At Home Learning Resources

Grade 4 - Week 12

https://2020census.gov/
Grade 4 ELA Week 12

All previous activities, as well as other resources can be found on the Lowell Public Schools website: https://www.lowell.k12.ma.us/Page/3800

This week completes a focus on fiction reading and realistic fiction narrative writing. Your child should be reading, writing, talking and writing about reading, and working on exploring new vocabulary each week.

**Reading:** Students need to read each day. They can read the text included in this packet and/or read any of the fiction books that they have at home, or can access online at Epic Books, Tumblebooks, Raz Kids, or other online books. All resources are on the LPS website. There is something for everyone.

**Talking and Writing about Reading:** As students are reading, they can think about their reading and get ready for summer. Students can also reflect back on the school year and write a bit about what they liked or learned.

**Writing:** Students will finish working on realistic fiction narratives this week. These resources are charts with examples to help your child write. They are available online in an interactive form with video tutorials here: [Grade 4 Narrative Writing Choice Board](#). Click on the images/starbursts to watch the video tutorials. This writing should finish this week. Students will be writing, then making it even better by revising, writing some more, and at the end, fixing it up by editing.

**Word Work:** Students can work on learning new vocabulary words using clues in the text. Students can choose any words they find in their reading.
My Summer Reading Plan

Books/Authors I want to read:

___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

Where I will get books:

☐ Borrow from the library  ☐ Read online  ☐ Trade books with friends
☐ Buy at a bookstore  ☐ Buy Online  ☐ Other __________

Where I will read:

☐ In my bedroom  ☐ In the living room  ☐ Outside
☐ In my car  ☐ At the beach  ☐ Other __________

Log all of the books that you read. If you read 1 book, write it down. If you read 100, write them down. You can write them here. If you run out of room, add another piece of paper.

OR

Looking for an even easier way to log your books, do it online. Click here to enter your book titles online. Your school will keep a list of all of the books that you read.

Remember, you only need to log your books on paper or online. NOT BOTH!

Happy Summer Reading!
Growing Up Green

Written by Claire Daniel
Illustrated by Stephen Marchesi

www.reddinga-z.com
Off to Siberia

Samantha pitched her pajamas into her suitcase and slammed it shut as if it contained a three-headed monster. It was crammed full of the shorts, sweatshirts, jeans, socks, and sneakers that she would need for the next eight weeks.

She glanced outside her window into the backyard next door. Mrs. Gonzalez was planting flowers, and Mr. Gonzalez was raking leaves. Mrs. Gonzalez opened a bag of store-bought compost and spread it on top of the soil around the pink blossoms.
Samantha heard her brother, Hal, calling her from downstairs. “Sam, your laundry is done!”

Samantha ran to the laundry room to find her favorite pink T-shirt. In her haste to grab it out of the dryer, she knocked over two boxes piled high with empty soda bottles.

“Sometimes I just hate recycling!” she yelled.

“At least you get a vacation from it,” her older brother muttered.

“I might as well be going to Siberia!” groaned Samantha.

“Maine isn’t so bad,” Hal said, sticking his head in the laundry room. He was leaving for college in the fall, so he was working at an office to make money over the summer.

“I’ll be slaving away at my summer job while you’re relaxing at Nannie’s.” He jumped as if he were making a jump shot on a basketball court and tossed an empty water bottle into the trash.

“If Mom finds this empty bottle in the trash instead of the recycling bin, you’ll be in Siberia yourself,” Samantha warned.

He picked up the bottle, threw it up in the air, and snatched it in front of Samantha’s face. “I know, Einstein. Cool your jets.”
At breakfast, Samantha ate chunks of mango with delight. Her mother knew she loved mangoes, so Samantha suspected that the treat was her way of saying she was sorry.

All winter, the family had talked about Samantha going to summer camp. Her summer was going to be jam-packed with horseback riding, swimming, and mountain biking. But then the economy crashed, and her parents didn’t have the money to send her to camp. Instead, Samantha was being sent to her grandmother’s house in Maine for the summer.

After breakfast, Samantha grabbed the empty milk carton and threw it in the recycling bin. At least her trip to Maine would finally give her a break from her mom’s tough “green rules” about recycling and saving energy.

When Samantha arrived in Maine, her grandmother picked her up at the airport. Samantha laughed when she saw that her grandmother drove a hybrid car, just like her parents. After hugging her grandmother, Samantha said, “Are you a ‘green nut’ like my mom?”

Nannie shrugged, “Not exactly.”

“Great,” Samantha said, “because I am sick and tired of all the rules in my house! ‘Turn out that light,’ ‘Turn down the air conditioning,’ and ‘Walk so we don’t have to take the car!’ My mom is driving us all crazy!”

Nannie didn’t comment, but she smiled slightly. Soon it was dark, and the motion of the car gently put Samantha into a deep sleep.
Nannie’s House

Samantha’s bedroom was on the top floor of Nannie’s house, and the morning sunshine pried open her eyes. She heard digging outside and saw Nannie in the garden.

Samantha was amazed at all the flowers she saw outside her window. There were clumps of pink, blue, and yellow everywhere. Behind a fence, vegetables filled rows of raised garden beds. Nannie walked back toward the house, and Samantha quickly dressed and ran downstairs.

Her grandmother rinsed strawberries and put them in a bowl next to the milk and cereal.

“Do you have mangoes instead?” Samantha asked.

“Mangoes in Maine?” Nannie frowned. “Can you imagine how much energy it takes to ship a mango from Peru to here?”

Samantha was speechless. Nannie continued, “I buy my food locally. I bought these strawberries for you at the farmer’s market yesterday. They’re sweeter and fresher than fruits from faraway places.”

Samantha tasted the berries, and her grandmother was right—they tasted terrific.

After breakfast, Samantha followed her grandmother into the garden and was amazed at the asparagus, spinach, lettuce, and broccoli plants. Nannie obviously had a green thumb!

Samantha watched her grandmother dump vegetable and fruit scraps into a wire bin. “What’s that?” Samantha asked.

“It’s my new compost bin.”
Nannie rolled the wheelbarrow to a different bin filled with something that looked like rich, dark soil, "This is mature compost."

Nannie filled the wheelbarrow with the dark-brown substance. Then she rolled it over to an empty raised bed intended for green-bean plants.

"Make yourself useful," her grandmother said. She handed Samantha a shovel. As her grandmother emptied the wheelbarrow, Samantha mixed the compost into the dirt.

Samantha remembered Mrs. Gonzalez and how she used compost around her flowers at home. "I thought compost kept weeds out. Why are we mixing it in the dirt?"

"It makes the soil rich. Compost sticks to the soil particles and helps them hold onto the nutrients that make plants grow."

After mixing the compost into the soil, Nannie showed Samantha how to plant green beans. Then they watered the garden before gathering spinach and lettuce for a salad.

After lunch, Nannie suggested that they go for a hike. Samantha opened the door to the pantry and asked, "Where's the water?" Nannie pointed to the spigot.

"No, I mean the bottled water for the hike."

Nannie tossed her a metal bottle. "Fill that. My water comes from a spring. Besides, if you use that, there'll be one less plastic bottle to recycle."

Samantha groaned. She had come from a fanatical recycling family to a situation so green that even recycling was frowned upon!

Samantha teased, "You're even greener than my mom, aren't you?"

"You could say that," Nannie said with a grin. "I'm waiting for my hair to turn green any day. Yours might, too, with a little luck."
Living Green

That first day was like many more that followed. In the mornings, they worked in the garden. In the afternoons, they went hiking or biking. It wasn’t summer camp, but it wasn’t torture, either.

Samantha also learned just how green her grandmother was, but her greenness, if you could call it that, was just the way she lived. Nannie pinned her clothes on a clothesline to dry. She plugged her television and lamps into power strips and shut them off at night. She mowed her lawn with a hand mower instead of a gas-powered one. Instead of using harsh chemicals to clean her house, she used baking soda and vinegar.

One day, Samantha’s grandmother set up a farm stand at the end of her driveway and sold some of the vegetables from the garden. At night, she collected the money that people left in the cash box.

“It pays for the garden supplies,” her grandmother said.

Samantha noticed that her forehead was creased. “What’s wrong, Nannie?” she asked.

Her grandmother smiled and relaxed her muscles. “Nothing—I was just thinking.” But she didn’t sound very convincing.

Samantha wondered what was wrong. Was she doing something wrong, or was something else worrying her grandmother? Something was definitely not right.
The Seed of an Idea

One afternoon, after a trip to the beach, Samantha’s grandmother stopped by the hardware store. She purchased yards of hardware cloth, which is a wire mesh used for fencing.

“That will be $21.36,” the clerk said.

Nannie pulled a twenty-dollar bill from her wallet and began digging in her purse for the rest of the money. Quickly, Samantha pulled out two dollars from her jeans pocket.

“Need this?” she asked.

“Thank you,” her grandmother said. “I’ll pay you back.”

Samantha noticed that the wrinkles were back on Nannie’s forehead. Then it occurred to Samantha that perhaps her grandmother was short of money. That would explain the wrinkles!

The next day, Samantha and Nannie loaded up the car with the hardware cloth, a bucket full of kitchen scraps, a bag of grass clippings, and a bale of straw. They drove to an outdoor flower garden, where ten members of a gardening club were waiting for them.

Nannie spoke to the group of men and women. “I’m so happy that you’ve asked us to teach you how to compost.” She looked at her granddaughter. “This is my assistant, Samantha. She can tell you how compost helps your garden.”

Samantha was shocked when everyone turned to listen to her, but she remembered what her grandmother had taught her. She spoke up loud and clear. “Compost adds richness to your soil. Gardeners call it ‘black gold’ because it is so precious. You can spend five dollars a bag for it, but we can teach you how to make it for free.”

For the next hour, Samantha and Nannie showed the group how to compost. At the end of the demonstration, one woman gave Nannie a check. Samantha remembered Mrs. Gonzalez tending her flowers back home, and an idea formed in her mind. If it worked, she might go to camp next year!
The Vegetable Thief

During July, more and more vegetables came up in the garden. Samantha and her grandmother were busy tending the garden, and two days a week they gave composting demonstrations to homeowners and gardening groups.

The garden was thriving. The beans grew long, and the raspberries turned deep red. The yellow squash popped up overnight, and the cucumbers seemed to grow an inch longer each day. Every morning, Samantha harvested vegetables and fruits, taking what they didn’t need to the farm stand.

One day, Nannie asked Samantha to collect the money at the stand. Samantha opened the cash box, and there was only twenty-five cents inside. She searched the stand in case some money had fallen under the table, but there wasn’t any.

Someone was stealing their produce! Samantha grabbed the cash box and ran back into the house. When she told Nannie, her grandmother just said, “Hmm.” Samantha was confused. If Nannie needed money, why was she so unconcerned?

“Nannie! Someone is stealing from you!”

“Maybe,” she said. “Maybe not.”

“There’s no maybe! We sold a whole table full of squash, raspberries, and lettuce today. And there’s only a quarter in there.”

“Maybe someone needs the food,” Nannie said.

“But it’s stealing!”

“They probably can’t afford to buy fresh vegetables.”

Samantha said, “But it isn’t right. Whoever took the food knew they were stealing. They must feel guilty. Hungry or not, people shouldn’t steal.”
Nannie smiled, “Then let’s not let them. I have an idea.”

They worked together to make a new sign for the farm stand. This time, the sign asked for voluntary contributions only. People could pay whatever they wanted for the fruits and vegetables they bought.

Samantha said, “But Nannie, don’t you need the money that the farm stand makes?”

Nannie’s brow wrinkled up again. “Money’s not everything.” Then she laughed, “Call it part of being green, which you so lovingly tell me I am!”

“How is giving food away being green?”

“Think of it this way. The earth provides us with fruits and vegetables. We have too many, so we give some to people who need them. If they can pay, they pay. If they can’t, they can’t. Times are hard now, and if I can share my garden with someone who doesn’t have one, then I’m happy.”

Samantha studied her grandmother’s face. It was still lined with worry. Was she really serious that she didn’t need the money?

End of Summer

In early August, Samantha went to check the cash box. Instead of a quarter or a dollar, there was a fifty-dollar bill inside! Samantha gave the money to her grandmother, who didn’t seem surprised. She just said, “Hmm” and smiled. Neither of them knew who had put the money in the box, and Samantha realized that it didn’t matter. With the money they had collected, the garden supplies had been paid for, and there was a little extra left over.

Soon it was time for Samantha to return home and get ready for school. She packed her bags and realized for the first time that she hadn’t felt homesick or bored all summer. She had been too busy!
On the way to the airport, Samantha decided to tell her grandmother about her money-making idea. She said, “You know I wanted to go to camp this summer.”

The wrinkles returned to Nannie’s forehead. Samantha quickly added, “I had a great time, and I have a new idea. When I get back home, I’m going to teach the people there how to compost. I can save people money and help protect the environment.”

Nannie laughed. “That’s a wonderful idea! Green really does run in our family.”

A few minutes before Samantha boarded the airplane, her grandmother handed her an envelope.

“What’s that?” Samantha asked.

“Look inside,” Nannie said.

Samantha opened the white envelope and saw a stack of ten- and twenty-dollar bills. She stammered, “I can’t—”

“Yes, you can,” her grandmother said. “You helped me all summer with the garden and the composting workshops. Now you can go to camp next summer.”

“But you need this money!” Samantha blurted.

Her grandmother laughed. “No, I don’t! I have all the money I need.”

“But—but—you always looked so worried this summer.”

“I was worried,” Nannie said. “I was worried about you. I was worried that you were miserable staying with me instead of doing exciting things at camp.”

Samantha dropped her bags and hugged her grandmother.

“I had an amazing summer! I wouldn’t trade this summer for all the camps in the world!”
Nannie said, “Honey, that is the loveliest thing anyone has ever told me.”

Samantha said, “You taught me a lot. You taught me that being green isn’t just about recycling and turning off lights. It’s about working with the earth and helping other people.”

Samantha grabbed her bags and walked toward the gate. “You’ll come visit us in the city, right?”

“Yes!” Nannie said, blowing her a kiss.

Samantha said, “Just do me one favor. Next year, plant some mango trees. If anyone can get them to grow in Maine, you can.”

Nannie laughed and waved good-bye.

Glossary

compost (n.) a mixture of decaying organic material, such as vegetables, plant clippings, or newspapers (p. 4)

contributions (n.) payments made to support a cause (p. 19)

environment (n.) all the conditions affecting an organism in a specific area, including plants, animals, water, soil, weather, landforms, and air (p. 21)

fanatical (adj.) obsessive (p. 12)

hybrid car (n.) a fuel-efficient car that uses an electric motor recharged by a conventional engine powered by fossil fuel (p. 8)

mature (adj.) fully developed (p. 11)

nutrients (n.) substances in food or soil that living things need to stay healthy and grow (p. 11)

produce (n.) fresh fruits and vegetables (p. 18)
An End of the Year Letter to My Teacher!

Date ____________________________

Dear __________________________________________

_________________________________________________________________________

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Signed

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Grade 4 Realistic Fiction Writing Choice Board - Visit the online option for an interactive board with tutorials. Use the anchor charts to help you write your own realistic fiction story.

Getting Ideas for Fiction

Plan Your Fiction Story

Developing Characters

How to Write a Realistic Fiction Story

Study ways other authors make stories better - try some!

Draft scene by scene, only using summary when needed.

Create trouble in the story, resolving that trouble at the end.

Draft possible story arcs. Revise until it feels just right.

Edit!

Getting Ideas for Fiction

How to Find Ideas for Fiction

- Observe the world or reread entries. Mine your notebook for story ideas.
- Ask, “What books do I wish existed in the world?”
- Let this question lead you to invent a character with traits, struggles, actions.
- Think about an issue that is important to you and create a character who struggles with that issue.

Elexa

Eleax is a 11 year old girl that wants to be the head cheerleader. But her best friend who wants to be the head girl, will she do it in the end of her friendship. She has notice that the boy that was following her around Daron is now following her, what will happen next?

Things are really hard right now for a boy named Marquis. He really loves his big brother, but lately it seems like Erick doesn’t hang out with him very much. And, Mom seems really worried stressed all the time. One night, Marquis heard Erick and Mom talking about money and they seemed upset. Erick was saying he could work more at the grocery store, and he told Mom not to worry. But Mom wants Erick to work on his school work too. Marquis is worried about both of them. What will happen to the family?
I sat in reading class and grumbled to make all our mini readers notice. Even when the class was reading out loud, it's like all I could hear was the breath in the air, each sound, the quietness of a classroom. I told him, "I thank you for your help."

He came closer. Lexie whispered, "OHHH," then I shouted, "RUN!"

We tried to run on foot as we could but we knew that wasn't fast. We rush for the door, trying to slip into class without being noticed by a teacher or just a hall monitor.

I had bumped into Mr.cq dropping my homework and nearly falling. I stammered and took a step back. He said, "Sorry, I think I stepped on your foot."

On my way to the door, I was to busy looking at the light leaves that looked like a carpet, I didn't see. I didn't realize I tripped over the carpet and bumped into Mr.cq. He said, "I'm sorry, I don't mean to bother anyone."

In the hall, I didn't think about my back pocket, but I turned to go back. I was late, so I hurried. I thought to myself, "How could I be so late?"

As I turned the corner, a voice called, "I'm sorry, I'm late."

I turned around and saw a teacher. I was the only person left in the hallway.
Develop a strong story idea and character(s). Set the scene.

I tiptoed down the stairs into the kitchen. “Hurry, we’re having tomato soup tonight.” “Mom, I hate tomato soup!” I whined.

Advice for Developing a Character

- Start with whatever you’ve decided matters to you about your character.
- Put together a character so that all the parts fit together into a coherent person.
- Reread often, asking, “Do these different things make sense within one person? Do they fit together in a believable way? Are these traits there for a reason?”

Draft possible story arcs. Revise until it feels just right.

Draft #1

Draft #2

Draft #3

Story Arc

Climax

Rising Action

Falling Action

This is where the conflict is resolved.
Once there lived a little girl. Her name was Elizabeth and she loved her mom and dad. Elizabeth was in fourth grade. One day her class went on a trip. The class had to sit in the middle. When the class had been there for about half an hour or so, the lady that was walking with Elizabeth and her class brought out a snake. Elizabeth, who was as white as snow, started waving at her parents. She heard the lady tell the class that they might touch the snake. Elizabeth got even more excited, and when the lady with the snake reached her, Elizabeth reached her hand toward the snake. Her hand touched the snake. And, how frightened she was! Her Elizabeth was so frightened when she realized the snake would bite her hand. She put her hand back. Little Elizabeth was just as frightened as the rest of the class. The rest of Elizabeth’s trip was a lot of fun. When Elizabeth got home, she told her parents all about the trip. She also encouraged the snake part a bit, but her parents never knew that.

Elizabeth felt her hand touch the very mean looking snake. Its slithering cool black eyes snaked in the light as it slithered at Elizabeth not even blinking. The snake kept tugging its blood and forked tongue out of its mouth. Elizabeth felt call of something like scales under her fingers. Elizabeth knew that it was the snake’s rough skin. Elizabeth imagined that it was rubber because she thought that snakes are rubber. So, their skin. Elizabeth noticed the pattern on the snake’s back, how the snake’s skin was also the one thing the snake about the snake. Snakes slithering and sparkling diamonds on the snake kind of a black surface.

**Draft Rewrite**

**Draft Scene by Scene, Only Using Summary When Needed.**

**Rewrite**

**A Storyteller’s Voice Shows, Not Tells.**

- **describes actions that took place.**
- **uses dialogue.**
- **describes what we saw, smelled, tasted, or felt.**
- **describes images around the storyteller.**

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**Setting Description**

_The Morning Go to Birmingham—1963_ by Christopher Paul Curtis

It was one of those super-duper cold Saturdays. One of those days that when you breathe in, your breath kind of hangs in the air like a cloud. You can feel it in your lungs. It was so cold that it was hard even to go outside your eyes would automatically fill with tears. That’s how I felt.

**Question**

_Can you keep a secret? Everybody has secrets, of course, but mine's different, and it's kind of weird._

**Dialogue**

_On My Honor_ by Merrick Dane Boener

“Climb the Starved Rock Bluffs? You’re gonna be kidding! Joe’s spine tingled at the mere thought of trying to scale the sheer river bluffs in the state park. He looked at Terry square in the eye. “Somebody got killed last year trying to do that! Don’t you remember?”

Terry shrugged, popped a wheelie on his battered BMX, spun in place.

**Study ways other authors make stories better - try some!**

- Select a part of the story that works for you.
- Name specifically what the author did on the page.
- Suppose why the author did this particular thing.
- Look at your own writing and find places where it would help the text to try something similar.

**Try it!**
Create trouble in the story, resolving that trouble at the end.

Tammy Revises Her Ending

Ending 1
Then I looked closely. Something was missing.
"Ranger, where is your coat?"
"Ranger gave me a sly smile and a quick wink."
I have no idea."

Key Questions Fiction Writers Consider in Revising Endings

- Can the reader see evidence of the main character's evolution?
- Does my ending make sense or come out of nowhere?
- Are the loose ends tied up? Have I answered the reader's key questions?

Editing Checklist

☐ Read for sense and missing words.
☐ Edit for punctuation.
☐ Check for capital letters at the beginning of new sentences, when using proper nouns, or when giving someone's title.
☐ Check that known, high-frequency words are spelled correctly.
☐ Read back aloud to check for fragments and run-on sentences.
☐ Check every word to be sure it is spelled correctly.
New Vocabulary Word: ____________________________

Definition

Synonyms

Antonyms

Word

Sentences

Example:

Non-example:
## Lesson 19 Sprint 4-3

### Mental Division

|   | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | 12.  | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | 25.  | 26.  | 27.  | 28.  | 29.  | 30.  | 31.  | 32.  | 33.  | 34.  | 35.  | 36.  | 37.  | 38.  | 39.  | 40.  | 41.  | 42.  | 43.  | 44.  |
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|   | 20 ÷ 2 = | 4 ÷ 2 = | 24 ÷ 2 = | 30 ÷ 3 = | 6 ÷ 3 = | 36 ÷ 3 = | 40 ÷ 4 = | 8 ÷ 4 = | 48 ÷ 4 = | 2 ÷ 2 = | 40 ÷ 2 = | 42 ÷ 2 = | 3 ÷ 3 = | 60 ÷ 3 = | 63 ÷ 3 = | 4 ÷ 4 = | 80 ÷ 4 = | 84 ÷ 4 = | 40 ÷ 5 = | 50 ÷ 5 = | 60 ÷ 5 = | 70 ÷ 5 = | 68 ÷ 2 = | 96 ÷ 3 = | 86 ÷ 2 = | 93 ÷ 3 = | 88 ÷ 4 = | 99 ÷ 3 = | 66 ÷ 3 = | 66 ÷ 2 = | 40 ÷ 4 = | 80 ÷ 4 = | 60 ÷ 4 = | 68 ÷ 4 = | 20 ÷ 2 = | 40 ÷ 2 = | 30 ÷ 2 = | 36 ÷ 2 = | 30 ÷ 3 = | 39 ÷ 3 = | 45 ÷ 3 = | 60 ÷ 3 = | 57 ÷ 3 = | 51 ÷ 3 = |

### Lesson 19: Explain remainders by using place value understanding and models.
### A STORY OF UNITS

#### Lesson 21 Sprint

#### Lesson 21:
Solve division problems with remainders using the area model.

<table>
<thead>
<tr>
<th>1.</th>
<th>8 ÷ 2</th>
<th>Q = _____ R = _____</th>
<th>23.</th>
<th>6 ÷ 2</th>
<th>Q = _____ R = _____</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>9 ÷ 2</td>
<td>Q = _____ R = _____</td>
<td>24.</td>
<td>7 ÷ 2</td>
<td>Q = _____ R = _____</td>
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<td>Q = _____ R = _____</td>
<td>25.</td>
<td>3 ÷ 3</td>
<td>Q = _____ R = _____</td>
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<td>5 ÷ 4</td>
<td>Q = _____ R = _____</td>
<td>26.</td>
<td>4 ÷ 3</td>
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</tr>
<tr>
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<td>7 ÷ 5</td>
<td>Q = _____ R = _____</td>
<td>27.</td>
<td>6 ÷ 4</td>
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</tr>
<tr>
<td>6.</td>
<td>8 ÷ 5</td>
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<td>28.</td>
<td>7 ÷ 4</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>7.</td>
<td>5 ÷ 3</td>
<td>Q = _____ R = _____</td>
<td>29.</td>
<td>6 ÷ 6</td>
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<td>4 ÷ 2</td>
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<td>9 ÷ 4</td>
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<td>32.</td>
<td>5 ÷ 2</td>
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<td>33.</td>
<td>9 ÷ 3</td>
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<tr>
<td>12.</td>
<td>3 ÷ 2</td>
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<td>34.</td>
<td>9 ÷ 5</td>
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</tr>
<tr>
<td>13.</td>
<td>7 ÷ 3</td>
<td>Q = _____ R = _____</td>
<td>35.</td>
<td>7 ÷ 7</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>14.</td>
<td>8 ÷ 3</td>
<td>Q = _____ R = _____</td>
<td>36.</td>
<td>9 ÷ 9</td>
<td>Q = _____ R = _____</td>
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<td>15.</td>
<td>9 ÷ 3</td>
<td>Q = _____ R = _____</td>
<td>37.</td>
<td>13 ÷ 4</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>16.</td>
<td>8 ÷ 6</td>
<td>Q = _____ R = _____</td>
<td>38.</td>
<td>18 ÷ 5</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>17.</td>
<td>9 ÷ 6</td>
<td>Q = _____ R = _____</td>
<td>39.</td>
<td>21 ÷ 6</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>18.</td>
<td>5 ÷ 5</td>
<td>Q = _____ R = _____</td>
<td>40.</td>
<td>24 ÷ 7</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>19.</td>
<td>6 ÷ 5</td>
<td>Q = _____ R = _____</td>
<td>41.</td>
<td>29 ÷ 8</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>20.</td>
<td>8 ÷ 8</td>
<td>Q = _____ R = _____</td>
<td>42.</td>
<td>43 ÷ 6</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>21.</td>
<td>9 ÷ 8</td>
<td>Q = _____ R = _____</td>
<td>43.</td>
<td>53 ÷ 6</td>
<td>Q = _____ R = _____</td>
</tr>
<tr>
<td>22.</td>
<td>9 ÷ 9</td>
<td>Q = _____ R = _____</td>
<td>44.</td>
<td>82 ÷ 9</td>
<td>Q = _____ R = _____</td>
</tr>
</tbody>
</table>
Division without remainders

Find the quotient of each division expression. Some strategies are shown in the example below. Do you have another strategy that works? Try a strategy that makes sense to you and check your answer by multiplying the quotient by the divisor.

<table>
<thead>
<tr>
<th>Place value chip/disc models</th>
<th>Partial Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>852 ÷ 4</td>
<td></td>
</tr>
<tr>
<td>Place value box</td>
<td></td>
</tr>
<tr>
<td>Standard Algorithm</td>
<td></td>
</tr>
</tbody>
</table>

CHECK:

213 x 4

1. 92 ÷ 4  
2. 426 ÷ 3  
3. 165 ÷ 5  
4. 6738 ÷ 6
Division with remainders

Find the quotient of each division expression. Some strategies are shown in the example below. Do you have another strategy that works? Try a strategy that makes sense to you and check your answer by first multiplying the quotient by the divisor, then add the remainder.

\[
\begin{align*}
76 \div 3 &= 25 \text{ R.1} \\
&= 3 \times 25 + 1
\end{align*}
\]

**CHECK:**
Step 1: multiply the quotient by the divisor
\[
25 \times 3 = 75
\]
Step 2: add the remainder
\[
75 + 1 = 76
\]

1.   86 ÷ 4 
2.   355 ÷ 2 
3.   537 ÷ 6 
4.   4762 ÷ 3
Monica bought a package of 435 party favors to give to the guests at her birthday party. She calculated that she could give 9 party favors to each guest. How many guests is she expecting?

Part A: Estimate. What is a reasonable estimate? Why?

Part B: Solve.
Part A: What division problem did she solve?

Part B: Show a number bond to represent Aleah’s area model, and represent the total length using the distributive property.
Delicious Doughnuts

What is your estimate?

What is an estimate that is too high? Why?

What is an estimate that is too low? Why?
How many doughnuts in the box?

Update Your Prediction

30 doughnuts

20 doughnuts

Solve:
How many doughnuts in the box?

Solve:
Least Product

Directions: Using the digits 1 to 9 at most one time each, fill in the boxes to make the least product.

First attempt

What did you learn from this attempt? How will your strategy change on your next attempt?
Second attempt

What did you learn from this attempt? How will your strategy change on your next attempt?

Third attempt

What did you learn from this attempt? How will your strategy change on your next attempt?

Fourth attempt

What did you learn from this attempt? How will your strategy change on your next attempt?
Least Quotient

Directions: Using the digits 1 to 9 at most one time each, fill in the boxes to make the least quotient.

First attempt

What did you learn from this attempt? How will your strategy change on your next attempt?
Second attempt

What did you learn from this attempt? How will your strategy change on your next attempt?

Third attempt

What did you learn from this attempt? How will your strategy change on your next attempt?

Fourth attempt

What did you learn from this attempt? How will your strategy change on your next attempt?
YOUR CHALLENGE

Design and build something that can carry a Ping-Pong ball from the top of a zip line string to the bottom in four seconds (or less!).

BRAINSTORM & DESIGN

Look at your materials and think about the questions below. Then sketch your ideas on a piece of paper or in your design notebook.

1. Using these materials, what can you design that can carry a Ping-Pong ball down a zip line?
2. How will your Ping-Pong ball carrier stay on the zip line as it goes from the top to the bottom?
3. What kinds of materials should be in contact with the zip line so that the carrier slides quickly?

BUILD, TEST, EVALUATE & REDESIGN

Use the materials to build your Ping-Pong ball carrier. Then make a zip line. Run the line between the back of a chair and a stack of books. Make sure the high end is about two feet above the low end. Test the carrier by putting it on the line. When you test, your design may not work as planned. The design process is all about “if at first you don’t succeed, then try, try again.” On Design Squad, we say, “Fail fast—succeed sooner!” Study the problems and then redesign. For example, if your Ping-Pong ball carrier:

- keeps dropping the ball—Check that it has a big enough place to hold the ball.
- stops partway down—Make sure there’s nothing blocking your carrier where it touches the line.
- doesn’t balance well—Adjust the weights. Add weights or move them so they are farther below the zip line. Doing this changes the carrier’s center of gravity, the point within an object where all parts are in balance with one another. See how changing the numbers and positions of washers affects the carrier’s balance.
- takes longer than four seconds to travel the zip line—Find ways to reduce friction. Yes, there’s friction—the force that resists motion—even when you’re dealing with something as smooth as fishing line. You’ll find friction anytime things rub together. Experiment with different materials to see if you can reduce friction and speed up the Ping-Pong ball carrier.

MATERIALS (per person)

- chipboard (from a cereal box or back of a notepad)
- 2–4 small paper cups (i.e., 3-ounce)
- Ping-Pong ball
- 4 plastic straws
- scissors
- single-hole hole punch
- 4 feet of smooth line (e.g., fishing line or unwaxed dental floss)
- tape (duct or masking)
- 4 standard, flat steel washers (1 inch in diameter or larger)
- 4 wooden skewers
TAKE IT TO THE NEXT LEVEL

• Slow down! Build a carrier that takes ten seconds to travel the length of the zip line.

• Piggyback time. Make a carrier that can hold several Ping-Pong balls at the same time.

• Blast off! Find a way to launch the Ping-Pong ball when the carrier gets to the end of the zip line.

• On your mark. Get set. Go! Set up two zip lines and race different ball carriers.

ENGINEERING IN ACTION

Ever want to zip up the side of a building like Batman or Spiderman? Now this superpower can be yours, thanks to engineer Nate Ball, host of Design Squad, and his friends. For a contest, they designed and built a climbing device that could carry a person 50 feet up the side of a building in less than five seconds. After months of work, the team tested their climber by lifting a 150-pound load of tires. Nate recalls, “After a few seconds, there was an awful sound. The gearbox exploded. The tires smashed to the ground with a huge crash.” After analyzing the ruined climber, they made lots of changes and ended up winning third prize in the contest. Ultimately, they patented the climber and started a company to sell it. Today, soldiers, firefighters, and rescue workers around the world use the team’s climber to fly up buildings. Now, those are real superheroes.

MAKE IT ONLINE

Travel by blimp, anyone? Build a jet-propelled blimp that can travel across a large room. Make it out of 2 balloons, 2 straws, and some clay and tape. See how on Make Magazine’s project page at makezine.com/designsquad.
Grade 4 Science
This investigation involves a lens that you will not likely have at home. Instead, please watch the demonstration on the video.

Mystery 2: What do people who are blind see?

To see the video, click on the link below.

End of Mystery Assessment

https://mysteryscience.com/body/mystery-2/light-eyes-vision/60?code=NzYzNzIwNDg&t=student

1. Why do some people have blurry vision?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. How does light enter the eye? On this drawing of the eye, label the retina, cornea-lens, iris, and pupil. Then use a big arrow to show where light enters the eye.

3. What would happen if your cornea-lens were cloudy instead of clear? What would you see?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Lowell, The Continuing Revolution

Watch the video called “Lowell: The Continuing Revolution” from the Lowell National Historical Park. You can find it using the link below.

https://www.nps.gov/media/video/view.htm?id=87E6A909-CC5D-5D18-64F1D60FCFAF957F

As you watch the video, think about the following questions. The questions are in the order of those topics in the video:

- Lowell is located at the *confluence* of the Merrimack and Concord Rivers (that means where the rivers join together.) Why were the rivers important to the growth of the city?
- Why was the city of Lowell created?
- Who were the first people to work in the mills? Why did they stop?
- Why did so many immigrants work in the mills?
- Why did mills begin to close?
- When the mills declined, what happened to the environment?
- What helped bring new life to the city?
- Why do immigrants still come to Lowell?
- “Lowell is a place that lives in the present, and tells of the past.” What does that quote from the video mean?

Pick one of the questions above. Write a paragraph to answer it. Your paragraph needs a topic sentence, three details from the video, and a closing sentence.
### ESL at Home 3-5 Weeks II-I2

Use notebook paper to complete these activities. Do one each day!

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

**Choose a TV Show or Movie and write a review for it! Include a summary and why you like it/don’t like it.**

First, ____. Next, ____. Last, ___. I like this/don’t like this because ___. Another reason is because ___.

**Find 10 food random items of your choice in your house. Line them up in alphabetical order, A-Z.**

**Example:** Crackers, Apple, Banana

**Go on a walk outside. What are some natural resources that you see? What are some physical features of your area? Sketch and label.**

**Natural resources:** water, plants, sunlight. **Physical Features:** Mountain, hills, river.

**Design your dream house. Draw and label rooms, furniture, and the fun features you would put at your house!**

**Write your own math problem and solve it. Then, write to explain how you solved it.**

**Example:** 468+782=

First, ____. Next, ____. Last, ____.

**Read two books. Compare/contrast the characters, setting, problem, solution, etc. using a venn diagram.**

**Use things around your house to create an invention to launch items into the air using force. How do you get items to go farther? Less distance? Higher? Sketch and label your invention.**

**Practice reading aloud to someone in your family. Then, ask your family member questions about the text to see if they were listening!**

**Find 5 things in your home that have acute angles.**

**Find 5 things in your home that have obtuse angles.**

**Find 5 things in your home with lines that are parallel.**

**Sketch and label these items!**

**Write your opinion on distance learning. How do you feel about learning from home? Do you like it/dislike it? Why? Write three reasons.**

I like/dislike distance learning. First, ____ because ____. Another reason I ____ is because ____. Finally, ______.