Super-Journal Week 3:6

Every night, you should be reading at least 30 minutes of whatever book you have checked out from your assigned reading list. Tape or glue (but do not staple) this sheet into your Super-Journal on the left-side page. Fill in the table below *every day* by recording the required data.

Day	Title	Start Pg.	End Pg.	Parent Sign.
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

On the right-side page of your Super-Journal, answer two of the questions below throughout the week. Be sure that the questions you choose to answer go with the appropriate type of book (Fiction or Nonfiction). The Super-Journal is due on the first day after the weekend (usually Monday). To earn credit for your journal entry, you *must* respond in at least five complete sentences per response and use specific evidence from the text to support your claim based on what you've read this week.

FICTION

1. How does the author organize the text? Does the author use description, sequence, compare and contrast, cause and effect, or problem and solution to tell the story? Use evidence from the text to support your answer.
2. What is the main idea of the last chapter you read this week?

NONFICTION

1. Explain what is happening in the text.
2. What is the main idea of this text?

RL.2.5/RI.1.3

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RL.2.5/RI.1.3

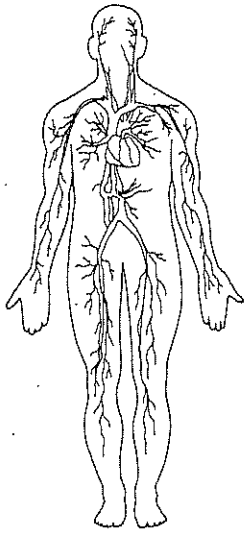
Science Standard: Knows the general structure and functions of cells in organisms

Benchmark: Knows that each plant or animal has different structures which serve different functions in growth, survival, and reproduction

Your Remarkable Body

Your body is an amazing machine. Just as a machine's many parts work together to make it run, your body systems work together to keep you going. These systems include the skeletal system and the muscle system.

All of the bones in your body make up your skeletal system. Bones meet at joints. Moveable joints, like those in the fingers, let the body move. Fixed joints, like those found in the skull, do not let the bones move. Your teeth are bones with a very specific job: chewing food. The other bones form a frame that supports your body and protects its internal organs. Bones do several other tasks, too. Some bone cells take calcium out of the blood and add it to the bone. Calcium makes the bones strong so that they will not break easily. The soft inner part of a bone, called bone marrow, makes and releases new blood cells. The most obvious job that bones do is work with your muscles to let you move.



Your muscle system lets your body move and allows your internal organs to work. You have skeletal muscles and smooth muscles. Skeletal muscles move bones and are voluntary muscles that you can control. These muscles move by pulling. Each muscle can only pull in one direction. One end of each skeletal muscle connects to a bone. This bone does not move when the muscle pulls. The other end of that muscle attaches to another bone. This bone does move when the muscle pulls. One set of muscles pulls the bones in one direction; the other set pulls the bone in the other direction. This means that you use one set of muscles to lift your arm up and another set of muscles to move it back down.

Smooth muscles make up most of the body's internal organs. Smooth muscles move food through the digestive system, air through the lungs, and blood through veins and arteries. Since you cannot control these muscles, they're called involuntary muscles. Smooth muscles cannot move as fast as skeletal muscles, but they work **continuously**. Your heart is a smooth muscle. It beats about 75 times each minute, and it will never rest as long as you live.

Your Remarkable Body

Comprehension Questions

1. You have control of the movement of
   - (a) some of your body's muscles.
   - (b) all of your body's muscles.
   - (c) none of your body's muscles.
   - (d) just your arm and leg muscles.

2. While you are young, the part of the skeletal system that has its bones replaced by brand new bones is
   - (a) the skull.
   - (b) the feet.
   - (c) the teeth.
   - (d) the hands.

3. Which is an example of voluntary muscles?
   - (a) your lungs breathing
   - (b) your heart beating
   - (c) your legs walking
   - (d) your intestines digesting food

4. Another word for *continuously* is
   - (a) rarely.
   - (b) often.
   - (c) rapidly.
   - (d) constantly.

5. When you break an arm bone, which of these systems is affected?
   - (a) the voluntary muscle system
   - (b) the involuntary muscle system
   - (c) the respiratory system
   - (d) the digestive system

6. Picture a skeleton. Where do you see moveable joints?
   - (a) in the skull
   - (b) in the knee
   - (c) in the ribs
   - (d) in the teeth

7. Which body system do you find the most interesting? Explain.

_____

_____

_____

It Circulates

Cross-Curricular Focus: Life Science

The **circulatory** system is the transport system of the human body. Your body is like a map filled with passageways of different sizes that are filled with blood. **Arteries** and **veins** are the body's largest blood vessels. Arteries carry oxygen-rich blood from the lungs and through the heart so it can be delivered to all the cells of the body. Veins carry carbon dioxide waste back to the heart and into the lungs so the carbon dioxide can be exhaled. **Capillaries** are the tiniest blood vessels. They are especially helpful in the lungs, where the gas exchanges take place in air sacs called alveoli. Under a microscope, alveoli look like grape clusters.

At the very center of the circulatory system is the **heart**. Your heart is about the same size as your fist, but it is made of muscle. Its job is to pump your blood through all those blood vessels. It never stops working, even when you are sleeping. It is the strongest muscle in your body. Your heart has four chambers, or spaces, inside it. They are the left and right **ventricles**, and the left and right atriums. Each chamber is separated by a valve that allows blood flow in only one direction. The opening and closing of the valves is what you can hear through a stethoscope when you visit the doctor. The blood being pushed through the valves is what you feel as your pulse.

Blood looks like a simple red liquid when you have a cut or a scrape. That's only because your eyes cannot see what is going on inside the blood at the microscopic level. The reason blood looks red to us is because it contains an iron-rich substance called hemoglobin. Hemoglobin allows blood to hold on to oxygen and carry it around the body. Hemoglobin is found in disc-shaped cells called red blood cells. There are also white blood cells in our blood. They are larger than red blood cells and are important because they help us fight disease. Platelets, another kind of cell found in our blood, help us form scabs when we are injured so we don't lose too much blood. All of these cells float in a liquid called plasma. Plasma also carries sugar to cells and waste products away from cells.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is the function of the white blood cells?

_____

_____

2) How are arteries and veins alike?

_____

_____

3) Based on other information in the passage, what gases are being exchanged in the alveoli?

_____

_____

4) What is the main idea of this passage?

_____

_____

5) What does hemoglobin do?

_____

_____

Lesson 10-6 • Reinforce Understanding

Solve Problems Involving Area

Name _____

Review

We can determine the area of a rectangle by finding the number of whole units and then finding the number of fractional units.

Consider a rectangle that is 6 units by $5\frac{1}{2}$ units.

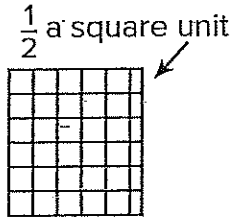
There are 6 rows of 5 square units:

$6 \times 5 = 30$ units

There are 6 half-square units:

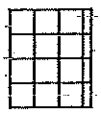
$6 \times \frac{1}{2} = 3$ units

Altogether, there are $30 + 3 = 33$ square units



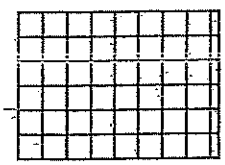
What is the area of the rectangle with the given dimensions?

1. $3\frac{1}{4} \times 4 =$

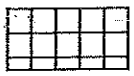


2. $7\frac{1}{2} \times 3 =$

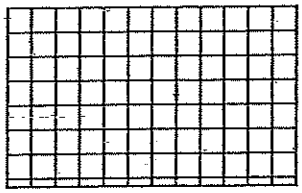
3. $8\frac{1}{3} \times 6 =$



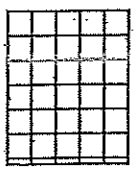
4. $5 \times 2\frac{1}{2} =$



5. $12 \times 7\frac{1}{3} =$



6. $5 \times 6\frac{1}{4} =$



Lesson 10-6

Additional Practice

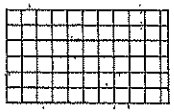
Name _____

Review

You can find the area of a rectangle with fractional side lengths by tiling the rectangle with unit squares and multiplying the length and width.

A rectangular garden is $10\frac{1}{2}$ feet long and 6 feet wide. What is the area of the garden?

Find the area of the rectangle.



Count the length: $10\frac{1}{2}$ units.

Count the width: 6 units.

Multiply the length and the width to find the area.

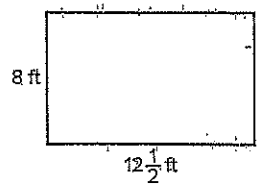
Number of whole square units: $6 \times 10 = 60$

Number of half-square units: $6 \times \frac{1}{2} = 3$

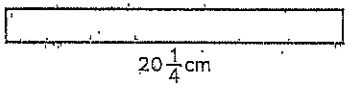
Total number of square units: $60 + 3 = 63$

The area of the garden is 63 square units.

What is the area of the rectangle?

1. 

_____ square feet

2. 

_____ square centimeters

What is the area of a rectangle with the given dimensions?

3. 5 inches by $3\frac{1}{2}$ inches

_____ square inches

4. 8 feet by $4\frac{2}{3}$ feet

_____ square feet

5. 10 yards by $2\frac{1}{5}$ yards

_____ square yards

6. 5 meters by $2\frac{3}{4}$ meters

_____ square meters

7. A ceramic tile is $\frac{3}{4}$ foot wide and $\frac{3}{4}$ foot long. What is the area of the tile?

_____ square foot

8. Jill's rectangular bedroom is 11 feet long and $9\frac{1}{2}$ feet wide. What is the area of the floor in Jill's bedroom?

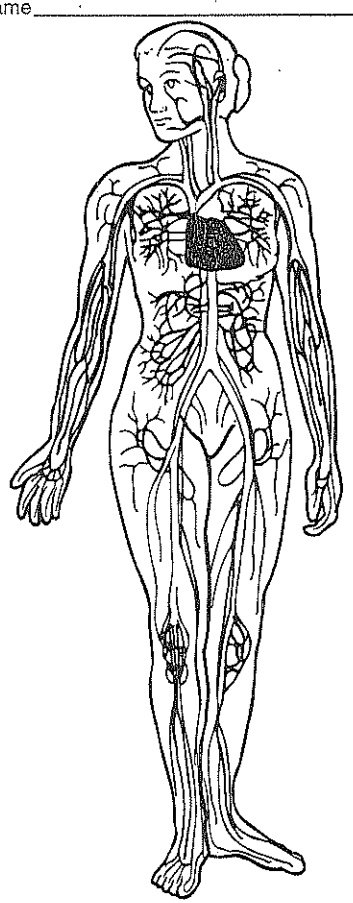
_____ square feet

9. Jake's vegetable garden is in the shape of a rectangle. The garden is 24 feet long and $5\frac{5}{6}$ feet wide. What is the area of Jake's vegetable garden?

_____ square feet

Math @ Home Activity

With your child, look for some rectangles or rectangular objects around your home. Use a ruler or tape measure to measure the dimensions, using fractions of a foot instead of inches. If neither dimension is a whole number, round one of the dimensions to the nearest whole foot. Have your child find the area of the object.



An Efficient System

When you reach adulthood, your heart will beat more than 100,000 times each day!

The *circulatory system* has two important jobs. It moves blood and regulates the temperature of your body. The circulatory system—which is made up of your heart, blood vessels, and blood—carries nutrients, oxygen, antibodies, and hormones to the cells of your body. The heart is the pump that keeps your blood moving through the blood vessels. On its journey, blood picks up oxygen from the lungs and nutrients from the digestive system.

Because you are a warm-blooded animal, your body has a fairly steady body temperature. Your circulatory system helps maintain this constant temperature. Warmer blood from the center of your body is brought to the surface to be cooled. The circulatory system does all of this work with about four to five quarts of blood.

Directions: Use words or short phrases to answer the questions.

1. Name the system that carries blood throughout the body._____
2. List three things that make up the circulatory system._____
3. Name two functions of the circulatory system._____

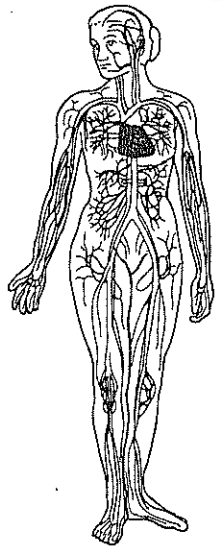
An Efficient System

Directions: Use words or short phrases to answer the questions.

1. Name the body parts that carry blood._____
2. The blood picks up oxygen from which body parts?_____
3. What does the blood pick up from the digestive system?_____
4. Where does the blood take oxygen and nutrients?_____
5. How is warmer blood from the center of your body cooled?_____

Research: Who is Barney Clark? What courageous thing did he do that advanced medical study of the heart?

Bonus: To find out how many times per minute your heart beats, take your pulse. (Place two fingertips of your right hand on the underside of your left wrist just below the base of your thumb.) Sit quietly for one minute and count the pulse beats. Using this number, figure out approximately how many times your heart will beat in one hour and in 24 hours.



Lesson 10-7 • Reinforce Understanding

Solve Problems Involving Perimeter

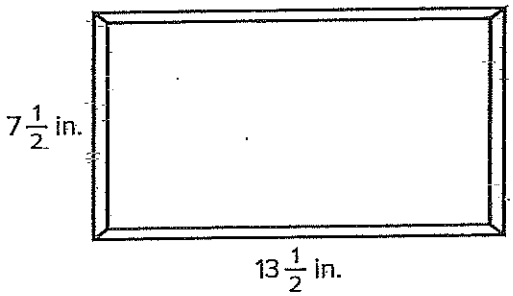
Name _____

Review

You can use the perimeter formula to solve problems involving the distance around a rectangle.

Example:

Ellen is replacing the frame around a rectangular painting. How much framing material does Ellen need?



Use the perimeter formula $P = 2 \times l + 2 \times w$.

$P = (2 \times 13\frac{1}{2}) + (2 \times 7\frac{1}{2})$

$= (2 \times \frac{27}{2}) + (2 \times \frac{15}{2})$

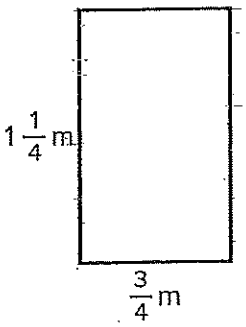
$= 27 + 15$

$= 42$

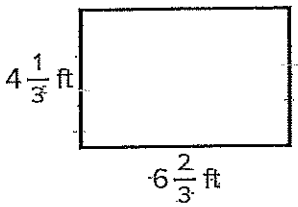
Ellen needs 42 inches of framing material to replace the frame.

What is the perimeter of the rectangle?

1.



2.



3. Length $= 41\frac{1}{2}$ cm

Width $= 30\frac{1}{4}$ cm

4. Width $= 2\frac{3}{5}$ yd

Length $= 2\frac{2}{5}$ yd

Lesson 10-7

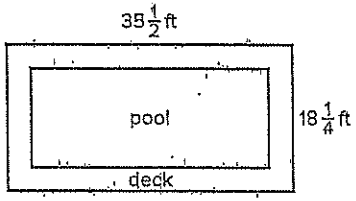
Additional Practice

Name _____

Review

You can use the perimeter formula to solve problems involving the perimeter of a rectangle with fractional side lengths.

How much fencing is needed to go around the pool and deck?



Use the perimeter formula, $P = (2 \times l) + (2 \times w)$.

$P = (2 \times 35\frac{1}{2}) + (2 \times 18\frac{1}{4})$

$= \frac{142}{2} + \frac{146}{4}$

$= 71 + 36\frac{1}{2}$

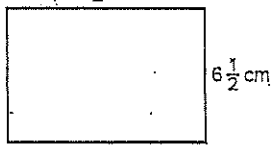
$= 107\frac{1}{2}$

$107\frac{1}{2}$ feet of fencing is needed.

What is the perimeter of the rectangle?

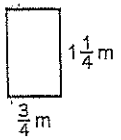
1. 

$P =$ _____ in.

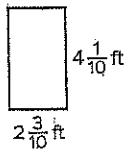
2. 

$P =$ _____ cm

What is the perimeter of the rectangle?

3. 

$P =$ _____

4. 

$P =$ _____

5. Length $= 15\frac{1}{12}$ in.
Width $= 9\frac{1}{2}$ in.

$P =$ _____

6. Width $= 52\frac{2}{3}$ cm
Length $= 48\frac{1}{6}$ cm

$P =$ _____

7. Nola cut a piece of poster board for an art project. The poster board has a length of $18\frac{1}{2}$ inches and a width of $16\frac{1}{4}$ inches. What is the perimeter of the poster board?

8. A practice soccer field has a length of $98\frac{1}{2}$ meters and a width of $78\frac{5}{12}$ meters. Is the perimeter of the field greater than 350 meters? Explain your thinking.

Math @ Home Activity

Have your child measure the length and width of a rectangular object in your home. Measure to the nearest half, fourth, or eighth inch. Then have your child find the perimeter of the rectangular object. Repeat as time permits.

Gas Exchange

Cross-Curricular Focus: Life Science

Name: _____

Did you know that your body has its very own gas exchange program that runs 24 hours a day? It's called the respiratory system. It is one of your body's vital systems, which means you could not live without it. Every time you take a breath, oxygen enters your lungs and is carried around to all the body's cells by the circulatory system. Waste products, like carbon dioxide gas, are picked up by the circulatory system as well. Carbon dioxide is dropped off at the lungs so you can breathe it out.

The respiratory and circulatory systems need each other. The respiratory system brings in oxygen and pushes out carbon dioxide. The circulatory system transports these gases where they need to go. The two systems work together to make sure that your body gets what it needs to survive. That is why we say that the respiratory and circulatory systems are **interdependent**. They need each other.

The respiratory system is not just your lungs. It also includes your nose, mouth, and the air passageways that connect them to your lungs. After you inhale air through your nose and mouth, it enters a tube in your throat called the trachea. Right before the trachea gets to your lungs, it splits into two smaller tubes called the bronchi. The deeper you go into your lungs, the smaller and smaller the tubes become as they keep dividing in two. The very smallest tubes end with tiny sacs. These sacs look like grape clusters under the microscope. These are called alveoli. They diffuse oxygen into the blood and receive carbon dioxide being returned to the lungs from the blood. Carbon dioxide travels out of your body when you exhale.

Your body has a special way of making sure that you can get the oxygen that you need when you breathe. Your chest actually changes size when you inhale. You have muscles that are attached to your ribs. These muscles pull up when you inhale. Your diaphragm, a large muscle under your lungs, pulls down. This gives plenty of room so you can get the air you need.

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is the purpose of the circulatory system?

_____

_____

2) Identify the parts of the respiratory system.

_____

_____

3) What is the function of the alveoli?

_____

_____

4) How does the body get rid of carbon dioxide?

_____

_____

5) How does your body make room for a deep breath? _____

_____

Multiplying with Mixed Numbers in Word Problems

22.

Name: _____

Solve each problem.

1. Neil has $2\frac{1}{4}$ pounds of apples. He uses $\frac{2}{3}$ of the apples to make pies. How many pounds of apples does Neil use to make pies?

2. Kathy is riding her bike $1\frac{3}{5}$ miles to her friend's house. She has already traveled $\frac{7}{8}$ of the distance. How far has Kathy already traveled?

3. Keisha spent $3\frac{1}{3}$ hours at the science museum. She spent $\frac{2}{5}$ of that time in the planetarium. How much time did Keisha spend in the planetarium?

4. Javier is planting a vegetable garden that will be $7\frac{1}{2}$ meters long and 1 meter wide. He will plant $\frac{1}{5}$ of the garden with tomatoes. How many square meters of the garden will be planted with tomatoes?

5. Ed has two dogs. The smaller dog weighs $8\frac{1}{3}$ pounds. The larger dog weighs $1\frac{1}{2}$ times as much as the smaller dog. How much does the larger dog weigh?

6. Shane designed a mural that is $2\frac{3}{4}$ yards long and $1\frac{1}{3}$ yards high. What is the area in square yards of the mural?

7. How could you use an area model to solve problem 4?

Fluency and Skills Practice

Multiplying Fractions in Word Problems

22

Name: _____

Solve each problem.

1. Blanca has $\frac{3}{4}$ pound of tuna salad. She uses $\frac{1}{3}$ of the tuna salad to make sandwiches. How much of the tuna salad did Blanca use?

2. Frank has a board that is $\frac{5}{8}$ meter long. He cuts off a piece that is $\frac{3}{5}$ the length of the board. How long is the piece of the board Frank cut off?

3. Sharon drinks $\frac{2}{3}$ of $\frac{1}{2}$ pint of lemonade. How much lemonade did Sharon drink?

4. James lives $\frac{4}{5}$ mile from the library. He has already walked $\frac{3}{4}$ of the way. How far has James walked?

5. Ali worked on his math homework for $\frac{2}{3}$ hour. He spent $\frac{3}{4}$ of the time solving multiplication problems. How much time did Ali spend solving multiplication problems?

6. Madison has $\frac{5}{6}$ yard of fabric. She uses $\frac{2}{5}$ of the fabric to make a pillow cover. How much fabric did Madison use for the pillow cover?

7. How could you draw a picture to solve problem 2?

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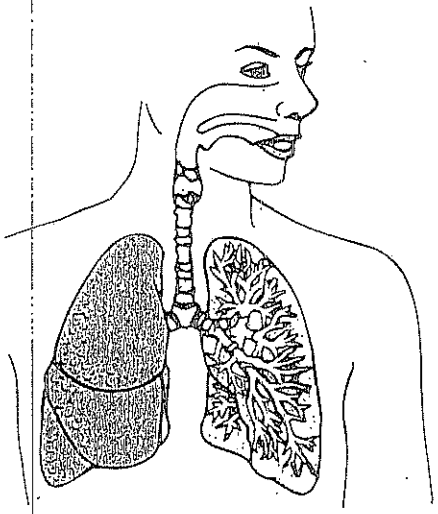
A Breathtaking System

An adult's lungs can hold five quarts of air! How large a balloon do you think it would take to hold that much air?



When you breathe in air through your nose and mouth, you get oxygen. You need oxygen to live. The air goes down your *windpipe* and into your lungs. Your lungs absorb oxygen from the air. The oxygen travels in the blood to every part of the body.

Your body uses oxygen to burn food and to give you energy. You make carbon dioxide when you do this. The blood carries the carbon dioxide back to the lungs. Then it is breathed out. This whole process is called *respiration*.

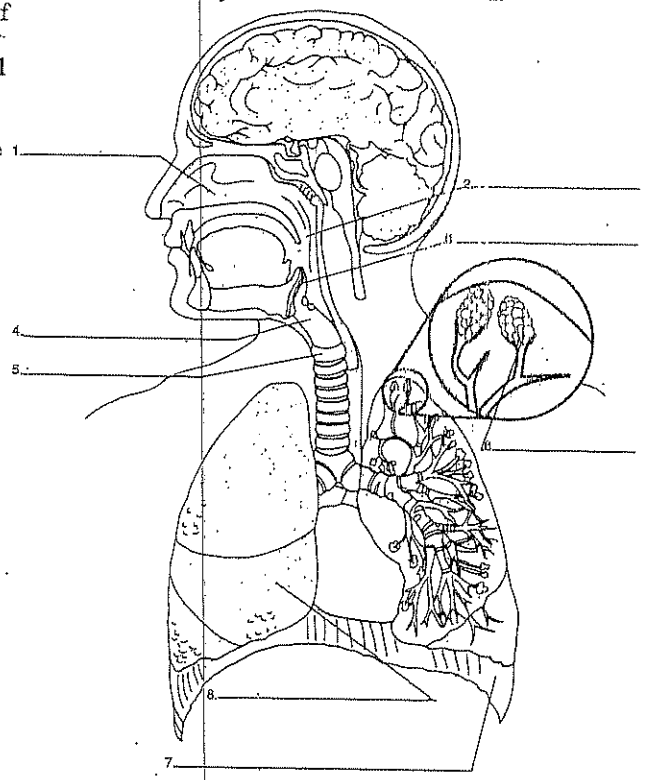
Directions: Use one word from the text to complete the statements.

1. You need _____ to live.
2. You take in air through the nose or the _____.
3. The air you breathe in goes down your _____ and into your lungs.
4. The words in the text that mean "to inhale" are _____.
5. The oxygen you breathe in travels in the _____ to every part of your body.
6. When you breathe in, you take in _____.
7. When you breathe out, you get rid of _____.
8. Your body uses oxygen to burn _____.
9. The blood carries the carbon dioxide back to the lungs, and it is _____ out.
10. The process of breathing in and out is called _____.

A Breathtaking System

Directions: Use the number code to label and color the diagram of the respiratory system.

1. You take in air through your **nasal passage.** Color it green.
2. The **pharynx** connects your mouth and nasal passages. Color it yellow.
3. The **epiglottis** is the flap of cartilage behind your tongue. It helps close the opening to your windpipe when you swallow. Color it red.
4. The **larynx** is made of muscle and cartilage. It is where your **vocal cords** are located. Color it brown.
5. The **trachea** is a tube that serves as the main passageway for air to and from the lungs. Color it purple.
6. The **alveoli** are tiny air sacs at the ends of the **bronchioles.** Color them red.
7. The **diaphragm** is a wall of muscle and connecting tissue. Color it gray.
8. The **lungs** absorb oxygen from the air you breathe. Color the left lung blue.

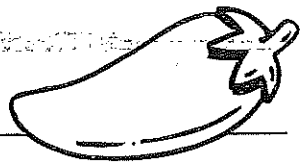


Research: Your right and left lungs are not identical. Find out how they are different.

Bonus: Sit quietly and listen to your breathing. Count how many times you breathe in and out each minute. Stand up and do 25 jumping jacks. Then count your breaths again. How does exercise affect breathing? Write a true statement about this.

Name _____ Date _____

Multiplying Fractions: Problem Solving



Solve each problem.

1. Carl is making dinner for a group of his friends. He is making a recipe for stuffed chilies that uses $1\frac{3}{4}$ cups of cream cheese. Carl will only need to make $\frac{2}{3}$ of the recipe. How much cream cheese should he use?

2. A 2-serving recipe for chicken mole calls for $3\frac{1}{2}$ teaspoons of chili powder and $1\frac{1}{2}$ tablespoons of olive oil. How much of each ingredient is needed to make 3 servings?
   Think: How much of each ingredient is needed for 1 serving?

3. Carl has $\frac{7}{8}$ pounds of cheese. He uses $\frac{1}{7}$ of this in his quesadillas. Since there are 16 ounces in 1 pound, how many ounces of cheese does Carl use in his quesadillas?
   Think: What is $\frac{7}{8}$ of 16 ounces? _____ What is $\frac{1}{7}$ of that? _____

In problems 4–6, solve using this recipe.

Chillaquillas (Serves 6)

1 dozen tortillas	$\frac{2}{3}$ cup chopped green onions
$2\frac{1}{2}$ cups grated jack cheese	$2\frac{1}{4}$ teaspoons chili powder
$1\frac{1}{3}$ cups tomato sauce	$\frac{1}{2}$ teaspoon crushed oregano
$1\frac{1}{4}$ cups low fat cottage cheese	$\frac{1}{4}$ cup oil

Clue:
Use logical reasoning.

4. Carl will need enough chillaquillas to serve 8 people. What number should the recipe be multiplied by to make enough for all 8 people?

5. How much tomato sauce is required if the recipe is multiplied by $1\frac{1}{3}$?

6. How many cups of chopped green onions will be needed if the recipe is tripled?

7. Challenge: Carl's recipe instructs him to bake at 205°C (degrees Celsius). He can convert this temperature to degrees Fahrenheit (°F) using this formula:
   $°F = \frac{9}{5} \times °C + 32$
   What cooking temperature should he use in degrees Fahrenheit?

Name _____ Date _____

Fractions: Multiplication Practice

Multiply. Connect the answers from START to FINISH. Circle the correct FINISH.

1. $\frac{4}{9} \times \frac{3}{8}$
2. $7 \times \frac{5}{7}$
3. $\frac{3}{12} \times \frac{3}{5}$
4. $2\frac{1}{2} \times \frac{1}{5}$
5. $\frac{2}{3} \times \frac{5}{10}$
6. $\frac{5}{6} \times 8\frac{1}{5}$
7. $\frac{1}{3} \times 8$
8. $\frac{2}{3} \times 6$
9. $3\frac{2}{4} \times 1\frac{2}{7}$
10. $4\frac{1}{8} \times 2\frac{4}{5}$
11. $2\frac{2}{7} \times 3$
12. $4 \times 2\frac{4}{5}$
13. $\frac{2}{9} \times 1\frac{3}{4}$
14. $\frac{2}{12} \times \frac{1}{10}$
15. $2\frac{1}{3} \times 3\frac{5}{6}$
16. $\frac{2}{7} \times \frac{4}{3}$
17. $\frac{1}{4} \times \frac{1}{5}$
18. $2\frac{4}{5} \times \frac{3}{7}$
19. $\frac{5}{8} \times \frac{3}{4}$
20. $2\frac{2}{3} \times 1\frac{3}{5}$

$8\frac{11}{18}$	$\frac{4}{11}$	$2\frac{2}{3}$	4	$4\frac{1}{2}$	$5\frac{9}{10}$	$\frac{7}{24}$	FINISH
$2\frac{14}{15}$	$\frac{1}{3}$	$6\frac{5}{6}$	$\frac{2}{9}$	$11\frac{11}{20}$	$\frac{15}{32}$	$4\frac{4}{15}$	FINISH
$\frac{7}{15}$	$\frac{1}{2}$	$\frac{6}{21}$	$11\frac{1}{5}$	$6\frac{6}{7}$	$1\frac{1}{5}$	$9\frac{1}{2}$	FINISH
5	$\frac{3}{20}$	$8\frac{1}{3}$	$\frac{7}{18}$	7	$\frac{1}{20}$	$\frac{2}{3}$	FINISH
START $\frac{1}{6}$	$\frac{19}{20}$	$4\frac{1}{4}$	$\frac{1}{60}$	$8\frac{17}{18}$	$\frac{8}{21}$	$12\frac{5}{8}$	FINISH

Down the Hatch

Cross-Curricular Focus: Life Science

A car needs energy to get where it's going. Your body must have fuel to do all the things it needs to do so you can grow up healthy and stong. The **digestive** system takes care of the body's need for fuel. It is made up of a group of organs that work together. They pass fuel in the form of food from one organ to the next until the entire process is complete. Waste products then pass out of the body.

The digestive system goes to work the moment you put food into your mouth. Immediately, the salivary glands in your mouth moisten the food. The saliva begins breaking down the food into smaller and smaller pieces. Your teeth also get involved, biting and grinding the large pieces. Finally, the pieces are small enough to swallow. Your tongue is kind of like a traffic director, pushing food around in your mouth to make the most of your saliva and teeth. Then, your tongue pushes your food to the back of your mouth so you can swallow.

As your food leaves your mouth, it enters a tube called the **esophagus**. Gravity and muscles push your food down to the **stomach**. In the stomach it is greeted by strong acids. During the next couple of hours, acids and enzymes break your food into a soupy liquid.

Believe it or not, your body has still not received energy from your food. Your liquefied food finally passes into the small **intestine**. This is a long tube that is coiled back and forth inside your body. The food will remain there for up to six hours. During that time, special chemicals digest the liquid even further. Nutrients your body needs are pulled from it. The nutrients enter your blood through tiny little finger-like projections called villi that line the insides of your small intestine.

What happens to the leftovers? The things your body does not need pass into your large intestine. Water and minerals are absorbed out of the food and into your blood over the next 10-36 hours. After most of the liquid is removed, the rest of the leftover material passes out of your body as solid waste.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) Explain what happens to food while it is still in your mouth. _____

_____

_____

_____

_____

2) What is the name for the tube from the mouth to the stomach? _____

3) What are villi?

_____

_____

4) At what point during the digestive process does your body begin to receive energy from the food?

_____

_____

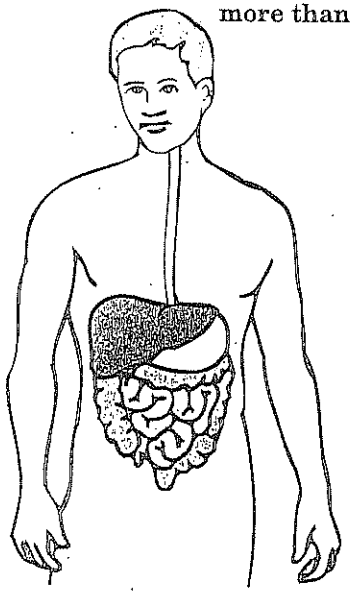
5) Where is your food likely to be two hours after you eat?

_____

_____

Dealing With Digestion

Did you know that digestion begins before you even begin to eat? Digestion begins when you think about eating. In anticipation, your body begins to prepare itself by producing saliva. Your mouth makes more than a quart of saliva a day.



Your digestive system processes food, which provides your body with the energy it needs for maintenance and repair. When you put food into your mouth, your teeth cut, grind, crush, mash, and shred the food while mixing it with saliva. Then the food moves down a tube called the *esophagus* to the stomach. There three bands of strong muscles churn, squeeze, and break the food up into smaller pieces. An acid produced in the stomach dissolves meat and other foods.

After the food leaves the stomach, it travels through the small and large intestines, where particles of food pass through the linings of the intestines and into the blood. Powerful body chemicals called *enzymes* digest the carbohydrates, proteins, and fats that make up your diet.

Directions: Use words or short phrases to complete the sentences.

1. What is the function of the digestive system?

_____

_____

2. Name two reasons your body needs food.

_____

_____

3. Name four body parts involved in the digestive process.

_____

_____

Dealing With Digestion

Directions: Hidden in the word-search puzzle are 20 words from the text. The words are written vertically, horizontally, and diagonally. How many of them can you find? There are other words in the puzzle that are not in the text, but they don't count. Find and circle only words from the text.

e	s	o	p	h	a	g	u	s	c	k	h
d	t	i	n	t	e	s	t	i	n	e	s
i	o	r	g	a	n	s	f	n	e	e	z
g	m	s	y	s	t	e	m	o	u	r	b
e	a	p	b	o	d	i	e	s	o	r	r
s	c	r	e	p	a	i	r	p	l	d	e
t	h	o	n	m	o	u	t	h	i	a	a
i	f	c	e	b	b	b	r	p	n	o	t
v	a	e	r	l	a	l	o	r	i	e	c
e	t	s	g	o	n	o	t	o	n	n	o
c	s	s	y	o	d	o	e	t	g	z	n
d	i	e	t	d	k	b	i	e	s	y	e
r	i	s	f	e	t	s	n	i	m	m	s
m	a	i	n	t	e	n	a	n	c	e	p
p	a	r	t	i	c	l	e	s	q	s	e

Research: Find out what saliva does. Write a paragraph about it.

Bonus: What happens when your food goes down the wrong way? If someone were choking on a piece of food stuck in his windpipe, what would you do? What is the Heimlich maneuver? Draw a picture to show how it can save a life.