Center Activity 5.19 ★★ Recording Sheet**

Partner A _____

Partner B _____

Decimal Sums and Differences

Equation Bank	
$45.1 + 18.43 = 229.4$	$86.4 - 12.59 = 73.81$
$48.06 + 67.50 = 115.1$	$56.2 - (12.1 + 43.76) = 2.34$
$19.14 + 5.4 = 24.54$	$112.23 - 6.15 = 106.38$
$36.4 + (12.12 + 21.76) = 70.92$	$109.78 - 86.06 = 23.72$

True	False

Adding Fractions with Unlike Denominators

Name: _____

Add.

1. $\frac{1}{2} + \frac{1}{4}$ _____

2. $\frac{1}{2} + \frac{3}{8}$ _____

3. $\frac{1}{2} + \frac{1}{3}$ _____

4. $\frac{1}{3} + \frac{1}{4}$ _____

5. $\frac{5}{6} + \frac{1}{12}$ _____

6. $\frac{1}{3} + \frac{2}{5}$ _____

7. $\frac{5}{6} + \frac{2}{3}$ _____

8. $\frac{3}{4} + \frac{5}{6}$ _____

9. $\frac{7}{9} + \frac{1}{6}$ _____

10. $\frac{7}{8} + \frac{2}{3}$ _____

11. $\frac{3}{2} + \frac{3}{5}$ _____

12. $\frac{9}{8} + \frac{5}{6}$ _____

13. What is a different common denominator you could use in problem 2? Describe how you would add the fractions using this different common denominator. Is the result equivalent to the sum found in problem 2?

Subtracting Fractions with Unlike Denominators

Name: _____

Subtract.

1 $\frac{1}{2} - \frac{1}{4}$ _____

2 $\frac{1}{2} - \frac{3}{8}$ _____

3 $\frac{1}{2} - \frac{1}{3}$ _____

4 $\frac{1}{3} - \frac{1}{4}$ _____

5 $\frac{5}{6} - \frac{5}{12}$ _____

6 $\frac{3}{4} - \frac{1}{6}$ _____

7 $\frac{7}{8} - \frac{3}{4}$ _____

8 $\frac{1}{2} - \frac{2}{5}$ _____

9 $\frac{3}{4} - \frac{3}{5}$ _____

10 $\frac{2}{3} - \frac{3}{5}$ _____

11 $\frac{5}{6} - \frac{3}{8}$ _____

12 $\frac{7}{8} - \frac{2}{3}$ _____

13 How could you check your work in problem 4? Describe each step.

***Ready*® Center Activity 5.21 ★★**

Add and Subtract Fractions

What You Need

- 10 game markers in one color
- 10 game markers in a different color
- Game Board

Check Understanding

Find the sum or difference. Show your work.

$\frac{1}{12} + \frac{3}{4}$ $\frac{4}{5} - \frac{1}{2}$

What You Do

1. Take turns. Roll the number cube.
2. Find the denominator that matches your toss in the table.
3. Choose an addition or subtraction expression on the **Game Board** that can be solved using that number as a denominator. If none of the remaining expressions can be solved using that denominator, your turn ends.
4. Tell your partner how you would solve the problem using that denominator. If your partner agrees, rewrite the expression on the **Game Board.** Then find the sum or difference.
5. Place a game marker on the space on the **Game Board.**
6. Continue until all of the expressions have been solved.
7. The partner with more game markers on the **Game Board** wins the game.

Toss	Denominator
1	4
2	6
3	8
4	10
5	12
6	20

Go Further!

Choose three subtraction expressions on the **Game Board.** Change the operation from subtraction to addition and find the sum using a different denominator than was used in the game. Exchange papers with your partner to check.

***Ready*® Center Activity 5.21 ★★ Game Board**

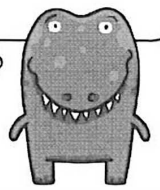
Partner A _____

Partner B _____

Add and Subtract Fractions

$\frac{1}{6} + \frac{3}{4}$	$\frac{3}{8} - \frac{1}{4}$	$\frac{3}{5} + \frac{3}{10}$	$\frac{5}{12} + \frac{1}{4}$
$\frac{2}{3} - \frac{1}{6}$	$\frac{7}{10} - \frac{3}{5}$	$\frac{1}{2} + \frac{3}{4}$	$\frac{5}{6} - \frac{1}{2}$
$\frac{7}{8} - \frac{3}{4}$	$\frac{1}{2} + \frac{2}{5}$	$\frac{2}{3} - \frac{3}{6}$	$\frac{3}{4} - \frac{7}{10}$
$\frac{3}{4} - \frac{1}{3}$	$\frac{1}{2} + \frac{1}{4}$	$\frac{3}{4} - \frac{6}{20}$	$\frac{4}{5} - \frac{1}{4}$

Sometimes I need to rename both fractions using the new denominator: $\frac{1}{4} + \frac{1}{3} = \frac{3}{12} + \frac{4}{12}$.



Adding with Mixed Numbers

Name: _____

Add.

1. $4\frac{7}{8} + \frac{1}{8}$ _____

2. $4\frac{7}{8} + \frac{1}{4}$ _____

3. $4\frac{7}{8} + \frac{1}{2}$ _____

4. $2\frac{3}{4} + \frac{1}{3}$ _____

5. $2\frac{3}{4} + \frac{2}{3}$ _____

6. $2\frac{3}{4} + \frac{5}{6}$ _____

7. $1\frac{2}{5} + 1\frac{1}{2}$ _____

8. $2\frac{4}{5} + 3\frac{1}{2}$ _____

9. $3\frac{2}{3} + 3\frac{2}{5}$ _____

10. $4\frac{5}{8} + 2\frac{2}{3}$ _____

11. $5\frac{3}{4} + 2\frac{3}{5}$ _____

12. $3\frac{5}{6} + 2\frac{7}{8}$ _____

13. What strategy did you use to solve problem 3? Describe each step.

Subtracting with Mixed Numbers

Name: _____

Subtract.

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

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

3. $2\frac{1}{8} - \frac{3}{4}$ _____

4. $2\frac{1}{2} - \frac{2}{3}$ _____

5. $2\frac{1}{4} - 1\frac{1}{3}$ _____

6. $3\frac{1}{6} - 1\frac{3}{4}$ _____

7. $7\frac{2}{5} - 3\frac{1}{2}$ _____

8. $5\frac{3}{8} - 4\frac{1}{6}$ _____

9. $8\frac{2}{3} - 3\frac{4}{5}$ _____

10. $6\frac{2}{5} - 3\frac{3}{4}$ _____

11. $9\frac{3}{8} - 3\frac{2}{3}$ _____

12. $14\frac{1}{8} - 9\frac{5}{6}$ _____

13. What pattern did you notice in problems 1 through 3? Explain how this helped you subtract.

***Ready*® Center Activity 5.24 ★★**

Use Fraction Vocabulary

What You Need

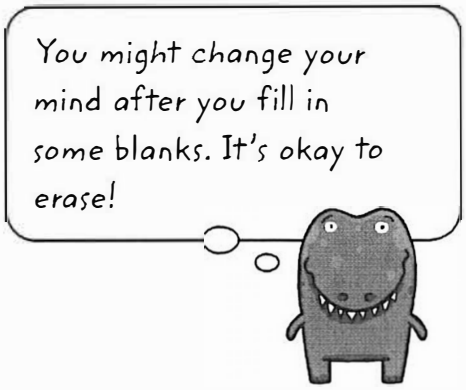
- Recording Sheet

Check Understanding

Thomas says that $6\frac{7}{15} - 4\frac{9}{10}$ is about 2. Is he correct? Use fraction vocabulary to support your answer.

What You Do

1. Read the problem on the **Recording Sheet.** Think about how to solve it.
2. Read the paragraphs that tell how to solve the problem.
3. Use words and numbers from the word bank and number bank to fill in the blanks. Some words and numbers may be used more than once.
4. Take turns. After you fill in a blank, your partner fills in the next one.
5. When all the blanks are filled in, read the paragraphs aloud. Do they make sense?
6. Fix any mistakes if you need to.



Go Further!

Read the situations below.

Sean says $\frac{4}{5} - \frac{1}{2}$ is less than 1 because $\frac{4}{5}$ is less than 1.

Gina modeled both fractions and saw that $\frac{4}{5} - \frac{1}{2}$ is less than 1.

Write two sentences using at least three words from the **Recording Sheet** to tell how each student most likely made his or her estimate. Exchange papers with your partner to check.

***Ready*® Center Activity 5.24 ★★ Recording Sheet**

Partner A _____

Partner B _____

Use Fraction Vocabulary

Janine has containers of baking chocolate. One container weighs $\frac{4}{5}$ pound. The other container weighs $\frac{13}{15}$ pound. How many pounds of baking chocolate does she have?

To add fractions, they must have _____. The fractions in the problem have _____. The _____ of 5 and 15 is _____, so I can use that number as the _____.

First, I write $\frac{4}{5}$ as an _____ with a _____ of 15. $\frac{4}{5} = \frac{\square}{15}$

Then, I add the numerators of both fractions in the problem.

The answer is $\frac{\square}{15}$, which is a fraction greater than 1.

Word Bank
benchmark fraction
common denominator
denominator
equivalent fraction
fraction strip
least common multiple
like denominators
unlike denominators

Number Bank
4
5
12
13
15
25

Estimating in Word Problems with Fractions

Name: _____

Solve the problems. Estimate to tell if your solution is reasonable. Show your work.

1 Jim mails one package that weighs $\frac{3}{8}$ pound and another that weighs $\frac{2}{3}$ pound. What is the total weight of both packages?

2 Rosa needs $5\frac{1}{4}$ yards of ribbon for a crafts project. She already has $2\frac{7}{8}$ yards of ribbon. How many more yards of ribbon does she need to buy?

3 To make fruit punch, Tyrone needs $3\frac{3}{8}$ quarts of orange juice and $3\frac{3}{4}$ quarts of cranberry juice. How many quarts of juice does he need in all?

Estimating in Word Problems with Fractions *continued*

Name: _____

4 Lin spent $\frac{5}{6}$ hour on math homework and $1\frac{3}{4}$ hours on science homework. How many hours in all did she spend on homework for both subjects?

5 Sandra rode her bike $9\frac{1}{3}$ miles on Monday and $6\frac{4}{5}$ miles on Tuesday. How many more miles did she ride on Monday than on Tuesday?

6 How can you make a high estimate for the sum of two fractions in a word problem?

***Ready*® Center Activity 5.23 ★★**

Estimate Fraction Sums and Differences

What You Need

- number cube
- 12 game markers in one color for Partner A
- 12 game markers in a different color for Partner B
- Game Board

Check Understanding

Estimate. Is the sum or difference greater than or less than 1?

$\frac{5}{6} + \frac{1}{5}$ $\quad$ $1\frac{2}{3} - \frac{9}{10}$

Explain your reasoning.

What You Do

1. Take turns. Roll the number cube. Read the estimate next to that toss in the table.
2. Use estimation to find an expression on the **Game Board** that has a sum or difference that matches that estimate. If there are none, your turn ends.
3. Point to the sum or difference and explain your reasoning to your partner.
4. Your partner checks your answer by calculating the sum or difference. If you are correct, place a game marker on the expression.
5. Continue until all the squares are covered.
6. The player with the most markers on the **Game Board** wins.

Toss	Estimate
1	Less than $1\frac{1}{2}$
2	Between $1\frac{1}{2}$ and 2
3	Greater than 2
4	Less than $1\frac{1}{2}$
5	Between $1\frac{1}{2}$ and 2
6	Greater than 2

Go Further!

Write an addition or subtraction expression that matches each estimate in the table. Ask your partner to use estimation to classify each expression.

***Ready*® Center Activity 5.23 ★★ Game Board**

Partner A _____

Partner B _____

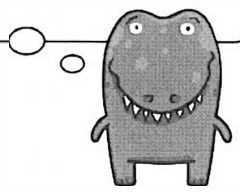
Estimate Fraction Sums and Differences

$1\frac{1}{9} + \frac{1}{6}$	$3\frac{1}{2} - 2\frac{1}{8}$	$1\frac{1}{6} + \frac{1}{2}$	$2\frac{7}{8} - \frac{2}{3}$
$5\frac{3}{4} - 3\frac{4}{9}$	$1\frac{3}{4} + \frac{5}{8}$	$8\frac{4}{5} - 7\frac{1}{8}$	$1\frac{7}{15} + \frac{4}{5}$
$2\frac{1}{2} - \frac{5}{6}$	$1\frac{1}{4} + \frac{5}{12}$	$\frac{4}{5} + \frac{3}{10}$	$1\frac{3}{5} - \frac{3}{10}$

I can use benchmark fractions and number sense to estimate sums and differences.

$\frac{3}{5} + \frac{1}{8}$ { $\frac{3}{5}$ is less than $\frac{3}{4}$. $\frac{1}{8}$ is less than $\frac{1}{4}$. The sum is less than 1.

$1\frac{3}{8} - \frac{3}{10}$ { $\frac{3}{10}$ is less than $\frac{3}{8}$. The sum is greater than 1.



Fractions as Division

Name: _____

Solve each problem.

1. Roger has 4 gallons of orange juice. He puts the same amount of juice into each of 5 pitchers. How many gallons of orange juice are in 1 pitcher?

2. Marta has 8 cubic feet of potting soil and 3 flower pots. She wants to put the same amount of soil in each pot. How many cubic feet of soil will she put in each flower pot?

3. Greg made 27 ounces of potato salad to serve to 10 guests at a picnic. If each serving is the same size, how much potato salad will each guest receive?

4. Chandra spends 15 minutes doing 4 math problems. She spends the same amount of time on each problem. How many minutes does she spend on each problem?

5. Taylor has 5 yards of gold ribbon to decorate 8 costumes for the school play. She plans to use the same amount of ribbon for each costume. How many yards of ribbon will she use for each costume?

6. DeShawn is using 7 yards of wire fencing to make a play area for his puppy. He wants to cut the fencing into 6 pieces of equal length. How long will each piece of fencing be?

7. What is a division word problem that can be represented by $\frac{4}{3}$?

***Ready*® Center Activity 5.25 ★★**

Fractions As Quotients

What You Need

- Recording Sheet

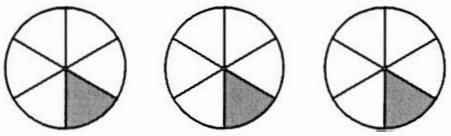
Check Understanding

Sketch a model to find the quotient of $3 \div 8$. Write a division equation and a multiplication equation to represent the model.

What You Do

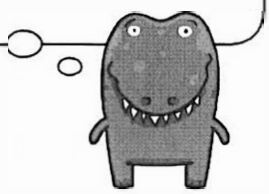
1. Take turns. Choose a division model from the **Recording Sheet.**
2. Tell your partner a division equation that represents the model.
3. Your partner tells you a multiplication equation to check the quotient.
4. Say how the two equations are related.
5. If your partner agrees, you each write your equation on the **Recording Sheet** in the space below the model.

The division model



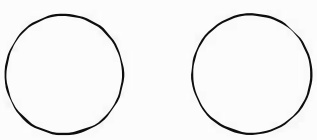
shows $3 \div 6 = \frac{3}{6}$, because there are 3 wholes each divided into 6 parts.

I can check the quotient by writing a related multiplication equation: $\frac{1}{6} \times 3 = \frac{3}{6}$.



Go Further!

Shade in the model to show that the quotient $\frac{2}{5}$ represents the division of the numerator by the denominator. Have your partner write a multiplication and division equation to show it.



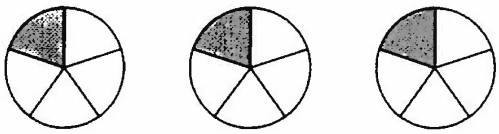
***Ready*® Center Activity 5.25 ★★ Recording Sheet**

Partner A _____

Partner B _____

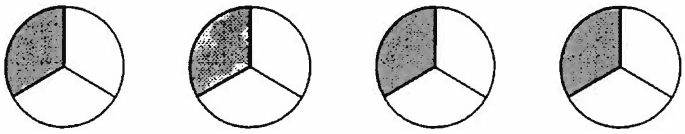
Fractions As Quotients

A



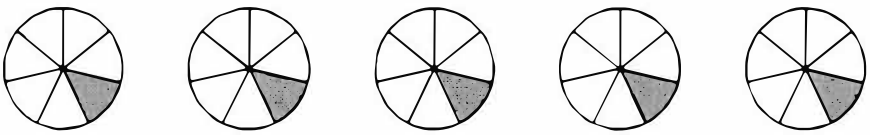
_____ ÷ _____ = _____ _____ × _____ = _____

B



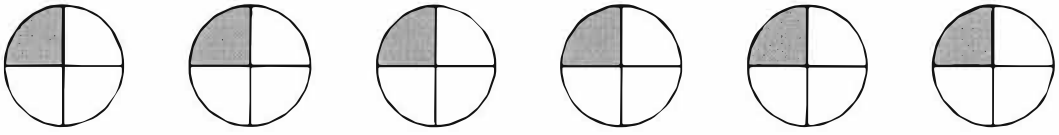
_____ ÷ _____ = _____ _____ × _____ = _____

C



_____ ÷ _____ = _____ _____ × _____ = _____

D



_____ ÷ _____ = _____ _____ × _____ = _____

5th Science- Ecosystem Choice Board

You have spent time this year learning about many different topics of interest about Ecosystems. Now, you will demonstrate your knowledge by choosing ***three*** activities from the choice menu below to complete.

Articles to support the learning:

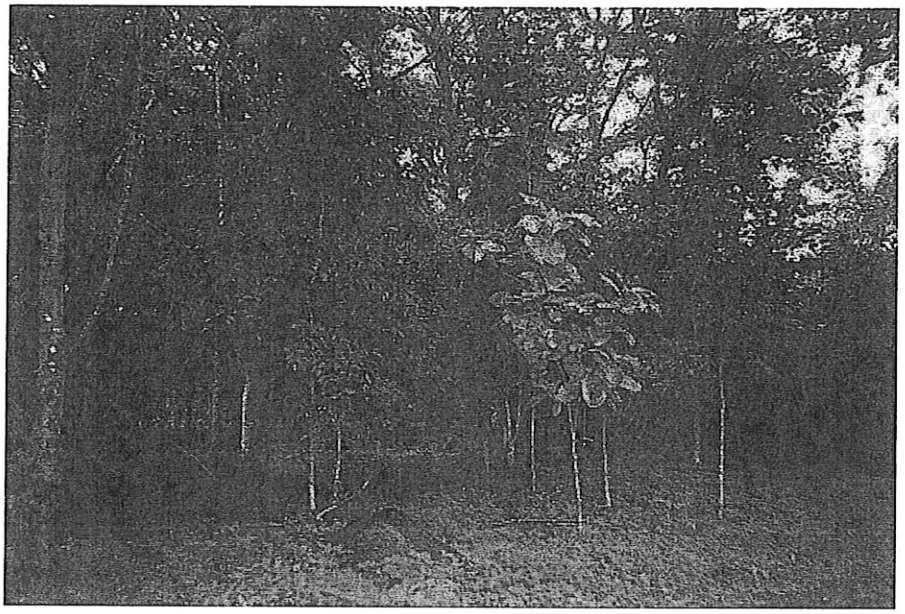
The Ecosystem of the Forest
What's the Big Idea About Marine Biology?
How Acid Rain Affects a Food Web

Week 1

Letter to an Ecologist Draft an informative letter to an ecologist about the difference between a terrestrial and aquatic ecosystem. Include vocabulary in your letter that demonstrates your knowledge of land-based and water-based ecosystems. Explain in three paragraphs why it is important to protect all ecosystems within communities.	**Brochure** Design an informational brochure about a specific ecosystem (deciduous forest, grasslands, pond, etc.) of your choice. Make sure you include reasons why this ecosystem is important and how the plants and animals within it are interconnected.	**Comic Strip** Organisms within an ecosystem can be producers, consumers, or decomposers. Create a comic strip that describes the difference between these organisms. Make sure you include pictures, dialogue, and captions to explain how these affect each other.
Interview Pretend you are interviewing a plant or an animal within a specific ecosystem (tundra, lake, rainforest, etc). Write a list of five interview questions to ask that plant or animal. Then, give possible answers the plant or animal may have given in response to your questions.	**Game Maker** Create a game that would help other students review many of the vocabulary terms that you learned during the Ecosystems unit. These words may include: • producer • consumer • biotic • abiotic • photosynthesis • grasslands • salinity	**Song Writing** Compose a song with lyrics that shows how food chains and food webs are a vital part of the interconnectedness of a specific ecosystem. Make sure you include the webs and cycles that are commonly associated with the particular ecosystem.

The Ecosystem of the Forest

by ReadWorks



Even if it doesn't look like it, all living things constantly interact with their environment. For instance, every time you take a breath, you get oxygen from the air, and every time you breathe back out, you release carbon dioxide into the world around you. Both oxygen and carbon dioxide are vital gases that different organisms can use. You, a human, need the oxygen for energy and need to get rid of the carbon dioxide, because it's a waste matter.

Just like us, all other organisms take something from their environment while putting waste back into it. When several kinds of organisms interact with each other in one particular area, it's called an ecosystem. In the forest, living beings (plants, animals, insects, fungi and bacteria) all interact with each other and with the soil and water to form the forest's specific kind of ecosystem.

So, how does it work? Every organism in the forest can be put in one of three categories. Depending on which category they're in, they'll interact with each other and the forest's resources in a different way. The categories are producer, decomposer and consumer. Let's look at each one.

Producers are living things that can make their own energy out of non-living resources all around them like, oxygen and water. They're also known as autotrophs. Autotrophs do not need to kill anything in order to eat. Plants and algae, for example, are producers. In the forest's ecosystem, the trees, shrubs and moss are all producers. They turn water and sunlight into the energy they need to live and grow, through a process called photosynthesis. And remember that carbon dioxide you expelled as waste matter? Well, for plants, carbon dioxide is a vital gas. It is used to help aid with the process of photosynthesis.

Like producers, decomposers don't need to kill another living being to obtain food. However, they differ

from producers because they still need to get their nutrients from other organisms or from waste matter expelled by other organisms. Usually they eat dead animals and plants. Bacteria and certain kinds of fungi are examples of decomposers. They're very important because by helping break down dead organisms, they actually provide energy to living ones.

Consumers are the living beings that need to eat other organisms to survive. You may have heard about this group as being "at the top of the food chain." They're also known as heterotrophs. Humans are heterotrophs who eat both plants and animals to live. In the forest, a deer eating plants, a wolf hunting deer, a hawk eating rodents, and rodents eating both bugs and plants, are all examples of the ecosystem's consumers. As you can see, carnivores, omnivores and herbivores are all different kinds of heterotrophs. It doesn't matter which kind of organism they eat; as long as they eat other organisms to survive, they're consumers/heterotrophs.

So, now that you know each type of player, how does the ecosystem's cycle work? Well, when an organism dies and its body decomposes, bacteria go to work. Let's imagine the dead organism is a deer. Bacteria obtain energy from the deer's body, while helping it decompose efficiently. When the deer's body breaks down, because of the work done by the bacteria, it returns to the soil. This is important for the earth, because the carcass actually gives vital energy back to the environment. It makes the soil rich in nutrients for plants to grow there. Grasses, flowers and trees then grow in that soil and get the energy they need, along with energy from the sun and water. The water also filters through the soil, which is necessary for the forest's flowers and trees to be able to take it up through their roots. Heterotrophs, like deer, eat those plants to get their energy, and other heterotrophs, like wolves, eat the deer for their energy.

As you can see, in a forest ecosystem or any kind of ecosystem, every being interacts with other beings. What's important to remember is that each part of the ecosystem is as important as another. Without soil, there'd be no plants. With no plants, there'd be no deer, rodents or certain kinds of insects. And without tiny microbes (remember, the decomposers), animals and plants would die without their bodies being returned to the earth. Because forests cover about a quarter of the total land surface of the world, keeping their ecology balanced is important for the entire earth.

Name: _____ Date: _____

1. What is an ecosystem?

A. a living being, such as a human, that eats other living beings in order to survive

B. the process by which the body of a living thing is broken down by decomposers

C. one particular area where several kinds of organisms interact with each other

D. an organism that breathes in oxygen and then breathes out carbon dioxide

2. What does this passage explain?

A. This passage explains what the difference between plants and fungi is.

B. This passage explains what an ecosystem is and how it works.

C. This passage explains how oxygen is used by the human body after it is breathed in.

D. This passage explains what happens when a decomposer dies in the forest.

3. In an ecosystem, different organisms interact with each other.

What evidence from the passage supports this statement?

A. Plants use sunlight, water, and carbon dioxide in a process called photosynthesis.

B. Forest ecosystems cover about a quarter, or one-fourth, of the total land surface in the world.

C. Producers are living things that can make their own energy out of non-living resources.

D. A deer decomposing in the soil provides food for bacteria and nutrients for plants to grow.

4. Based on the information in the passage, what do all ecosystems have in common?

A. All ecosystems are home to living beings that interact with each other.

B. All ecosystems are home to trees, deer, humans, rodents, wolves, hawks, and bacteria.

C. All ecosystems have an equal number of consumers, decomposers, and producers.

D. All ecosystems have a few consumers that do not interact with decomposers and producers.

5. What is this passage mainly about

A. the differences between oxygen and carbon dioxide

B. different kinds of consumers and the reasons they are "at the top of the food chain"

C. different organisms in a forest ecosystem and how they interact

D. what happens when the ecology of a forest is thrown off-balance

6. Read the following sentence: "Consumers are the living beings who need to eat other **organisms** to survive."

What does the word **organisms** mean?

A. environments

B. waste matter

C. categories

D. living things

7. Choose the answer that best completes the sentence below.

Every organism in the forest can be put in one of three categories, _____ producer, decomposer, or consumer.

A. namely

B. although

C. as a result

D. earlier

8. What is a decomposer?

_____

_____

_____

9. How do decomposers interact with their ecosystem? Be sure to name one example of them taking from the ecosystem and one example of them giving to the ecosystem.

10. The author writes that each part of the ecosystem is as important as another. Based on the information in the passage, do you agree or disagree? Explain your reasons for agreeing or disagreeing using evidence from the passage.

What's the Big Idea about Marine Biology? Creatures and Ecosystems in the Ocean

This text is provided courtesy of OLogy, the American Museum of Natural History's website for kids.

There Are So Many Ways to Live in the Sea

Forests and prairies are examples of ecosystems on land. An ecosystem is a community of living things. Members survive by interacting with each other and with their environment. At first glance, the ocean seems like one big ecosystem.

Look below the surface and you'll see that there are lots of different kinds of ocean ecosystems - more than on land - all teeming with life. Ocean ecosystems depend on each other for survival.

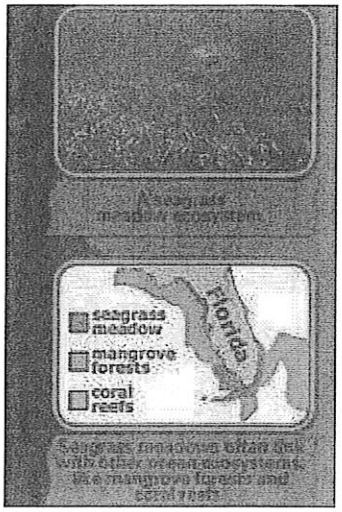


Photo Credit: courtesy of NOAA, Heather Dine (top); courtesy of Florida Department of Environmental Protection (bottom)

Ocean Layer Cake

In the ocean you see a much greater variety of creatures if you move up or down than by moving from side to side.

The sunlit zone, near the top, is rich in life. Algae bloom here, providing huge quantities of food for the animals that live here, and for the billions of deep-sea animals that rise to feed here every night and then return to the deep at dawn. This vertical migration is the largest mass movement of life on Earth. And it happens every night!

As you dive deeper, to the colder, darker twilight zone, there's less life. Zooplankton and sea snow provide most of the food for the animals that live here.

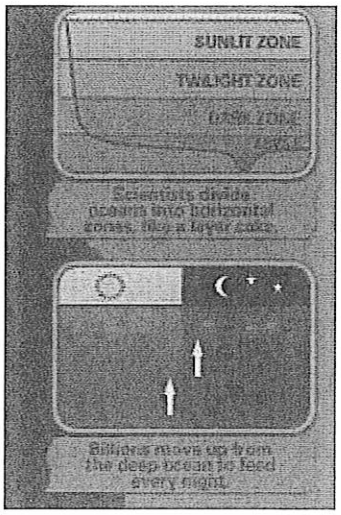


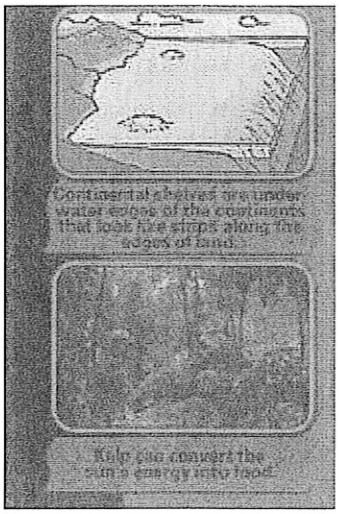
Illustration Credit: Eric Hamilton (top); courtesy of Debbie Steinberg, Virginia Institute of Marine Science (bottom)

Way down deep is the icy-cold dark zone, where signs of life are rare. The pressure of the water would crush a human. It's pitch-black here because no sunlight penetrates. The only

light is provided by bioluminescence - glowing lights on animals' bodies.

Life on the Edge

Ecosystems such as coral reefs, mangroves, kelp forests, and estuaries are found along the continental shelves. Eighty percent of all sea life lives here. Why? Because shallow water and closeness to land provide the conditions needed to support large quantities of life: food, light, and shelter. Algae, like kelp and phytoplankton, contain green, brown, and red pigments that enable them to convert the sun's energy into food.



Credit: Eric Hamilton (top illustration); courtesy of Ian Skipworth (bottom photo)

Name: _____ **Date:** _____

1. If you dive deeper into the ocean will you find more life or less life?

2. Eighty percent of all sea life is found in ecosystems along the continental shelves. Why is this the case?

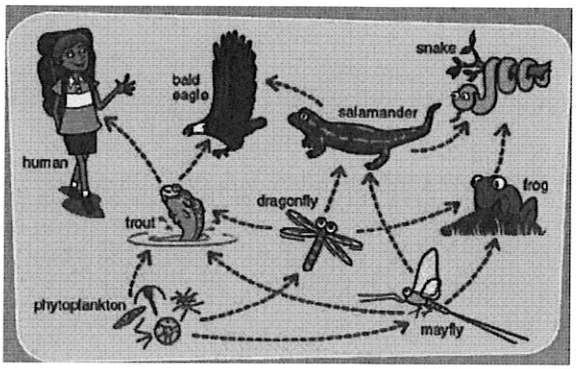
Support your answer with evidence from the text.

3. What is the main idea of this text?

How Acid Rain Affects a Food Web

by The Environmental Protection Agency
This text is taken from the United States Environmental Protection Agency's website.

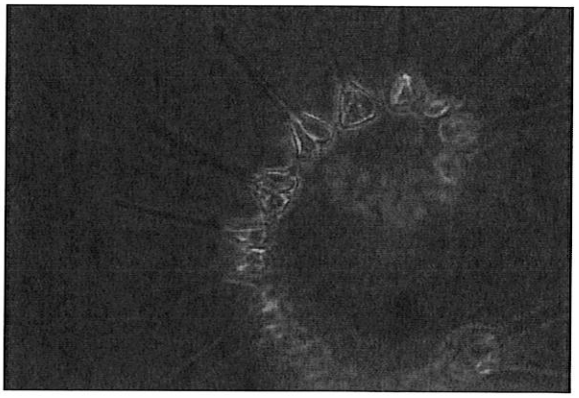
A food web is a diagram that explains the feeding relationships between different plants and animals in an ecosystem. An animal that is at the top of a food web eats the various plants and animals that are listed below it. Therefore, the animals at the top are predators, and the animals and plants listed below them are prey. Some animals have many different sources of food, while others are more limited in what they eat.



U.S. Environmental Protection Agency

an example of a food web

Acid rain can cause serious problems for many different animals and plants. As a result, the entire food web is affected. For example, acid rain can cause phytoplankton in lakes to die. Insects, which rely on phytoplankton for food, now have less food to eat, and they begin to die as a result. These insects are a source of food for many other animals, such as fish, birds, frogs, and salamanders. As the insects die, there is now less food for these animals. This process continues up the entire food web. So, although acid rain may not directly affect a certain species of plant or animal, it can affect the entire food web by limiting the amount of food available.



phytoplankton

Name: _____ Date: _____

1. What is a meaning of the word **predator**?

A. loss of the ability to move a body part

B. the male reproductive organ of a flower

C. an animal that preys on others for food

2. What is another meaning of the word **predator**?

A. the top line of a hill, mountain, or wave

B. any authorization to pass or go somewhere

C. someone who attacks and plunders for gain

Please use each answer choice only once. Choose the one word that best completes the sentence.

3. Shelter can protect animals from hot and cold weather and from a _____.

A. predator

B. predators

C. predation

4. All food chains have _____ and prey.

A. predator

B. predators

C. predation

5. _____ is a mode of life where food is made by killing and eating other animals.

A. predator

B. predators

C. predation

6. Please write your own sentence using the word **predator**.

7. What would you like to remember about the meaning of the word **predator** so that you can use it when you write or speak?

Name: _____ **Date:** _____

1. What is a meaning of the word **prey**?

A. a specialist in geology

B. the victim of a disease

C. a change for the better

2. What is another meaning of the word **prey**?

A. animal hunted or caught for food

B. official routes of communication

C. a line that indicates a boundary

Please use each answer choice only once. Choose the one word that best completes the sentence.

3. All food chains have predators and _____.

A. prey

B. preyed

C. preys

4. Each creature _____ on another, nothing was safe from all.

A. prey

B. preyed

C. preys

5. The electric eel usually _____ on fish.

A. prey

B. preyed

C. preys

6. Please write your own sentence using the word **prey**.

7. What would you like to remember about the meaning of the word **prey** so that you can use it when you write or speak?