

4th Grade Distance Learning Week 3

ELA

Read and complete the questions for each.

- Running: Sport or Way of Life?
- Substitute Meany
- What's the Deal with Sleep?

Math

Unit 7 - Measurement worksheets

- Measuring Capacity - Level 3
- Milliliters and Liters (pg. 1)
- Milliliters and Liters (pg. 2)
- Converting Liters and Milliliters

Name: _____

RUNNING: SPORT OR WAY OF LIFE?

by Kelly Hashway

You flip through the channels for the fourth time and realize that once again there's nothing on television that grabs you. Not a problem! Throw on some running shoes and comfortable clothes and go for a run.

One of the coolest things about the sport of running is that you don't need expensive equipment. All you need is a good pair of running shoes and a safe environment. But just because you don't need much equipment don't be fooled into thinking the sport of running is easy. No one wakes up and decides to run a marathon without training. Running requires discipline, perseverance, and concentration. It's a sport that's good for your body and mind.

Running strengthens your heart, lungs, and muscles. It develops coordination and makes you more aware of your body. Running also gives you energy by increasing your oxygen intake, and it improves your immune system so you don't get sick as easily. It can even help you stay more focused in school because exercise helps you to think more clearly.

How do you get involved in the sport if you don't know much about it? Most schools offer cross-country and track programs, but there are also running clubs open to all ages. A simple Internet search can help you find some in your area. The programs show you how running can offer competition or just be for fun. They also teach runners to set realistic goals and take care of their bodies.

Runners have great respect for each other because they know how difficult the sport can be. If you go to a race, you'll see people cheering for *all* the runners, from the first place finisher to the last place finisher. Running isn't always about how fast you are or how far you're going. It's about getting out there and doing it. Participation is more important than competition, and effort is recognized over talent.

If you're looking for more than just a sport, running may be the perfect choice for you.



Name: _____



RUNNING: SPORT OR WAY OF LIFE?

by Kelly Hashway

1. What is the main idea of the fourth paragraph in this article?
 - a. Running is one way to keep your body healthy.
 - b. You don't need expensive equipment to be a runner.
 - c. Running for fun is better than running in a competition.
 - d. There are many running clubs and teams you can become involved in.

2. **Benefits of Running for Your Health and Mind**
(Find Four Benefits Mentioned in the Passage)

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

3. What is the author's main purpose for writing this passage?
 - a. to give historical information about runners
 - b. to teach readers how to become great runners
 - c. to persuade readers to try running
 - d. to compare and contrast running and watching television

4. Tell whether each sentence is a fact or opinion.
Write the word fact or opinion on each line.

_____ Running is not an easy sport.

_____ Many schools offer cross country or track programs.

_____ Running develops coordination and makes you more aware of your body.

Name: _____

RUNNING: SPORT OR WAY OF LIFE?

Vocabulary Activity



Part 1: Reread "Running: Sport or Way of Life?" by Kelly Hashway. As you read highlight the following vocabulary words in the story.

lungs

coordination

immune system

heart

concentration

marathon

realistic

Part 2: Match each vocabulary word on the left with its definition on the right.

_____ 1. lungs

a. long-distance running race

_____ 2. coordination

b. protects your body from bacteria and disease

_____ 3. immune system

c. reasonable

_____ 4. heart

d. body organ that puts oxygen into your blood

_____ 5. concentration

e. ability to think deeply

_____ 6. marathon

f. ability to move your body's muscles skillfully

_____ 7. realistic

g. muscle that pumps blood through your body

Part 3: Use a vocabulary word from the list to complete each sentence.

8. Drinking juice with vitamin C strengthens your _____.

9. When Joey said he could run 50 miles, his friend said, "That's not _____."

10. I could barely breathe when I finished running the _____.

11. The nurse was monitoring her patient's _____ rate.

12. The writer was lost in _____ as he thought about what he will write next.

Name: _____

Substitute Meany

By Kelly Hashway

Jacob walked into school with a smile on his face.

He loved Fridays.

“Hey,” Michael said, walking up alongside him. “I heard you have a substitute today.”

“Who is it?” Jacob asked, hoping for Mr. Smith, the nicest substitute at school. The students all referred to him as Mr. Smiley.

“Mr. Meany,” Michael said.

Jacob gulped. If the students had nicknamed the substitute Mr. Meany, he must be awful!

“See ya!” Michael patted Jacob on the back and turned into his classroom.

Jacob slowed his pace, imagining a monster of a substitute teacher. He probably had big bushy eyebrows that slanted downward when he scowled at the students. And his voice! Jacob imagined it to be a booming voice that shook the classroom walls. Jacob shivered.

“You ready for Mr. Meany?” Cassie asked, meeting Jacob at the classroom door.

Jacob gulped and stopped in the doorway. The bell rang, and Jacob heard footsteps coming toward him. Loud, scary footsteps.

“Are you in this class, young man?”

Jacob kept his head lowered and said, “Um...yes.”

“Please find your seat then.”



Jacob finally looked up when he heard the word “please.” Someone mean wouldn’t be so polite, would they?

“Is something wrong?” Mr. Meany asked.

Jacob just stared. Mr. Meany didn’t have a booming voice or bushy, slanted eyebrows.

“Are you Mr. Meany?”

The man nodded and smiled. “I see the name fooled you.”

“I thought...” Jacob wasn’t sure he should tell Mr. Meany how the students gave the substitute teachers nicknames.

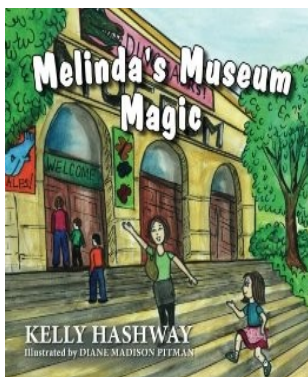
“That I got my name because I’m mean?” Mr. Meany laughed. “I get that a lot.” He leaned down and whispered, “Why don’t you take your seat and give me a chance to show you I’m not mean at all?”

Jacob nodded and walked to his seat. The morning passed quickly, mostly because Mr. Meany was a lot of fun. Jacob didn’t even mind taking his math test because Mr. Meany did a cheer at the front of the room before the test and made everyone laugh.

When it was lunchtime, Jacob stood and walked up to Mr. Meany. “See you after lunch, Mr. Not-a-Meany,” Jacob said with a smile.

Mr. Meany smiled back.

About the Author



Kelly Hashway's picture book, *Melinda's Museum Magic*, is now available!

Melinda is taking her first trip to the museum, and her mother promises it will be magical. But when the exhibits start coming to life in ways that only Melinda can see, she'll learn the real magic of the museum.

Hashway, Kelly. *Melinda's Museum Magic* ISBN: 978-0615814216

Name: _____

Substitute Meany

By Kelly Hashway



1. What is the name of the substitute that Jacob wanted?
- a. Mr. Meany
 - b. Mrs. Nice
 - c. Mr. Smith
 - d. Mrs. Jones

2. Describe how Jacob imagined Mr. Meany.

3. Name one thing Mr. Meany did that made Jacob change his mind about him.

4. What did Jacob say to let the reader know he felt different about Mr. Meany at the end of the story than he did at the beginning.

Name: _____

Substitute Meany

By Kelly Hashway



Match each vocabulary word on the left with the correct definition on the right. Write the letter on the line provided.

- | | |
|---------------------|---|
| 1. _____ referred | a. to have looked at someone with disapproval |
| 2. _____ slanted | b. a person that takes the place of someone or something |
| 3. _____ scowled | c. showing good manners |
| 4. _____ substitute | d. the speed that someone or something moves |
| 5. _____ polite | e. to have called someone by a certain name or title |
| 6. _____ pace | f. a name that is different from your real name but people may call you by it |
| 7. _____ nicknames | g. not level or straight |

❖ **Now try this:** Choose one vocabulary word from this page and use it in a sentence.

Name: _____

What's the Deal with Sleep?

By Lydia Lukidis

You go to bed at night, close your eyes, and drift off to sleep. Have you ever wondered how exactly sleep works? Plus, where do dreams come from?

Let's start with the basics. When you fall asleep, you go through the four stages of the sleep cycle. We'll explore what happens during each of these stages.



First up is Stage 1. This is when you feel yourself becoming drowsy. Your muscles begin to relax and your brain activity slows down. Your eye movements are slow during Stage 1. It lasts several minutes and you can be woken up easily.

Next is Stage 2, when your sleep becomes a bit deeper. You won't wake up as easily. The slow eye movements continue and your brain waves slow down even more. Your body temperature goes down and your heart rate slows down.

Stage 3 is known as deep sleep. It's more difficult for you to be woken up. And although you are sleeping deeply, this is when sleepwalking or sleep talking occurs. So all those sleepwalkers out there may not actually remember doing anything strange in their sleep the next day.

Then finally, you move into REM. That stands for rapid eye movement. During the REM stage, your eyes move quickly beneath your closed eyelids. This is caused by certain brain activity. You may have vivid dreams during this stage. Your brain waves are more active than in Stages 2 and 3. They're similar to when you're awake. It's easier for someone to wake you up, but you may feel groggy or sleepy.

Once your REM phase is over, the cycle starts all over again with Stage 1.

A complete sleep cycle lasts between 90 and 110 minutes. Stages 1 and 2 are considered light sleep, while Stage 3 is deep sleep. You'll go through about four or five of these cycles each night, depending on how long you sleep.

Now, what's the deal with dreams? The scientific study of dreams is called *oneirology*. Nobody knows exactly why we dream. It is believed that dreaming helps us process emotions. Things that happen during the day often enter our dreams. We spend about 2 hours a night dreaming. Every single one of us dreams. Some of us dream in color, while others dream in black and white. Although we can dream during each stage of sleep, the most vivid dreams occur during REM sleep.

Sleep is very important. In fact, you spend about a third of your time doing it! That's a good thing. Quality sleep is as important as food and water. Without it, we wouldn't be able to function properly. We wouldn't be able to learn or create new memories. It would also be harder to concentrate and respond quickly. School-age children and teenagers need about 9 ½ hours of sleep each night. Most adults need between 7 and 9 hours of sleep each night.

Another funny habit we have is that we often forget our dreams. So the next time you fall asleep, keep a notebook and pen beside your bed. If you have any memories of your dreams when you wake up, write them down right away. Some might make funny stories!

About the Author



Lydia Lukidis is a children's author with a multi-disciplinary background that spans the fields of literature, science, and theater. So far, she has over 40 books and eBooks published, as well as a dozen educational books. Her latest STEM books include [A Real Live Pet!](#) and [The Space Rock Mystery](#).

Name: _____

What's the Deal with Sleep?

By Lydia Lukidis

1. Write the label **1**, **2**, **3**, or **REM** next to the correct description of **Stage 1**, **Stage 2**, **Stage 3**, and **REM** in the sleep cycle.



- _____ Your brain activity slows down, and you aren't woken up as easily. Your body temperature and heart rate fall.
- _____ Your eyes move quickly beneath your eyelids. You may have vivid dreams. Your brain waves are more active.
- _____ You begin to feel drowsy. Your muscles relax. You can still be woken up easily.
- _____ You enter deep sleep, and it's more difficult for you to be woken up. Some people may sleep walk or sleep talk.

2. Nobody knows exactly why we dream. According to the article, what is one reason scientists think we dream?

3. Which of the following is **not** true about dreams?

- a. Some of us dream in color, while others dream in black and white.
- b. The average person spends about two hours per night dreaming.
- c. Dreams only occur during the REM stage of the sleep cycle.
- d. The most vivid dreams occur during REM sleep.

4. Based on the information in the article, identify **three benefits** of getting enough sleep.

Name: _____

What's the Deal with Sleep?

By Lydia Lukidis



Match each vocabulary word from the reading passage with the correct definition.

- | | |
|----------------------|--|
| _____ 1. drowsy | a. producing realistic or clear images in your mind |
| _____ 2. heart rate | b. the worth, value, or excellence of something |
| _____ 3. rapid | c. sleepy; tired |
| _____ 4. vivid | d. a routine pattern of behavior |
| _____ 5. oneirology | e. focus your attention on a task or activity |
| _____ 6. emotions | f. a course of events that is repeated over and over again |
| _____ 7. quality | g. the number of times your heart beats per minute |
| _____ 8. concentrate | h. the scientific study of dreams |
| _____ 9. habit | i. happening at a quick pace |
| _____ 10. cycle | j. feelings |

Name: _____

What's the Deal with Sleep?

By Lydia Lukidis

In the article, "What's the Deal with Sleep?" you learned that sleep is important to our ability to function and feel our best. Everything becomes more difficult when we don't get enough sleep. In fact, according to the article, school-age children and teenagers need about nine-and-a-half hours of sleep every night.



On the lines below, answer the following questions:

Do you think you get enough sleep every night? Why or why not?

How do you feel when you don't sleep enough?

What changes could you make to help yourself get enough sleep?

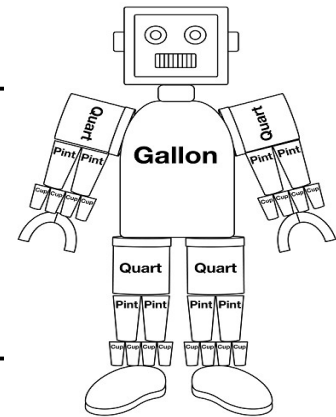
Measuring Capacity

$$1 \text{ gallon} = 4 \text{ quarts} = 8 \text{ pints} = 16 \text{ cups}$$

$$1 \text{ gallon} = 4 \text{ quarts}$$

$$1 \text{ quart} = 2 \text{ pints}$$

$$1 \text{ pint} = 2 \text{ cups}$$



Fill in the correct number for each statement.

a. 3 gallons = _____ pints

b. 6 gallons = _____ quarts

c. $\frac{1}{2}$ gallon = _____ pints

d. $\frac{1}{2}$ quart = _____ cups

e. $1\frac{1}{2}$ pints = _____ cups

f. $2\frac{1}{2}$ gallons = _____ cups

Circle the greater amount for each pair.

g. 12 quarts or 6 gallons

h. 10 quarts or 5 gallons

i. 6 cups or $2\frac{1}{2}$ pints

j. $4\frac{1}{2}$ cups or 2 quarts

k. 16 pints or $8\frac{1}{2}$ quarts

l. $\frac{1}{2}$ gallon or $3\frac{1}{2}$ quarts

Find the best answer and explain.

- m. Each day, Isaac feeds his puppy one cup of dog food in the morning and one cup in the evening. How many quarts of food does Isaac feed his puppy during a week? Explain how you found your answer.

answer: _____

explain: _____

Name: _____

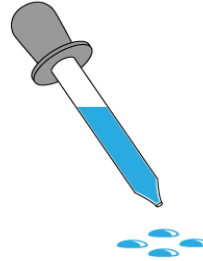
Milliliters and Liters

A **liter** (L) and a **milliliter** (mL) are two units for measuring capacity in the metric system.



This bottle holds 1 liter of water.

To convert liters to milliliters, multiply by 1,000.



A milliliter is about 20 drops of water.

To convert milliliters to liters, divide by 1,000.

1. 3,000 mL = _____ L

2. 8 L = _____ mL

3. 60 L = _____ mL

4. 80,000 mL = _____ L

5. 41,000 mL = _____ L

6. 70 L = _____ mL

7. 100 L = _____ mL

8. 5,000 mL = _____ L

9. 93,000 mL = _____ L

10. 52 L = _____ mL

11. 200,000 mL = _____ L

12. 600 L = _____ mL

13. A recipe calls for 2 L of water and 1 L of milk. How many mL is this combined?

Name: _____

Milliliters and Liters

A **liter** (L) and a **milliliter** (mL) are two units for measuring capacity in the metric system.

The bottle pictured at the right holds 1 L of water.

About twenty drops of water equals 1 mL.



To convert liters to milliliters,
multiply by 1,000.

$$9 \text{ L} \times 1,000 = 9,000 \text{ mL}$$

To convert milliliters to liters,
divide by 1,000.

$$13,000 \text{ mL} \div 1,000 = 13 \text{ L}$$

Determine which amount is more. Write the larger amount on the line. If the amounts are equal, write the word equal on the line.

- 3 L or 300 mL of milk 1. _____
- 10,000 mL or 10 L of juice 2. _____
- 60 L or 60,000 mL of vegetable oil 3. _____
- 140,000 mL or 1,400 L of water 4. _____
- 37 L or 38,000 mL of soap 5. _____
- 500 mL or 1 L of vinegar 6. _____
- 9 L or 950 mL of maple syrup 7. _____
- 7,000 mL or 7 L of cleaning fluid 8. _____
- 10,100 mL or 10 L of gasoline 9. _____
- 8 L or 8,001 mL of jam 10. _____
- 66,000 mL or 66 L of lemonade 11. _____
- 801 L or 810,000 mL of honey 12. _____

Name: _____

Converting Liters and Milliliters

Complete the tables below and answer the questions that follow.

liters	1		9	
milliliters		5,000		30,000

milliliters	4,000			550,000
liters		6	23	

rule: multiply by 1,000

rule: divide by 1,000

- a. How many liters are in 5,000 milliliters? _____
- b. How many milliliters are in 23 liters? _____
- c. How many milliliters are in 9 liters? _____
- d. How many liters are in 550,000 milliliters? _____
- e. How many liters are in 20,000 milliliters? _____
- f. How many milliliters are in 100 liters? _____
- g. How many milliliters are in 11 liters? _____
- h. How many liters are in 890,000 milliliters? _____
- i. Brenda has a 1 liter bottle of shampoo that is only half-full. About how many milliliters of shampoo does she have in the bottle? _____
- j. Mr. Perkins changed the oil in his car. He bought 6 liters of oil. He put 4,500 mL in his car. How many milliliters of oil did he have left? _____