At Home Learning Resources

Grade 6 - Week 12

https://2020census.gov/
Grade 6 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/3802

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

**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 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 personal 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 6 Personal Narrative Writing Choice Board. 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 as they read.
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!
My mother said he was trouble the first time I met him. His name was Frankie Pagoda and he had just been catapulted across his yard like a human cannonball and landed badly in ours. He was moaning as I stood over him, not knowing what to do. He was on his back and at first he wasn't moving, but slowly he began to gyrate his arms and legs like a stunned crab.

"Who are you?" I asked.

"Frankie . . . P—" he slowly replied. "Frankie Pagoda."

He was in a lot of pain, and here's what was going on. His older brother, Scary Gary, who had already been in trouble with the law, had made him climb to the very top of a reedy Australian pine tree with a rope between his teeth. Then he tied the rope to the top of the tree and Gary tied the other end to the winch on Mr. Pagoda's tow truck. He winched the tip of the tree all the way down so it made a big spring and then Frankie held on like a Koala bear while Gary cut the rope with a machete. Frankie was launched like the stones the Romans flung at the Vandals.

I was in my bedroom and Mom was in the kitchen; both of us had windows that faced the backyard. Then we heard that first Whoosh! of the tree and Frankie hollering, "Ahhhhhh!" That was followed by a thud and a very soulful moan. And this is how we found him—on his back with his arms and legs slowly stretching out.

"Are you okay?" I asked. He slowly turned over onto his hands and knees.

"Yeah," he said, wincing. "I've had worse."

Mom pointed at him as if he were a garden pest. "He's a heap of trouble," she said to me. Then she said to Frankie, "If you have to hurt yourself, please do it in your own yard."

He seemed to nod to that and I helped him up and he ran off. A few minutes later we heard, Whoosh! "Ahhhhhh!" Thud! "Ugh!" He was back.

"Something is messed up with those people," Mom said, chopping up onions that evening.

"Something's wrong in their heads."

Maybe there was something wrong with me, too. I was different from Frankie but still, the first moment I saw him in pain, it occurred to me that I wanted to be in pain, too.

That evening my mother came into my room. "If I ever catch you playing with that kid or over at their house, you will be in big trouble. This is just a friendly warning," she said.

"Why?" I asked. "He's a neighbor and will probably be a friend."

"You should not be friends with kids who are a danger to themselves and others."

I got some courage up and replied, "That's what I love about him."

She pointed a red finger at my chest. "You are a follower, not a leader," she said bluntly. "You are putty in the wrong hands. Don't get me wrong. You're a nice kid, but you are most definitely a follower."

I sort of knew this was true but I didn't want to admit it to her. Plus, a little of me still wanted to believe that I was strong, that I was my own man and a great leader.

But within a week I was Frankie's man, which was pretty scary because he was Gary's man, which made me low man on the totem pole—or pine tree. The first time Gary launched me, I hit a car. It was an old Mercury Cougar parked in their backyard. It didn't have any wheels and sat on its belly like a cat crouching to catch a bird. I hit the roof, which was like a steel trampoline. It dented down and popped up and I went springing off the top. As I was in the air, I kept thinking, When you hit the ground, roll and tumble and it won't hurt so much. This is what I had learned from watching Roller Derby on TV. It was my favorite show and very violent, but the players always avoided massive debilitating and life-threatening injuries as long as they rolled and tumbled across the wooden track or over the rails and into the rows of metal folding chairs. So, as I flew through the air, I stared at the grassy yard and planned my clever
descent. I hit the ground with my outstretched arms and, instead of bouncing as if my hands were shock absorbers, I collapsed into the ground like a piece of space junk.

I dislocated the fingers on my right hand, bruised the side of my face, and sprained my right shoulder. I limped home hunched over like Quasimodo and went straight to my room. A few minutes later I was barking in pain from relocating the joints in my fingers. I was so afraid my mother would see my bruised face that I stole my sister’s makeup and powered my bruise. At dinner I couldn’t use my right arm. It hung limply by my side like an elephant’s trunk. I must have pinched a nerve on contact with the ground that left my arm paralyzed. Perhaps for life. I ate with my left hand and food kept falling down my chin and shirt and onto my lap.

“What’s wrong with your arm?” my mother asked.

“Nothing,” I mumbled.

She sneered, stood up, and came around to my side. She grabbed my arm and pulled on it like it was the starter rope on a lawnmower engine. Something deep inside my shoulder went Pop!

“Arghhh,” I sighed. The relief from the pain was heavenly.

“You are as dumb as a post,” my mother said. “I’m warning you—don’t play with that kid! He’ll lead you to your death.”

I couldn’t help myself. The next day I felt pretty good and my teeth no longer throbbed when I breathed through my mouth. As soon as my mother went into the bathroom I ran over to Frankie's house. His brother Gary had rigged up an electric chair with a train transformer. He ran copper leads from the transformer to chicken wire on the chair seat and duct-taped it down.

“Don't be a chicken,” he said demonically when he saw me. “Take a seat.”

I did and it was torture at its most challenging. When I got home I looked at my naked butt in the mirror, and it was singed with the same chicken wire pattern that was on the chair. “Wow,” I said. “Pretty cool.”

The next day my mother did the laundry. She came to me with my pants, which were singed with the same wire pattern. “You don’t have to tell me how this happened,” she said. “You just have to stop. Whatever drives you to do this stuff is a sickness. So I’m grounding you for a while until you start displaying some sense.”

Maybe I was sick. Maybe I was a follower. But I couldn’t help myself. I wanted to sneak back for more. I was just thinking of crawling out the window when I looked over at the Pagoda house, and Frankie had his bike up on the peak of his roof. He was poised to pedal down the slope and land in the pool, which was quite a distance from the eaves of the house.

“Go!” Gary demanded. Frankie did. He pedaled as fast as he could and yelled all the way down and then was in the air. My vision was blocked by a bush, and instead of a splashing sound there was the springy metal sound of his bike hitting the concrete patio and clattering around. In a minute Gary was hollering at him to stop being a sissy and to get up and the dent in his forehead wasn’t anything to cry over. I rubbed my hand over my forehead. Perhaps a little dent of my own would look good, I thought.

The ambulance arrived in a few minutes. After some begging, Mom allowed me to visit Frankie in the hospital, and later, once Scary Gary was sent off to a special program for dangerous boys, I even snuck over to Frankie's house a few times. He recovered just fine. And because he stopped doing dumb things for Gary, I stopped doing dumb things for him. He was a follower too, like me. And when you put two followers together nothing really bad happens. We didn't get hurt for a while or do anything too stupid. About a month went by before I secretly hoped Scary Gary would return home and rescue us from being so dull. I was bored out of my mind.
If you could go back in time and restart the school year, what would you do differently and why?

What were your least favorite parts of this school year?

What are your favorite parts of this school year?

What will you miss most about your classmates?

What will you miss most about your teacher?

What one word would describe this school year? Explain why you chose the word.
What will you miss most about your classroom/school?

What was your favorite academic activity or event from this school year?

What was your favorite non-academic activity or event from this school year?

What was the best day you had this year? What made it the best?

What was the most interesting skill or topic you learned this year?

What was the most difficult skill or topic you learned this year?
What was something that was difficult for you at first but is now easy?

What do you wish that you had studied or learned this year?

What did you accomplish this year that you are most proud of?

What was the easiest skill or topic you learned this year?

What do you think was the most important things you learned this school year?

What was the kindest gesture you did for someone this year?
19. What was the kindest gesture someone did for you this year?

20. Which area of the classroom was your favorite? Why?

21. Which area of the school was your favorite? Why?

22. What will you miss most about this school year?

23. What was your favorite part of a normal school day? Why?

24. What was your favorite book you read in school this year?
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 headed the hall.

"Over here!" Jose yelled, waving his arms around above his head. I made sure that there was nobody in the way, and I passed the ball to her. Jamie picked up her brother's shoe as he ran in front of her, and she caught the ball. Jamie dribbled the ball and passed it to Angelica. The basketball hit the gym floor and went straight into her hands. From her hands, it went straight into her mouth.

Develop Characters

Make characters say the words and use the tone that shows their personalities and hints at the bigger meaning of the moment.

Explain why the characters act the way they do.

Angelica
- long dark hair
- she plays with her hair when she's nervous
- she likes to be a leader/lead?
- she worries about her friendship with Natalie
- she always has her pink pencil with the pan on top
- talks really fast when she is nervous
- always wants to be the best grades in the class grade
Ughhh… not again! I could see that Natalie and Max were already in the lunchroom and, of course, sitting together.

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.

“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 dad's face. He was cheering loudest of all. There was a huge smile on his face as he shouted 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 bit lower.

I could hear my dad's voice above the other cheers. Why hadn't he cheered the way for my team?

I was filled with 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.
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.

“Yes!” 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 the 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 and of me, and making me feel better when I was sad. It
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.
Monday

1. Express the ratio in three different ways (whole-to-part).
   "Out of the dozen roses, seven were yellow"
   \[ \_ \quad \_ \quad \_ : \_ \]

2. Use an integer to describe the situations.
   A debt of $32 \quad \_ \_\_\_\_
   A savings of $100 \quad \_ \_\_\_\_

3. Write an expression to represent:
   "An amount d divided by 4"

4. List all the factors. Circle the GCF.
   8: \_
   6: \_

List 5 multiples. Circle the LCM.
   10: \_
   5: \_

5. \[ 23.31 + 6.3 = \quad 7.36 \times 2.4 = \]

Tuesday

1. $18 for three books

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

2. Exponent Form | Expanded Form | Standard Form
   \[ 5^2 \]
   \[ 6^3 \]
   \[ 4^3 \]

3. 12 is 25% of what?

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

4. Luisa has 8 chapters of a book left to read. If she reads \( \frac{2}{3} \) of a chapter each day, how many days will it take her to finish the book?

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>9</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
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<tr>
<td>6</td>
<td>3</td>
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<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
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<td>4</td>
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<td>8</td>
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<td>6</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>
Wednesday

1. Add parentheses to make true.
   \[ 5 \cdot 3^2 - 4 \cdot 6 = 150 \]
   \[ 2^3 + 7 \cdot 8 + 4 = 30 \]

2. Model and solve.
   \[ \frac{1}{2} + \frac{1}{4} = \]

3. Draw a net for this figure.

4. Solve
   \[ \frac{3}{4} = \]
   \[ \frac{3}{5} = \]
   \[ \frac{1}{2} + \]
   \[ \frac{1}{4} = \]

5. Write > or < to make each statement true.
   -6 -12 -3 17 0 -22 -56 -23 14 -92
   -52 -89 -21 -23 -78 -43 2 22 -45 12

Thursday

1. Use substitution to match these solutions to their equations.
   \( \{3, 4, 6, 2\} \)
   \[ 13a = 26, \quad a = \]
   \[ 7b = 21, \quad b = \]
   \[ 15c = 60, \quad c = \]

2. Which expression is equal to:
   \[ 6(x + 9) \]
   \[ A \quad 6x + 9 \quad B \quad x \cdot 54 \]
   \[ C \quad (6 \cdot x) \cdot 9 \quad D \quad 6(x + 9) \]

3. Nightly low temperatures (°F):
   24, 27, 18, 39, 30, 31, 34
   Mean = ______ median = ______
   Mode(s) = ______ range = ______

4. This "box-and-whisker" plot was made based on the data from problem 3. Find and label the lower and upper quartiles of this data set.

5. Look back at problem 3. Find the lower and upper quartiles of the box plot.
Mean

The mean is the sum of all the values in a set divided by the number of items in the set. The mean is also called the average.

How to find the mean of a set of data:

Eduardo surveyed 7 of his friends to find out how many books they read during the month. The frequency table shows the data. What is the average number of books read by Eduardo's friends?

1. Add the number of books read by each friend.

\[
2 + 3 + 8 + 5 + 6 + 3 + 1 = 28
\]

2. Divide the sum by the number of friends.

\[
\frac{28}{7} = 4
\]

3. Use the average to answer the question.

Eduardo's friends read an average of 4 books during the month.

1. Find the mean of this set of data: 241, 563, 829, 755.

2. This frequency table shows the number of silver medals won by American athletes in Summer Olympic Games between 1972 and 2000. What is the mean of this set of data?

<table>
<thead>
<tr>
<th>Year</th>
<th>Medals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>24</td>
</tr>
<tr>
<td>1996</td>
<td>32</td>
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<tr>
<td>1992</td>
<td>34</td>
</tr>
<tr>
<td>1988</td>
<td>31</td>
</tr>
<tr>
<td>1984</td>
<td>61</td>
</tr>
<tr>
<td>1980</td>
<td>0</td>
</tr>
<tr>
<td>1976</td>
<td>35</td>
</tr>
<tr>
<td>1972</td>
<td>31</td>
</tr>
</tbody>
</table>

3. Estimation What is the approximate average of these three numbers: 9, 18, and 31?

4. Explain It Explain how you would find the mean of this set of data: 4, 3, 5.
**Median**

**Key Concept and Vocabulary**

Line up and find the middle.

42 in. 44 in. 45 in. 46 in. 48 in.

The median is the middle one.

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**PRACTICE MAKES PURR-FECT™**

Check your answers at BigIdeasMath.com.

1. **ODD NUMBER** Find the median horsepower of the cars.

   - Write in order:
     - 400 hp
     - 400 hp
     - 330 hp
     - 425 hp
     - 350 hp

   Median = [Blank]

2. **EVEN NUMBER** Find the median RBIs for the baseball players.

   - Write in order:
     - 180 RBI
     - 124 RBI
     - 150 RBI
     - 96 RBI
     - 140 RBI
     - 130 RBI

   Median = \[\frac{124 + 150}{2}\] = [Blank]
Key Concept and Vocabulary

Count which number occurs the most.

The mode number of cherries is 3.

PRACTICE MAKES PURR-FECT™
Check your answers at BigIdeasMath.com.

1. PROPellers  Find the mode number of propeller engines.

Mode =

2. SALMON Weights  Find the mode of the salmon weights. Include the units in your answer.

Mode =
REVIEW: Mean, Median, and Mode

Key Concept and Vocabulary

\[
\text{mode} = 1 \quad \text{median} = 3.5
\]

\[
1, 1, 1, 3, 4, 5, 6, 7
\]

\[
\text{Mean} = \frac{1 + 1 + 1 + 3 + 4 + 5 + 6 + 7}{8} = 3.5
\]

Visual Model

The scale balances at the mean.

Application Example

2. What is the mean weight of the bowling balls?

\[
13 + 12 + 9 + 10 + 13 + 9 = 66
\]

\[
\text{Mean} = \frac{66}{6} = 11
\]

The mean is 11 pounds.

Skill Example

1. \[
\text{mode} = 1 \quad \text{median} = 4
\]

\[
1, 1, 1, 3, 4, 5, 6, 7, 17
\]

\[
\text{Mean} = \frac{1 + 1 + 1 + 3 + 4 + 5 + 6 + 7 + 17}{9} = 5
\]

PRACTICE MAKES PURR-FECT™

Find the mean, median, and mode of the data.

3. \[2, 6, 9, 10, 3, 4, 6, 12, 4, 13\]

Mean = \_____, Median = \_____, Mode = \_____

4. \[30, 48, 32, 43, 45, 32\]

Mean = \_____, Median = \_____, Mode = \_____

5. \[18, 12, 25, 18, 17, 19, 29, 20, 13, 18\]

Mean = \_____, Median = \_____, Mode = \_____

6. \[6.8, 6.2, 6.3, 6.8, 5.9, 6.0, 6.1, 5.9\]

Mean = \_____, Median = \_____, Mode = \_____

7. \[-4, 5, 3, -2, 1, 0, -2\]

Mean = \_____, Median = \_____, Mode = \_____

8. \[2, 5, 5, 0, 12, 5, 7, 8, 12, 9\]

Mean = \_____, Median = \_____, Mode = \_____

9. **SALARIES** The weekly salaries of six employees at a fast-food restaurant are $140, $220, $90, $180, $140, and $200. Find the mean, median, and mode of these salaries.

Mean = \_____, Median = \_____, Mode = \_____

10. **PUPPIES** A litter of puppies is 8 weeks old. Find the mean, median, and mode weights of the puppies.

    Mean = \_____, Median = \_____, Mode = \_____
REVIEW: Frequency Tables

Key Concept and Vocabulary

<table>
<thead>
<tr>
<th>Number</th>
<th>Tally</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tbody>
</table>

Visual Model

A histogram shows the frequency of data values in intervals of the same size.

Skill Example

1. Data: 4, 6, 3, 6, 4, 5, 5, 6, 3, 5, 6, 3, 5, 6, 3, 5, 6

<table>
<thead>
<tr>
<th>Number</th>
<th>Tally</th>
<th>Frequency</th>
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<tbody>
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<td>3</td>
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<td>4</td>
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<tr>
<td>6</td>
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</tbody>
</table>

Application Example

2. How many 12-year-olds attended the swimming event? (about 13)

PRACTICE MAKES PURR-FECT™

Make a frequency table for the data. Then draw a histogram for the data.

3. Data (Ages): 5, 5, 7, 8, 4, 7, 5, 6, 7, 8, 4, 6, 6, 6, 5, 7, 7, 6, 4, 6, 5, 5, 7, 6

<table>
<thead>
<tr>
<th>Number</th>
<th>Tally</th>
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BIRTH WEIGHT

The histogram shows the birth weights for babies at a hospital.

4. How many babies weigh 6 pounds? __________

5. How many weigh 7 pounds? ________________

6. How many weigh less than 6 pounds? __________

7. How many weigh 6 or more pounds? __________

8. Approximate the mean birth weight. __________

Copyright © Big Ideas Learning, LLC
The data below is the average number of free throws attempted each season by the NBA teams.

23, 25, 25, 28, 27, 13, 20, 22, 21, 26, 22, 22, 22, 21, 25, 23, 22, 25, 18, 21, 26, 22, 21, 22, 24, 23, 25, 19, 22

<table>
<thead>
<tr>
<th>FREE THROW ATTEMPTS</th>
<th>TALLY</th>
<th>FREQUENCY</th>
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</thead>
<tbody>
<tr>
<td>18</td>
<td>I</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>II</td>
<td>2</td>
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<td>20</td>
<td>I</td>
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<td>21</td>
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<td>22</td>
<td>III</td>
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<td>III</td>
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<td>26</td>
<td>II</td>
<td>2</td>
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<td>27</td>
<td>I</td>
<td>1</td>
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<tr>
<td>28</td>
<td>I</td>
<td>1</td>
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</table>

The dot plot below shows the number of blue M&Ms in a sample of 15 packages. Complete a frequency table to display the information.

<table>
<thead>
<tr>
<th>BLUE M&amp;MS</th>
<th>TALLY</th>
<th>FREQUENCY</th>
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<td>13</td>
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</tbody>
</table>
What Should Always Go Up When The Rain Is Pouring Down?

Find the median, mode(s), and range of the data.

1. 4, 6, 8, 10, 12, 4, 9
2. 13, 18, 15, 12, 15, 13
3. 94, 82, 95, 72, 90, 92, 95, 100
4. 43, 12, 35, 51, 18, 26, 31
5. 14, 35, 20, 30, 31, 14, 19, 6, 4
6. 50, 39, 35, 50, 44, 39, 53, 62

Find the mode of the data.

7. | Favorite Sport | Favorite Food |
   | Soccer         | Pizza         |
   | Baseball       | Cheeseburger  |
   | Swimming       | Spaghetti     |
   | Football       | Apples        |
   | Gymnastics     | Spaghetti     |
   | Golf           | Hot dog       |
   | Basketball     | Pizza         |
   | Hockey         | Cheeseburger  |
   |                | Hot dog       |

Answers
U. 19, 14, 31
F. Soccer
T. Apples
R. 14, 13 and 15, 6
P. Spaghetti
L. Gymnastics
A. 31, none, 39
B. 8, 4, 8
W. Football
L. 47, 39 and 50, 27
M. 93, 95, 28
E. Pizza
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.

Watch the DESIGN SQUAD Backyard Thrill Ride episode on PBS or online at pbs.org/designsquad.

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PLATE TECTONICS: CLAIM-EVIDENCE-REASONING

Stimuli:

1) Plate tectonics puzzle  
2) Volcanoes map  
3) Earthquakes map  
4) Age of oceanic rock map

CLAIM:  
Earth's crust is made up of plates that have moved over time.

EVIDENCE:  (Describe the evidence that supports the idea that the plates have shifted and moved over time; this means describing evidence that allow us to know that the continents used to be in different places and evidence that supports the idea that the plates are still moving. Basically, describe all of the map data we collected.)

<table>
<thead>
<tr>
<th>Name of evidence</th>
<th>What does the evidence/map data show? (Describe what you can see.)</th>
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</table>
**REASONING:** (Explain how this evidence supports the claim that the Earth’s tectonic plates have moved over time; specifically discuss the different examples of evidence and how each of these examples shows that the Earth’s plates have moved over time and continue to move every day.)

---

Claim-Evidence-Reasoning Checklist:

<table>
<thead>
<tr>
<th>Category</th>
<th>Things That Should Be In Your CER:</th>
<th>Things to Fix:</th>
</tr>
</thead>
</table>
| Evidence | ❑ Includes three examples of map data we observed in class  
❑ Table describes in detail what the map data shows (i.e. what you can see on the map) for all three examples of data  
❑ For exceeds: mentions specific continents/land masses and/or is very detailed | ❑ Does not describe what can be observed about three different pieces of map data  
❑ Includes reasoning  
❑ Explains what data means or why it matters  
❑ Explains the logic behind why the map data shows that the Earth is made of plates |
| Reasoning | ❑ Includes reasoning  
❑ Explains the connection between the map data and Earth’s moving tectonic plates  
❑ Describes how all three pieces of map data in the evidence table support the idea of moving tectonic plates  
❑ For an exceeds: mentions extra pieces of data; mentions specific continents; considers what would be different if there were no plates | ❑ Lacks detail  
❑ Is unclear about why we know that the Earth is made of tectonic plates and these move around over time  
❑ Reasoning does not cite all three sets of data from the evidence table |
Fossil Evidence

DIRECTIONS: Cut out each of the continental land masses along the edge of the continental shelf (the outer line).
WORLD SEISMICITY
1978-1987
Explanation
- Location of earthquake epicenter
The daintree Rainforest is located in the northeast coast of Queensland and covers 460 square miles. It is the largest continuous area of tropical rainforest in Australia. The rainforest contains 3% of Australia’s marsupial, reptile, and frog population, 90% of its bat and butterfly population, and 7% of Australia's bird species. 12,000 species of insects call the Daintree Rainforest home.

The rainforest has one of the most complex ecosystems in the world because it is very old. Of the 19 ancient plant families that still exist, 12 of them can be found in the Daintree Rainforest. The rainforest is home to the rarest and oldest flowering plant, the idiot fruit.

The Daintree Rainforest, which is a World Heritage Site, is unusual because the lush forest runs directly into sandy beaches. It is the home to the southern cassowary, a large flightless black bird and the Bennett’s tree kangaroo. Both of these are endangered animals.

The rainforest averages about 90 degrees in the summer and 77 degrees in the winter. The rainforest receives about 79 inches of rain a year.

© Engaging Them All
Physical Geography and Biomes of Australia: The Location

Daintree Rainforest

Australia
Physical Geography and Biomes of Australia: The Visuals

Daintree Rainforest

When using Google Maps, make sure you move the mouse around. The picture is a 360 degree view.

Google Maps
https://goo.gl/mqTeJu

Google Maps
https://goo.gl/yQclCc

Google Maps
https://goo.gl/68QhOx

Google Maps
https://goo.gl/CMKZHS
You are going on a vacation in the Daintree Rainforest. In your suitcase, draw five things that you should bring on your trip. Under the suitcase, describe what you drew and why you drew it. Cite textual and visual evidence to support your choices.
The Coral Sea is located on the northeast coast of Australia and extend 12,200 miles down its coast. The islands of Vanuatu and New Caledonia are located to the east of the Coral Sea, the Solomon Islands are located to the north, and in the south, the Coral Sea joins the Tasman Sea. The coral Sea covers 1,850,000 square miles and is home to the Great Barrier Reef. The Coral Sea has a subtropical climate and receives 39 to 118 inches a year. Its rainiest season is between December and March. Tropical Cyclones often develop over the Coral Sea. A tropical cyclone happens when air moves in a circle over warm water. The cyclone creates heavy rains and strong winds. The Coral Sea includes many islands and reefs. Hammerhead sharks, manta rays, barracuda, turtles, grey and white tip reef sharks, tuna, and turtles live in the coral Sea. The Coral Sea is also home to the nautilus, which is a very rare type of mollusk.
Physical Geography and Biomes of Australia: The Location

Coral Sea

https://upload.wikimedia.org/wikipedia/commons/2/29/CoralSea_map.png
When using Google Maps, make sure you move the mouse around. The picture is a 360 degree view.

Google Maps
https://goo.gl/efbnTW

Google Maps
https://goo.gl/7KrqKY

Google Maps
https://goo.gl/eS4QJ5

Google Maps
https://goo.gl/7kLV06
Oliver and Charlotte love to go on vacation. They are considering going to the Coral Sea. Oliver wants to go but Charlotte doesn’t. Help Oliver and Charlotte argue their cases by citing textual and visual evidence.

I want to go to the Coral Sea because...

I don’t want to go to the Coral Sea because...
The Great Victoria Desert is the largest desert in Australia. It is located in southwestern Australia. The desert, which covers 13,784,260 acres is covered in grassland plains, salt lakes, small sandhills, and sand dunes. The Great Victoria Desert receives eight to ten inches of rain a year and thunderstorms happen frequently. The animals that live in the desert have adapted to the high temperatures and dry landscape. The desert contains snakes, lizards, and birds. Wallabies, which are small kangaroos, and dingos, predators who resemble dogs, also live in the desert. Because it is very dry, it is hard for plants to grow in the desert. Areas of the desert have dry grassland, shrubs, and eucalyptus. Days in the desert can reach 104° Fahrenheit and nights, during the winter, can drop to freezing temperatures.
Physical Geography and Biomes of Africa: The Location

Great Victoria Desert

[Map of Australia with the Great Victoria Desert highlighted in red]
Physical Geography and Biomes of Africa: The Visuals

Great Victoria Desert

When using Google Maps, make sure you move the mouse around. The picture is a 360 degree view.

Google Maps
https://goo.gl/rTE5oN

Google Maps
https://goo.gl/yhTsD3

Google Images
https://goo.gl/izl9Uw

Google Maps
https://goo.gl/IMluiX
Create two Instagram posts from the Great Victoria Desert. Come up with a username and write a two sentence description. Try to include information about climate, animals, and plants.
## ESL at Home 6-8 Weeks II-12
Use notebook paper to complete these activities. Do one each day!

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</table>
| Pick a character from a book. Write 3 different messages that character would post on social media! Can include pictures! | Find 10 random food items of your choice in your house. Line them up in alphabetical order. A-Z. **Example:** Crackers, Apple, Banana | Write a letter to students that will be in 6th grade next year. What do they need to know to be a successful middle schooler or 6th grader? Make sure you share with your teacher! | Create a poster on a piece of paper to persuade others about conservation. It can be about recycling, saving an endangered species, etc. | Write your own math problem and solve it. Then, write to explain how you solved it. **Example:** $5/8+7/11= $ First, ____. Next, ____. Last, ____.

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<th>Monday</th>
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| Rewrite part of a fiction story from a different **point of view**. Does the story change? What would we learn about different characters? Be creative! | 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, ____.

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