At Home Learning Resources
Grade 6 - Week 10

<table>
<thead>
<tr>
<th>Content</th>
<th>Time Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>At least 30 minutes daily (Could be about science, social studies, etc)</td>
</tr>
<tr>
<td>(Read books, watch books read aloud, listen to a book, complete online learning)</td>
<td></td>
</tr>
<tr>
<td>Writing or Word Work or Vocabulary</td>
<td>20-30 minutes daily</td>
</tr>
<tr>
<td>Math</td>
<td>45 minutes daily</td>
</tr>
<tr>
<td>Science</td>
<td>25 minutes daily</td>
</tr>
<tr>
<td>Social Studies</td>
<td>25 minutes daily</td>
</tr>
<tr>
<td>Arts, Physical Education, or Social Emotional Learning</td>
<td>30 minutes daily</td>
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</tbody>
</table>

These are some time recommendations for each subject. We know everyone’s schedule is different, so do what you can. These times do not need to be in a row/in order, but can be spread throughout the day. Teachers will suggest which parts of the packet need to be completed or teachers may assign alternative tasks.
Grade 6 ELA Week 10

All previous activities, as well as other resources can be found on the Lowell Public Schools website: https://www.lowell.k12.ma.us/Page/3802

This week begins a focus on memoir reading and personal narrative writing. Your child should be reading, writing, talking and writing about reading, and exploring new vocabulary each week.

**Reading:** Students need to read each day. They can read the memoirs included in this packet and/or read any of the memoirs 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, then talk about their reading with a family member and/or write about their reading using the prompts/questions included.

**Writing:** Students will be working on personal narratives for the next few weeks. The resources in this packet will be the same for next week for writing as well. These resources are charts with examples to help your child write. They are available online in an interactive form with video tutorials here: Grade 6 Personal Narrative Writing Choice Board. This writing should last throughout the weeks. This is a great opportunity to explore new topics. Students will be planning their writing, then writing, then making it even better by revising, writing some more, and at the end, fixing it up by editing. Your child might write 1 personal narrative and work to refine it throughout, or might write multiple personal narratives, getting better each time.

**Word Work:** Students can work on learning new vocabulary about a topic they are interested in. Choose 3 activities on the vocabulary tic-tac-toe board. Learn any words you want or find in your reading.
Memoir

A memoir provides factual information in a narrative style about a significant time, place, person, or event in the author's life, and explains the significance.

Memoirs:
- Tell the story (memoir) of a significant time, place, or person, or event in a subject’s life
- Are told by a subject
- Use a narrative structure
- Provide factual information about the subject's life
- Tell why the time or event is important enough to be written about
- Are written in first person
- Have a limited perspective (subjective)

Often:
- Include direct quotes
- Have photographs
- Tell the story at a significant point in subject’s life
- Tell the setting and the culture the person lived in and what influenced the subject
- Add factual statements as additional information
- Convey a larger message

*The above taken from *Genre Study, Fountas & Pinnell*
When reading memoir (narrative nonfiction) texts, think about the following. Annotate, stop and jot, and respond in writing as you are reading or when you are done. Remember in a memoir, the “characters” are the real life people in the narrative.

To Think Deeply about Memoirs ... 

Expect characters to be complicated and show more than one trait.

Look at a character’s less likeable sides.

Know that some traits matter more than others because they affect the rest of the story.

Consider the pressures exerted on characters.

Ask, “Is something in the setting pulling a character between competing pressures?”

Pay attention to backstory to gain new insights into characters.
<table>
<thead>
<tr>
<th>Consider how group dynamics or powerful individuals may influence a place.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO GIRLS ALLOWED!</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Figure out what kinds of obstacles the characters face.</th>
</tr>
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<tbody>
<tr>
<td>Racism</td>
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<tr>
<td>Sexism</td>
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<tr>
<td>Bullying</td>
</tr>
<tr>
<td>Division between groups</td>
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<table>
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<tr>
<th>Reflect on the characters and the story again, after you read the ending.</th>
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<tbody>
<tr>
<td>THE END</td>
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</tbody>
</table>
The Drive-In Movies
By Gary Soto
1990

Gary Soto is an American poet, novelist, and memoirist. In this short story, Soto describes his desire to go to the drive-in movies as a kid. As you read, take notes on what the narrator does to get what he wants.

[1] For our family, moviegoing was rare. But if our mom, tired from a week of candling eggs,¹ woke up happy on a Saturday morning, there was a chance we might later scramble to our blue Chevy and beat nightfall to the Starlight Drive-In. My brother and sister knew this. I knew this. So on Saturday we tried to be good. We sat in the cool shadows of the TV with the volume low and watched cartoons, a prelude² of what was to come.

One Saturday I decided to be extra good. When she came out of the bedroom tying her robe, she yawned a hat-sized yawn and blinked red eyes at the weak brew of coffee I had fixed for her. I made her toast with strawberry jam spread to all the corners and set three boxes of cereal in front of her. If she didn't care to eat cereal, she could always look at the back of the boxes as she drank her coffee.

I went outside. The lawn was tall but too wet with dew to mow. I picked up a trowel³ and began to weed the flower bed. The weeds were really bermuda grass,⁴ long stringers that ran finger-deep in the ground. I got to work quickly and in no time crescents of earth began rising under my fingernails. I was sweaty hot. My knees hurt from kneeling, and my brain was dull from making the trowel go up and down, dribbling crumbs of earth. I dug for a half an hour, then stopped to play with the neighbor's dog and pop ticks from his poor snout.

I then mowed the lawn, which was still beaded with dew and noisy with bees hovering over clover. This job was less dull because as I pushed the mower over the shaggy lawn, I could see it looked tidier. My brother and sister watched from the window. Their faces were fat with cereal, a third helping. I made a face at them when they asked how come I was working. Rick pointed to part of the lawn.

“You missed some over there.” I ignored him and kept my attention on the windmill of grassy blades.

While I was emptying the catcher, a bee stung the bottom of my foot. I danced on one leg and was ready to cry when Mother showed her face at the window. I sat down on the grass and examined my foot: the stinger was pulsating.⁵ I pulled it out quickly, ran water over the sting and packed it with mud, Grandmother's remedy.

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Hobbling, I returned to the flower bed where I pulled more stringers and again played with the dog. More ticks had migrated to his snout. I swept the front steps, took out the garbage, cleaned the lint filter to the dryer (easy), plucked hair from the industrial wash basin in the garage (also easy), hosed off the patio, smashed three snails sucking paint from the house (disgusting but fun), tied a bundle of newspapers, put away toys, and, finally, seeing that almost everything was done and the sun was not too high, started waxing the car.

My brother joined me with an old gym sock, and our sister watched us while sucking on a cherry Kool-Aid cube. The liquid wax drooled onto the sock, and we began to swirl the white slop on the chrome. My arms ached from buffing, which though less boring than weeding, was harder. But the beauty was evident. The shine, hurting our eyes and glinting like an armful of dimes, brought Mother out. She looked around the yard and said, “Pretty good.” She winced at the grille and returned inside the house.

We began to wax the paint. My brother applied the liquid and I followed him rubbing hard in wide circles as we moved around the car. I began to hurry because my arms were hurting and my stung foot looked like a water balloon. We were working around the trunk when Rick pounded on the bottle of wax. He squeezed the bottle and it sneezed a few more white drops.

We looked at each other. “There's some on the sock,” I said. “Let's keep going.”

We polished and buffed, sweat weeping on our brows. We got scared when we noticed that the gym sock was now blue. The paint was coming off. Our sister fit ice cubes into our mouths and we worked harder, more intently, more dedicated to the car and our mother. We ran the sock over the chrome, trying to pick up extra wax. But there wasn't enough to cover the entire car. Only half got waxed, but we thought it was better than nothing and went inside for lunch. After lunch, we returned outside with tasty sandwiches.

Rick and I nearly jumped. The waxed side of the car was foggy white. We took a rag and began to polish vigorously and nearly in tears, but the fog wouldn't come off. I blamed Rick and he blamed me. Debra stood at the window, not wanting to get involved. Now, not only would we not go to the movies, but Mom would surely snap a branch from the plum tree and chase us around the yard.

Mom came out and looked at us with hands on her aproned hips. Finally, she said, “you boys worked so hard.” She turned on the garden hose and washed the car. That night we did go to the drive-in. The first feature was about nothing, and the second feature, starring Jerry Lewis, was Cinderfella. I tried to stay awake. I kept a wad of homemade popcorn in my cheek and laughed when Jerry Lewis fit golf tees in his nose. I rubbed my watery eyes. I laughed and looked at my mom. I promised myself I would remember that scene with the golf tees and promised myself not to work so hard the coming Saturday.

Twenty minutes into the movie, I fell asleep with one hand in the popcorn.

After reading the memoir, describe how the character (person in the memoir) changes or responds to events throughout the text.
Think of a person, place, or moment in your life (maybe a first or last time, or a time when you realized something) that matters, and write a story about it.
Focus on one episode, write with detail (don’t summarize a stretch of time).

Help readers picture the episode—a small action and exact dialogue.

Climb inside the moment and write within the narrator’s point of view.

I could hear the squeaking of sneakers on the polished wooden gym floor as I dribbled the ball.

“Over here!” Tamil yelled, waving her arms around above her head. I made sure that there was nobody in the way, and I passed the ball to her. Jaime chapped her brother Jason as he ran in front of her, and she caught the ball. Jaime dribbled the ball and passed it to Angelica. The basketball hit the gym floor, and went straight into her hands, from her hand...
Lead 1 - Inner Thoughts
Ughhh... not again! I could see that Natalie and Max were already in the lunchroom and, of course, sitting together.

Lead 2 - Actions
I saw them together and immediately put on my biggest smile, held my head up, and bounced into the cafeteria like I didn't have a care in the world. I started laughing loudly, pretending that the person next to me had just said something SO funny.

Lead 3 - Dialogue
“Oh, HEY, Sarah! How ARE you? I said, way too loudly.
“Um, fine?” How are you?” Sarah responded.
“Oh my gosh, Sarah, that is SO funny!” I basically shouted.
“Um, what’s funny?” Sarah asked, confused.
“Oh, Sarah, you are just too much!” I laughed, confusing her even more. Quickly, I looked to see if Natalie noticed all of this.
Ask, “What is my story really about?” and include descriptors, dialogue, and inner thinking that convey that meaning.

Elaborate on important scenes that show what the story is really about.

Include new scenes, remembered from the past or imagined in the future, that help show what the story is really about.

When I looked over at the parents, they were still on their feet cheering.

I then found my daddy's face, but was cheering last of all. There was a huge smile on his face as he chanted "Tyty's name along with the rest of the parents.

"Tyty, Tyty!" echoed through the gym. Every time I heard his name, my heart sunk a little bit lower.

I could hear my dad's voice above the other's. Why hadn't he cheered his name for my team? Was that was what filled my mind, I knew that.

Zoom in on the small but powerful details that really capture big moments and feelings.
Craft an ending that delivers a powerful message.

This wasn't just any dunk. It was something I had always wanted to do. For my entire life, I had wanted to be like Kobe Bryant, touching the rim at such a young age, and suddenly, here I was. I was going to be that person that everyone wanted to watch on the court. Now I am looking forward, hoping I'll be known and be one of the greatest, too. I'm ready to show this world what I've got. I'm ready to be a better player, a better person, than that guy who I was watching when I was six years old.

I understand that no matter what you want to do, you have to be willing to work hard for it. Nothing is ever going to be handed to you. Hard work really can beat talent.
FIG. 17–3  “The Unexpected Brother” by Gracie

I could hear the squeaking of sneakers on the polished wood gym floor as I dribbled the ball. “Over here!” Jamie shouted, waving her arms above her head. I made sure there was nobody in the way, and passed the ball to her. Jamie dodged her brother Jakie as he ran in front of her, and she caught the ball.

Jamie dribbled, then passed the ball to Ayo. The basketball hit the gym floor, and went straight into her hands. From her hands it went straight through the hoop.

“Yay!” I yelled. I looked over at the stands and saw my dad cheering. That smile on his face made me feel supported, it motivated me to win the game. Tyty and Jakie’s team had beat us the last time, but this time I was sure we had this. We were ahead by two and there was less than a minute remaining on the clock. All of our team’s hard work was finally going to pay off.

The smile on my face instantly disappeared when Tyty got the ball. He was one of the best players on their team, even though he was only eight.

He dribbled the ball to the other side of the court. Ayo followed right behind him trying to get the ball. I looked at the clock. There were only seven seconds left.

Tyty dribbled around Ayo who towered above him, and shot the ball. It bounced off the backboard and went through the hoop -- a three point shot. As I punched the air in anger, the light brown beaded bracelet that my dad had given me slipped off of my wrist and fell onto the gym floor. I quickly gathered the small round beads and the broken string, but one of the beads rolled under the bleachers before I could reach it. I put the beads and string into the pocket of my gray shorts and walked over to Jamie.

The crowd of parents in the bleachers were all on their feet, clapping for Tyty. I remember feeling that huge wave of disappointment like it was just yesterday.

I gave Jamie a high five even though I was still frowning.

“We tried our best,” I said. I was terribly sad because we had practiced so much. All to lose by one point.

When I looked over at the parents, they were still on their feet cheering.

I then found my dad’s face. He was cheering loudest of all. There was a huge smile on his face as he chanted Tyty’s name along with the rest of the parents.

“Tyty, Tyty,” echoed through the gym. Every time I heard his name, my heart sank a little lower.

I could hear my dad’s voice above the other adults! Why hadn’t he cheered like that for my team? That was what filled my mind. I knew that Ayo and Tyty’s dad had left when they were young, and my dad had tried to be there for them, so I tried to calm down.

I tried and tried but I just couldn’t calm myself down. I felt like my day didn’t even notice that I was there.

I heard my dad’s footsteps as he stepped down from the bleachers and onto the dark yellow gym floor. I saw him start to walk in my direction, so that began to make me feel better.

I remember thinking everything was going to be okay, my dad was going to make me feel better. I was used to my parents being very supportive of me, and making me feel better when I was sad. I then turned out that the complete opposite of what I thought, would happen.

My dad didn’t even look at me as he walked straight past me and right up to Tyty. I felt as if my heart had dropped from my chest.

“Great job buddy!” my dad exclaimed seeming to forget that I was even there.

I was standing right next to them, and yet it was as if I was invisible.

My dad gave Tyty a high five and continued to praise him as I stood there alone. I walked directly in front of my dad to see if he would notice me, but he did not even look up.

I didn’t understand why my dad couldn’t even acknowledge me. I was his daughter after all. Tyty wasn’t even related to us! I wish my mom would have come to our game instead of him. He was going to far and I could feel the anger burning inside of me. I wasn’t used to my dad acting like this.
My dad had still not stopped chattering about Tyty. It was just one shot, but my dad seemed to be explaining the plot of an action movie.

I took a deep breath and started to walk over to him. I tried to push the lump in my throat down as I made my way up to him.

“Dad, I’m really sad that we didn’t win,” I said, desperately seeking his support.
The huge smile stayed on his face. His light brown eyes were full of light.

“Did you see that shot Tyty made?” he said. “It was amazing.”

It was as if he hadn’t even heard what I just said. I could feel the anger bubbling up inside of me.

I just wanted to scream at the top of my lungs.

Now, being older and thinking about this, I know I shouldn’t have been so jealous, but I wasn’t used to my parents paying more attention to other children than to me. My dad really did hurt me that day, and I still think about it now. I am more mature now than when I was ten, but if this happened again I still think that I would feel pretty horrible.

I then walked over and stood by the wall, trying hard not to cry. I slammed my fist on the beige wall. I had thought my dad cared about me. I know that he does now, but at that time it sure seemed like he didn’t.

I was trying so hard to hold my tears down. I swallowed. Thoughts of sadness and hatred ran through my mind. This just wasn’t right. Fathers were supposed to care about their own children more than other people’s children.

I looked up to see Jamie’s dad patting her on the back, and that was the breaking point. I felt tears start to stream down my face. I was crying in the corner and my dad didn’t even notice.

Ayo then noticed that I was crying.

“Are you okay?” she asked, leaning down to talk to me as her short brown hair fell over her eyes.

“Yeah,” I said, trying to stop my tears. But I wasn’t okay. I wasn’t okay at all. I was sure that my dad had completely forgotten that I existed.

At that point I just couldn’t hold it in anymore and I could feel sobs rising in my throat. I looked over my shoulder to see my dad standing with Tyty, and more anger joined my sobs.

I kicked the basketball on the floor as hard as I could and charged down the stairs toward the bathroom. I turned to my right and ran into the the girls’ room.

I held a brown paper towel to my face as I sobbed into it.

To this day I still think about every moment of that day. That moment made me stronger and helped me grow up a little bit. It made me more mature than I was before, and it helped me realize that even though I am an only child, my parents won’t always be thinking about me.
Vocabulary Word Tic Tac Toe

Choose three activities to complete using your vocabulary words.

<table>
<thead>
<tr>
<th>Definition Drawing</th>
<th>Crossword Puzzle</th>
<th>Synonyms and Antonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw a picture or scene of the definition of at least 5 of your vocabulary words. Label each drawing with the word.</td>
<td>Create a crossword puzzle using grid paper. Have a classmate solve it.</td>
<td>Use a thesaurus to find a synonym and antonym for 10 of your words. Use the recording sheet to write your answers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sentences</th>
<th>Flash Cards</th>
<th>Comic Strip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use each one of your words in a sentence. It must be used correctly, and the sentence should help someone understand the meaning of the word.</td>
<td>Make one flash card for each of your words. Write the word on one side and the definition on the other side. Use the cards to quiz yourself.</td>
<td>Create a comic strip using at least 5 of your words in the conversations between your characters.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prefix - Root - Suffix</th>
<th>Quiz</th>
<th>Story Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find as many words as you can with the same prefix, root, or suffix as your vocabulary words. Use the recording sheet to write your answers.</td>
<td>Make a 10 question quiz using 10 different vocabulary words. Questions can be multiple choice, fill-in-the-blank, or matching.</td>
<td>Write a story using at least 5 of your words. Include lots of detail and descriptive words.</td>
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</tbody>
</table>
Learning Goals for May 26th-30th

Students will be able to...

Reason about and solve one-variable equations.
- Solve equations by substitution
- Solve addition and subtraction equation
- Solve multiplication and division equations

SUGGESTED SCHEDULE

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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</thead>
<tbody>
<tr>
<td>NO SCHOOL</td>
<td>Understanding Equations</td>
<td>Solving Addition &amp; Subtraction Equations</td>
<td>Solving Multiplication &amp; Division Equations</td>
<td>Solving Addition and Subtraction Equations Puzzle</td>
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<td></td>
<td></td>
<td>Solving Multiplication and Division Puzzles</td>
</tr>
</tbody>
</table>
Tuesday

1. 36 inches in 3 feet

\[ \frac{\text{rate}}{\text{unit rate}} = \] _

2. | Exponent Form | Expanded Form | Standard Form |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>(10^3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7^4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2^5)</td>
<td></td>
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</tbody>
</table>

3. What is 40\% of 20?

\[ \frac{\text{part}}{\text{whole}} = \frac{\square}{\square} = \frac{\square}{100} = \text{percent} \]

4. A regular size chocolate bar was 5 \(\frac{3}{4}\) inches long. If the king size bar is 3 \(\frac{1}{2}\) inches longer, what is the length of the king size bar?

5. Write an equation to describe the relationship in each table.

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

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5-A-Day Math Review: Week 4

Name: __________________________ Date: ____________

Wednesday

1. Add parentheses to make true.

\[ 8^2 - 5 \cdot 2 = 118 \]
\[ 58 - 5^2 \cdot 2 = 66 \]

2. Model and solve.

\[ \frac{4}{5} + \frac{2}{5} = \] _

3. Find the area.

4. Solve

\[ \frac{2}{3} = \square \]
\[ \frac{3}{4} = \square \]
\[ \frac{7}{8} + \frac{1}{3} = \square \]

5. Write > or < to make each statement true. Use the number line for help.

-5 _ -7
-2 _ 2
-10 _ -3
-9 _ 2
5 _ 9
Understanding Equations

A solution to an equation is a value that makes the equation true. An equation is true if both sides are equal.

To find out if a given value is a solution to an equation, substitute the value for the variable. If both sides of the equation are equal, the value is a solution to the equation. Use this method to solve the following problem.

Kate is going to babysit for 5 hours. She needs to make exactly $20.00 to buy a concert ticket. How much does Kate need to make each hour in order to buy the concert ticket?

The equation for this situation is $5x = 20.00$, where $x$ is the amount she makes per hour.

To find the solution to $5x = 20.00$, substitute the different rates for $x$.

<table>
<thead>
<tr>
<th>Possible Babysitting Rates</th>
<th>$3.00 per hour</th>
<th>$4.00 per hour</th>
<th>$5.00 per hour</th>
<th>$6.00 per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Try $x$ = $3.00$:</td>
<td>$5 \times 3.00 = 15.00$</td>
<td>Not a solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Try $x$ = $4.00$:</td>
<td>$5 \times 4.00 = 20.00$</td>
<td>Solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Try $x$ = $5.00$:</td>
<td>$5 \times 5.00 = 25.00$</td>
<td>Not a solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Try $x$ = $6.00$:</td>
<td>$5 \times 6.00 = 30.00$</td>
<td>Not a solution</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the solution is $4.00$, Kate needs to make $4.00 per hour in order to earn enough money to buy the concert ticket.
Understanding Equations

Substitute the different values of the variable to find the solution to each equation.

1. $27 - c = 18$  \hspace{1cm} c = 9, 11, 35, 45  \hspace{1cm} 3. $8 \times s = 96$  \hspace{1cm} s = 9, 12, 13, 14
2. $q - 19 = 12$  \hspace{1cm} q = 7, 21, 29, 31  \hspace{1cm} 4. $56 = 7f$  \hspace{1cm} f = 6, 7, 8, 9

Tell if each equation is true or false for $w = 2.1$.

5. $28.4 - w = 25.3$  \hspace{1cm} 6. $w = 39.2 - 37.1$

Tell which value of the variable is the solution to the equation.

7. $t + $13.38 = $19.00$  \hspace{1cm} t = $5.62, $5.72, $6.62, $7.72$
8. $19.7 = 41.1 - g$  \hspace{1cm} g = 21.4, 22.4, 30.4, 31.4
9. $7.7 + r = 8.5$  \hspace{1cm} r = 0.2, 0.6, 0.8, 1.2

10. **Writing to Explain**  Lou set up 6 tables for a party. 42 people are coming to the party. Lou is planning to seat 7 people at each table. Use the equation $42 + p = 6$ to explain whether Lou’s plan will work.

11. **Reasoning** 117 students and teachers participated in a fundraiser. 96 students participated. Did 11, 19, 21, or 29 teachers participate? Use the equation $t + 96 = 117$ to justify your answer.

12. **Geometry** Jerry built a table with a square top. The perimeter of the tabletop is 18 feet. He knows that each side of the table is either 3, $3 \frac{1}{2}$, 4, or $4 \frac{1}{2}$ feet long. Use the equation $18 = 4s$ to help him find which is the length of each side of the tabletop.
Solving Addition and Subtraction Equations

You can use inverse relationships and the properties of equality to get the variable alone to solve an equation. Remember that you need to do the same thing to both sides of the equation to keep the equation equal.

Solve the equation $5 + c = 15$.
To get $c$ alone, undo adding 5 by subtracting 5 from both sides.

\[
\begin{align*}
5 + c &= 15 \\
5 + c - 5 &= 15 - 5 \\
c &= 10
\end{align*}
\]
Check your solution by substituting 10 for $c$ in the equation.

\[
\begin{align*}
5 + c &= 15 \\
5 + 10 &= 15 \\
15 &= 15 \quad \text{It checks.}
\end{align*}
\]

Solve the equation $x - 20 = 16$.
To get $x$ alone, undo subtracting 20 by adding 20 to both sides.

\[
\begin{align*}
x - 20 &= 16 \\
x - 20 + 20 &= 16 + 20 \\
x &= 36
\end{align*}
\]
Check your solution by substituting 36 for $x$ in the equation.

\[
\begin{align*}
x - 20 &= 16 \\
36 - 20 &= 16 \\
16 &= 16 \quad \text{It checks.}
\end{align*}
\]
Solving Addition and Subtraction Equations

Explain how to get the variable alone in each equation.

1. \( n + 10 = 100 \)
   \( n + 10 - 10 = 100 - 10 \)

2. \( x - 75 = 49 \)
   \( x - 75 + \_ = 49 + \_ \)

Solve each equation and check your answer.

3. \( g - 8 = 25 \)

4. \( 25 + y = 42 \)

5. \( r + 82 = 97 \)

6. \( 30 = m - 18 \)

7. \( 150 = e + 42 \)

8. \( a - 51 = 12 \)

9. Jo loaned Al $15. She had $15 left. Solve the equation \( 15 = s - 15 \) to find how much money Jo had before she made the loan.
   
   A $0      B $15      C $30      D $60

10. Critical Thinking  If \( n + 10 = 40 \), then what is the value of the expression \( n - 25 \)?

   A 5      B 2      C 30      D 50

11. Writing to Explain  Explain how to solve the equation \( 35 + p = 92 \). Then solve.
Solving Multiplication and Division Equations

To solve an equation, make the two sides of the equation equal with the variable alone on one side. You can use inverse operations and properties of equality.

Remember: Inverse operations “undo” each other. Properties of Equality say that you can multiply or divide both sides of an equation by the same number and the two sides of the equation remain equal.

Use division to “undo” multiplication.                      Use multiplication to “undo” division.

**With numbers:**
3 \times 6 = 18
3 \times 6 + 6 = 18 + 6
3 = 3

**In algebra:**
m \times 9 = 54
m \times 9 + 9 = 54 + 9
m = 6

**With numbers:**
24 + 2 = 12
24 + 2 \times 2 = 12 \times 2
24 = 24

**In algebra:**
p + 8 = 7
p + 8 \times 8 = 7 \times 8
p = 56
Solving Multiplication and Division Equations

For 1 through 3, explain how to get the variable alone in each equation.

1. \[ r \times 7 = 42 \]
   \[ r \times 7 \div 7 = 42 \div 7 \]

2. \[ m \div 6 = 12 \]
   \[ m \div 6 \times \_ = 12 \times \_ \]

3. \[ 44 = 2k \]
   \[ \_ = \_ \]

For 4 through 9, solve the equation. Check your answer.

4. \[ 9n = 72 \]

5. \[ y \times 5 = 60 \]

6. \[ n + 13 = 2 \]

7. \[ w \div 7 = 15 \]

8. \[ 216 = 36p \]

9. \[ 17 = t \div 3 \]

10. Writing to Explain  Tell how you would get the variable \( m \) alone on one side of the equation \( 15m = 45 \).

11. Write a Problem  Write a problem that can be solved with the equation \( r \div 6 = 14 \).

12. Number Sense  Which equation can you use to solve this problem?

   There are 12 muffins in a package. Will bought 84 muffins. How many packages did he buy?

   A. \( 12 \times p = 84 \)  B. \( 84 \times 12 = p \)  C. \( 12 + p = 84 \)  D. \( 84 = 12 + p \)
What Do Kitty Cats Like To Eat For Breakfast?

Write the letter of each answer in the box containing the exercise number.

Solve the equation. Check your solution.

1. \( p - 8 = 4 \)
2. \( k - 2 = 12 \)
3. \( 9 = h - 15 \)
4. \( y + 4 = 7 \)
5. \( x + 5 = 21 \)
6. \( 63 = r + 31 \)
7. \( x - 25 = 16 \)
8. \( 26 = m + 18 \)
9. \( \frac{2}{3} = a - \frac{2}{3} \)
10. \( f + \frac{1}{4} = \frac{7}{8} \)
11. \( 2.3 = q - 3.6 \)
12. \( j + 4.4 = 16.2 \)

Answers

K. 16
L. \( \frac{5}{8} \)
E. 24
S. 14
R. 5.9
C. 41
I. 32
P. 12
S. 8
M. 3
E. 11.8
I. \( 1\frac{1}{3} \)
## Puzzle Time

### What Did The Dirt Say When It Began To Rain?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<tbody>
<tr>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
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<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
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</tbody>
</table>

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

### Solve the equation. Check your solution.

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Equation</th>
</tr>
</thead>
</table>
| A        | \[
x = \frac{6}{9}
\]|
| B        | \[
z = \frac{7}{6}
\]|
| C        | \[
y + 4 = 10
\]|
| D        | \[
k = \frac{25}{5}
\]|
| E        | \[
2s = 16
\]|
| F        | \[
8 \cdot t = 96
\]|
| G        | \[
50 = 5x
\]|
| H        | \[
56 = 8k
\]|
| I        | \[
4b = 52
\]|
| J        | \[
39 = 6 \cdot c
\]|
| K        | \[
14 = n \div 5
\]|
| L        | \[
10 = v \div 6
\]|
| M        | \[
x + 16 = 3.5
\]|
| N        | \[
\frac{w}{25} = 4.4
\]|
| O        | \[
11.5 \cdot d = 23
\]|
| P        | \[
4.5v = 40.5
\]|
| 12 UP    |          |
| 6.5 CHANGE |          |
| 125 RAIN |          |
| 110 BE   |          |
| 42 THIS  |          |
| 8 KEEPS  |          |
| 60 I     |          |
| 70 AND   |          |
HAPPY CAKE DAY!

Find the value of each symbol in the multiplication table below:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>60</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Piping Bag</th>
<th>Canned Icing</th>
<th>Whisk</th>
<th>Oven</th>
<th>Egg</th>
<th>Mixer</th>
<th>Cake</th>
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There are 8 empty boxes below the table for additional symbols.
YOUR CHALLENGE

Build a machine that kicks a Ping-Pong ball into a cup lying on its side 12 inches away. Use either (1) a pendulum, (2) a rubber band, or (3) a combination of the two to do this.

MATERIALS*

- Balls (Ping-Pong and golf)
- Corrugated cardboard
- Paper clips
- Paper cups
- Popsicle sticks
- Rubber bands
- Ruler
- Scissors
- String
- Tape (masking or duct)
- Thin metal wire (optional)
- Wooden skewers

* For information on where to get these materials, see page 6 or visit pbskids.org/designsquad/engineers.

BRAINSTORM AND DESIGN

Before you begin designing your machine, brainstorm answers to the following questions. Record and sketch your ideas in your design notebook.

- Will my machine use a pendulum or rubber band (or a combination) to send a ball into the cup?
- How will I stop the machine from launching the ball before I’m ready to release it?
- How will the machine be triggered when I’m ready to launch the ball?
- How will I make sure the pendulum or rubber band launches the ball straight enough and with the right amount of force so it goes into the cup?

Think about how to create different release points for the pendulum or rubber band so you have more control over a launched ball. Also consider how to determine the right amount of energy to store up before making your shot.

BUILD, TEST, AND REDESIGN

When you lift a pendulum or stretch a rubber band, you increase its potential energy. Potential energy is energy that is stored. When you release the pendulum or rubber band, its potential energy is turned into kinetic energy, the energy of motion. Many machines have this in common—they turn potential energy (e.g., fuel, electricity, muscle power, springs, or weights) into kinetic energy that can be used to do a task (in this case, launch a ball).

Once you’ve built your machine, test it. Lay a cup on its side 12 inches away and see if you can get the ball in. When we made our machine, we had to debug some problems. For example, the ball bumped into parts of our machine and went in unexpected directions, and the stretched rubber band bent our frame. It was also hard to get the pendulum and rubber band to stay pulled back. If things like this happen to you, figure out a way to fix the problem so that your machine works every time.

When you lift a pendulum or stretch a rubber band, you increase its potential energy.
TAKE IT TO THE NEXT LEVEL

- Move the cup so it's 24 inches from your kicking machine.
- Build a ramp and see if you can shoot the ball up and over the ramp.
- Build a machine that can launch two balls at once or that can launch balls at different speeds.

SWEET DELIVERY

Building machines that make tasty—and sometimes far-out—ice cream flavors is just the kind of challenge Pete Gosselin loves. He’s head engineer for Ben and Jerry’s® ice cream. Pete’s the guy who designs the machines that make different flavors and mix the right amounts of candy, filling, or swirl into each container. And you thought getting a ball into a cup was a challenge! Some days, it’s, “We want every container to have half a pint of cherry ice cream with cherries and fudge flake and half a pint of chocolate ice cream with fudge brownie. Now on the brownie side, make sure there are at least three but no more than four brownie bites. Oh and by the way, these babies need to roll off the production line at 200 pints a minute.” To make some flavors, Pete tinkers with the factory’s existing machines. For others, he has to design special machines. His biggest challenge: to design a machine that makes a flavor with a core of fudge and caramel wedged between chocolate and caramel ice cream. The way Pete sees it, “The world is full of problems and possibilities. And technology has a huge influence on making our lives better, whether the challenge is addressing global warming or making delicious food.”

Ben and Jerry’s is a registered trademark of Ben & Jerry’s Homemade Holdings, Inc.

Want to make life easier? See how simple machines bring mechanical advantage to the rescue! Download Not So Simple Machines from Intel’s Design and Discovery hands-on engineering program.

intel.com/education/designanddiscovery

The Design Squad cast made a kicking machine for a professional soccer player. This soccer-ball launcher uses electric drills to spin wheelbarrow wheels to send soccer balls flying.

Watch Design Squad on PBS (check local listings). Download more challenges at pbskidsgo.org/designsquad.

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Use the clues in the legend. Place your cut-out continents on the map below to form one connected “super-continent”. Use evidence from the fossil record and from rock and soil types to support your claim. When you’re satisfied with your answer, glue the pieces down. (Hint: basalt is a type of rock.)

Click on this link to learn more about tectonic plates and continental drift: https://drive.google.com/file/d/1oiFEORo0cZrupEcsFB1c1eNhrZrxKVM/view?usp=sharing

Be able to explain to your teacher what it takes to turn a hypothesis into a scientific theory.
This includes two subregions of Asia: East Asia and Southeast Asia. Countries that are considered part of East Asia are Mongolia, China, North Korea, South Korea, Japan and Taiwan. The countries of Southeast Asia are Myanmar, Laos, Vietnam, Thailand, Cambodia, Malaysia, Singapore, Brunei, Indonesia and the Philippines.
This is a map of Southeast Asia. The region includes the following countries: Myanmar, Laos, Vietnam, Thailand, Cambodia, Malaysia, Singapore, Brunei, Indonesia and the Philippines.

Based on the maps on these two pages, what are 4-5 important physical features in East and Southeast Asia?

________________________________________________________

________________________________________________________

________________________________________________________

Make a hypothesis: What is one way that geography might impact life in East and Southeast Asia?

________________________________________________________

________________________________________________________

________________________________________________________
Asia is the largest of the world's continents. It covers about 30 percent of the Earth's land area. It also has more people than the rest of the world combined, with roughly 60 percent of the total population.

Asia makes up the eastern portion of the Eurasian supercontinent. Europe occupies the western portion. Most geographers define Asia’s western border as a zigzagging line that follows the Ural Mountains, the Caucasus Mountains, and the Caspian and Black Seas.

**Mountain Systems**

The Himalaya mountains extend for about 1,550 miles, separating the Indian subcontinent from the rest of Asia. The Himalayas formed about 50 million to 55 million years ago and are still growing about 2 inches every year.
The Himalayas cover more than 236,000 square miles, passing through northern India and making up most of Nepal and Bhutan. The Himalayas are composed of three different mountain belts. The northernmost belt, known as the Great Himalayas, has the highest average elevation at 20,000 feet. The belt contains nine of the highest peaks in the world. This belt includes the tallest mountain in the world, Mount Everest, which stands at 29,035 feet.

The Tien Shan mountain system stretches for about 1,500 miles, on the border between Kyrgyzstan and China. The highest peak in the Tien Shan is Victory Peak, which stands at 24,406 feet. Tien Shan also has more than 3,900 square miles of glaciers. The largest glacier is about 37 miles long.

The Ural Mountains run for about 1,550 miles in a north-south line from Russia to Kazakhstan. The Ural Mountains are some of the world's oldest, at 250 million to 300 million years old. Their average elevation is between 3,000 and 4,000 feet.

**Plateaus**

Asia is home to many plateaus, areas of level high ground. The Iranian plateau covers more than 1.4 million square miles, covering most of Iran, Afghanistan, and Pakistan. The plateau is not completely flat. The highest mountain peak is Damavand, at 18,410 feet.

The Deccan Plateau makes up most of the southern part of India. The plateau's average elevation is about 2,000 feet.

The Tibetan Plateau is the largest and highest area ever to exist in the history of Earth. It covers an area about half the size of the United States and averages more than 16,400 feet above sea level. The Tibetan Plateau’s glaciers contain the most ice outside the poles. The ice and snow from these glaciers feed Asia's largest rivers. About 2 billion people depend on the rivers fed by the plateau's glaciers.

**Plains, Steppes And Deserts**

The West Siberian Plain, located in central Russia, is one of the world's largest areas of flatland. It extends from north to south about 1,500 miles and from west to east about 1,200 miles. The plain contains some of the world's largest swamps and floodplains.

Central Asia is covered mostly by a steppe, a large area of flat grassland. Mongolia can be divided into a mountain forest zone, a dry zone, and a desert zone.

The Rub' al Khali desert covers an area larger than France. It stretches across Saudi Arabia, Oman, the United Arab Emirates and Yemen in the Middle East. It holds roughly half as much sand as Africa's Sahara desert, even though it is 15 times smaller in size.

**Freshwater**

Lake Baikal, located in southern Russia, is the deepest lake in the world, reaching a depth of 5,315 feet. The lake contains 20 percent of the world’s unfrozen freshwater. It is also the world’s oldest.
lake, at 25 million years old.

The Yangtze is the longest river in Asia and the third longest in the world, reaching 3,915 miles in length. The Yangtze drains one-fifth of the China's land area and is home to one-third of its population.

The Tigris and Euphrates rivers begin in the highlands of eastern Turkey and flow through Syria and Iraq before emptying into the Persian Gulf. The land between the two rivers was known as Mesopotamia. It was the center of the earliest civilizations.

**Saltwater**

The Persian Gulf has an area of more than 90,000 square miles. Eight Middle Eastern countries border it. The Gulf is shallow and extremely salty. The seabed contains about half of the world’s oil reserves.

The Sea of Okhotsk covers 611,000 square miles between the Russian mainland and the Kamchatka Peninsula. Large ice floes make winter navigation almost impossible.

The Bay of Bengal is the largest bay in the world. It covers almost 839,000 square miles and borders Bangladesh, India, Sri Lanka and Myanmar. Many large rivers empty into the bay, forming the largest delta in the world.

**Terrestrial Flora And Fauna**

China has more flowering plant species than North and South America combined. Many flowers, like roses, most likely came from northern China. China is the likely origin of such fruit trees as peaches and oranges.

In the Himalayas, communities use yaks for work. Yaks are large animals related to cattle, but with a thick fiber coat and the ability to survive in the high altitude of the mountains. Yaks are used for transportation and for pulling plows. Their coats are sources of warm fiber for clothes. Yak milk is used for butter and cheese.

In the Mongolian steppe, the two-humped Bactrian camel is used for work. The camel's humps store nutrient-rich fat. Some camels are slow, Bactrians can actually outrun horses over long distances.

**Aquatic Flora And Fauna**

Lake Baikal is a unique site. Marine life has been able to evolve for millions of years relatively undisturbed. The lake has 1,340 species of animals and 570 species of plants.
Hundreds of Lake Baikal's species are found nowhere else on Earth. The Baikal seal, for instance, is one of the few freshwater seal species in the world.

The Bay of Bengal, on the Indian Ocean, is one of the world's largest tropical marine ecosystems. The bay is home to many fish, dolphins, whales, and other sea animals.

The

Sundarbans is a wetland area that forms at a delta in the Bay of Bengal. The Sundarbans is a huge mangrove forest. Mangroves are strong trees that grow in wet, marshy places.

Hundreds of species of fish, shrimp, crabs and snails live in the exposed roots of the mangrove trees. The Sundarbans supports more than 200 species of birds. There are also wild boar, macaque monkeys, monitor lizards and Bengal tigers.

Writing Prompt (Paragraph)
Based on what you have read, make three predictions about the way geography may have shaped the history of societies in this area and how people live today. Use evidence from the article to support your predictions.
## ESL at Home 6-8 Weeks 9-10
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>
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</thead>
<tbody>
<tr>
<td>Choose a TV Show or Movie and write a review for it! Include a summary and if you would recommend it to someone. First, __. Next, __. Last, __. You should/should not watch this because ___. Another reason ___.</td>
<td>Use things in your home to create a kind of store (clothing, furniture, etc.). Write what you will sell and what it will cost! “Sell” items to your family and add their totals! Example: Red t-shirt: $10 Jeans: $17.99 Gold necklace: $4.50</td>
<td>Create a cooking show! Choose something to make with your family! Explain the steps of how to make the dish while you are cooking together!</td>
<td>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, hill, river.</td>
<td>Imagine you were an animal (Example: horse, cow, pig, chicken) that lived on a farm where all the animals could talk. Write and draw about your adventure with your animal friends.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find items around your house and create an instrument. Come up with a song and write lyrics to it. Make sure you use imagery!</td>
<td>Pick a character from a TV show, movie, or book. Write and describe the character traits of that character. Example: Batman is wearing black. He is kind because he saves others.</td>
<td>Read a story or chapter aloud to someone, but don’t read the end (or what happens next). Have them predict what will happen. Then read it to them and see if they were correct!</td>
<td>Interview your parents or grandparents about their life when they were your age. Write about how your life is similar and different to theirs!</td>
<td>List four things in your home that produce light energy. List four things in your home that produce heat energy. List four things in your home that reflect light.</td>
</tr>
</tbody>
</table>

♫