At Home Learning Resources

Grade 4 - Week 3

Grab and Go Meals
Available for Lowell Public Schools Students on Weekdays While School is Closed

- Bartlett (11-11:30am)  79 Wannalancit St.
- Butler (12:45-1:30pm)  1140 Gorham St.
- Greenhedge (10:30-11am)  149 Inneal St.
- Lincoln (1:30-2pm)  300 Chelestown St.
- Moody (12-12:30pm)  158 Rogers St.
- Murkland (12:45-1:15pm)  350 Adams St.
- Pawtucketville (12-12:30pm)  425 West Meadow Rd.
- Robinson (11:15-11:45am)  110 June St.
- STEM Academy (Roger)*  10:30am-1 pm  43 Highland St.

*STEM meal service will be available at back door at the kitchen leading from Joseph Gandhi St.
ELA Grades 3 & 4 At Home Learning Choices
Weeks 2 & 3

You can continue the reading, writing, and vocabulary work from Week 1 OR continue online learning using tools like iReady, Lexia, Scholastic Learn OR complete the “Choose Your Own Adventure” Learning

“Choose Your Own Adventure”

This is a two week English Language Arts and Literacy exploration. Students will choose between 4 different options to pursue. Each option still requires daily reading. The goal of the project is for students to grow and increase their learning with a project of their choice. There are different levels of independence, as well as choices for how to share their learning. (This work is adapted from educator Pernille Ripp). Enjoy!

So what are the choices?

<table>
<thead>
<tr>
<th>Choice</th>
<th>To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choice 1: The Independent Reading Adventure</strong></td>
<td>See instructions below for “The Independent Reading Adventure”</td>
</tr>
<tr>
<td>On this adventure, you will choose a fiction chapter book to</td>
<td></td>
</tr>
<tr>
<td>show how well you understand the text. Read and either write</td>
<td></td>
</tr>
<tr>
<td>or record your answers to questions that show your deeper</td>
<td></td>
</tr>
<tr>
<td>understanding of the text.</td>
<td></td>
</tr>
<tr>
<td><strong>Choice 2: The Picture Book Read Aloud Adventure</strong></td>
<td>See instructions below for “The Picture Book Read Aloud Adventure”</td>
</tr>
<tr>
<td>On this adventure, you will listen to a picture book</td>
<td></td>
</tr>
<tr>
<td>being read aloud every day by lots of wonderful people.</td>
<td></td>
</tr>
<tr>
<td>Then you will write or record a response to a specific</td>
<td></td>
</tr>
<tr>
<td>question every day.</td>
<td></td>
</tr>
<tr>
<td><strong>Choice 3: The Learn Something New Adventure</strong></td>
<td>See instructions below for “The Learn Something New Adventure”</td>
</tr>
<tr>
<td>Ever wanted a chance to learn more about a new topic? Now</td>
<td></td>
</tr>
<tr>
<td>is the chance. Come up with a learning plan, learn more</td>
<td></td>
</tr>
<tr>
<td>about your topic, and then show your learning when you</td>
<td></td>
</tr>
<tr>
<td>return to school or virtually.</td>
<td></td>
</tr>
<tr>
<td><strong>Choice 4: The Graphic Novel Adventure</strong></td>
<td>See instructions below for “The Graphic Novel Adventure”</td>
</tr>
<tr>
<td>Want a chance to explore graphic novel writing? Read a</td>
<td></td>
</tr>
<tr>
<td>graphic novel and then write your own. Write each day and</td>
<td></td>
</tr>
<tr>
<td>be ready to share some of your great work when you return</td>
<td></td>
</tr>
<tr>
<td>to school or virtually.</td>
<td></td>
</tr>
</tbody>
</table>
Choice 1: The Independent Reading Adventure

On this adventure, you will choose a fiction chapter book to show how well you understand the text. Read and either write or record your answers to questions that show your deeper understanding of the text.

Connect Four boxes vertically, horizontally, or diagonally. The four boxes you choose must be included in your recorded or written response.

Choose Your Own Adventure - The Independent Reading Adventure

---

**Book:** Grab a chapter book to do this, if you do not have one at your house you can use Audible to listen to one or Epic Books or Libby/Overdrive.

**Choice in completion:**
You can either type this out in a document: Google Doc, Word, Etc. OR record this in a video or audio-only format.

---

**Details for Written Response**
- Write a healthy response for each section that requires a written answer, meaning a long paragraph.
- Include the title, author, genre of your book on the paper.
- Choose 4 elements to complete from the grid that are connected - they can be connected vertically, diagonally, or horizontally.
- Do this by hand by printing it out or take a picture of it.

**Required Details for Recorded Response**
- Brainstorm what you want to say before you record.
- Make sure you name the book and the author in your recording.
- Make sure your response answers the questions fully.
- Choose 4 elements to complete from the grid that are connected - they can be connected vertically, diagonally, or horizontally.
<table>
<thead>
<tr>
<th>Quotes: Copy down 3 meaningful quotes from the book and explain the meaning of each quote. Describe why it is important.</th>
<th>Character changes: How does your main character change throughout the story? Answer using evidence. Add two pictures or drawings that show what your character is thinking or doing.</th>
<th>Setting: Draw or describe a background that shows the setting of one or more important scenes for the characters.</th>
<th>Song: Find song lyrics that connect. Write the lyrics, including the song, artist, and a 2-3 sentence explanation of how the song related to the book.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting: Draw or describe a background that shows the setting of one or more important scenes for the characters.</td>
<td>Timeline: Create a timeline with 10 important events in the book. Each event must be a complete sentence.</td>
<td>Quotes: Copy down 3 meaningful quotes from the book and explain the meaning of each quote. Describe why it is important.</td>
<td>Character changes: How does your main character change throughout the story? Answer using evidence. Add two pictures or drawings that show what your character is thinking or doing.</td>
</tr>
<tr>
<td>Lessons learned: Add images and/or words to show lessons your main character learns throughout the book. Write about what the lessons teach them. Does this teach you any lessons?</td>
<td>Setting: Draw or describe a background that shows the setting of one or more important scenes for the characters.</td>
<td>Character changes: How does your main character change throughout the story? Answer using evidence. Add two pictures or drawings that show what your character is thinking or doing.</td>
<td>Quotes: Copy down 3 meaningful quotes from the book and explain the meaning of each quote. Describe why it is important.</td>
</tr>
<tr>
<td>Character changes: How does your main character change throughout the story? Answer using evidence. Add two pictures or drawings that show what your character is thinking or doing.</td>
<td>Quotes: Copy down 3 meaningful quotes from the book and explain the meaning of each quote. Describe why it is important.</td>
<td>Lessons learned: Add images and/or words to show lessons your main character learns throughout the book. Write about what the lessons teach them. Does this teach you any lessons?</td>
<td>Setting: Draw or describe a background that shows the setting of one or more important scenes for the characters.</td>
</tr>
</tbody>
</table>
Choice 2: The Picture Book Read Aloud Adventure

On this adventure, you will listen to a picture book being read aloud every day by lots of wonderful people. Then you will write or record a response to a specific question every day.

Choose Your Own Adventure - Picture Book Read Alouds

Love picture books being read aloud? Me too! Here is your chance to listen to a different picture book being read aloud every day and analyze the book using the question asked each day.

Project requirement:
● Watch the video posted for each day in the table below.
● Respond either in writing or by posting a recording of your answer.

Choice in completion:
You can either type this out in a document: Google Doc, Word, etc. OR record this in a video or audio-only format.

Details for Written Response
● Write a response for each question meaning a long paragraph.
● You should use evidence from the read aloud. You can use either a quote (stop the video to write it down) or write about a specific section of the picture book.
● Include the title and author of your book on the paper.

Details for Recorded Response
● Brainstorm what you want to say before you record.
● Make sure you name the book and the author in your recording.
● Start each recording by saying the question you are answering.
● Make sure your response answers the questions fully.
<table>
<thead>
<tr>
<th>Day</th>
<th>Title of Picture Book</th>
<th>Video link</th>
<th>Questions to discuss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Your Choice</td>
<td>Visit the LPS Virtual Read Aloud Page and choose a book to listen to. <a href="https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg">https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg</a></td>
<td>What did the author want you to learn? How does the main character change throughout the story? How do you know?</td>
</tr>
<tr>
<td>Day 2</td>
<td>Each Kindness</td>
<td><a href="https://www.youtube.com/watch?v=kj7Oc0ZoOjM">https://www.youtube.com/watch?v=kj7Oc0ZoOjM</a></td>
<td>What is the lesson of Each Kindness? How do you know?</td>
</tr>
<tr>
<td>Day 3</td>
<td>Your Choice</td>
<td>Visit the LPS Virtual Read Aloud Page and choose a book to listen to. <a href="https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg">https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg</a></td>
<td>What did the author want you to learn? How does the main character change throughout the story? How do you know?</td>
</tr>
<tr>
<td>Day 4</td>
<td>The Bad Seed</td>
<td><a href="https://www.youtube.com/watch?v=uqsGoiz-ufq&amp;list=PLIYzMyw+BPG96Ed1V7MaohaCnXoQnqIbmg&amp;index=20&amp;t=0s">https://www.youtube.com/watch?v=uqsGoiz-ufq&amp;list=PLIYzMyw+BPG96Ed1V7MaohaCnXoQnqIbmg&amp;index=20&amp;t=0s</a></td>
<td>In the book, the people who surround our main character see a certain way - how do you think what others think about him changes his actions? How do you connect to this story?</td>
</tr>
<tr>
<td>Day 5</td>
<td>A Bad Case of the Stripes</td>
<td><a href="https://www.youtube.com/watch?v=cKaQXmRvpyw">https://www.youtube.com/watch?v=cKaQXmRvpyw</a></td>
<td>Why is Camilla worried? What does she learn? What can this teach you about your own life?</td>
</tr>
<tr>
<td>Day 6</td>
<td>Your Choice</td>
<td>Visit the LPS Virtual Read Aloud Page and choose a book to listen to. <a href="https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg">https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg</a></td>
<td>What did the author want you to learn? How does the main character change throughout the story? How do you know?</td>
</tr>
<tr>
<td>Day 7</td>
<td>Wolfie the Bunny</td>
<td><a href="https://www.youtube.com/watch?v=BiU0Z9P2E4s">https://www.youtube.com/watch?v=BiU0Z9P2E4s</a></td>
<td>What did Dot use as evidence for understanding Wolfie? How did her view influence how she viewed Wolfie? How does this relate to your own life?</td>
</tr>
<tr>
<td>Day 8</td>
<td>On the Day You Begin</td>
<td><a href="https://www.readbrightly.com/brightly-storytime-the-day-you-begin/">https://www.readbrightly.com/brightly-storytime-the-day-you-begin/</a></td>
<td>How does our main character change throughout the story? How do you know? How does this story connect with your own life?</td>
</tr>
<tr>
<td>Day 9</td>
<td>The True Story of The Three Little Pigs</td>
<td><a href="https://www.youtube.com/watch?v=1Q01X8JU3GU">https://www.youtube.com/watch?v=1Q01X8JU3GU</a></td>
<td>How does hearing the story from the Wolf show us what we have missed? What happens to our understanding if we only see one side of the story?</td>
</tr>
<tr>
<td>Day 10</td>
<td>Your Choice</td>
<td>Visit the LPS Virtual Read Aloud Page and choose a book to listen to. <a href="https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg">https://www.youtube.com/channel/UCMIqoXopDU-6yfq5pJIPRtg</a></td>
<td>What did the author want you to learn? What language stood out to you? How does the main character change throughout the story? How do you know?</td>
</tr>
</tbody>
</table>
Choice 3: The Learn Something New Adventure

Ever wanted a chance to learn more about a new topic? Now is the chance. Come up with a learning plan, learn more about your topic, and then show your learning when you return to school or virtually.

Choose Your Own Adventure - The Learn Something New Project

Ever wanted a chance to learn more about a new topic? Now is the chance. Come up with a learning plan, learn more about your topic, and then show your learning when you return to school or virtually.

Project Requirements:
- Choose something you want to learn more about - remember your topic should be something you don’t know much about and cannot find all of the answers in one place on Google. They will need learning from many sources or experiences to answer.
- Fill in the learning plan to show what you will be learning and how you will challenge yourself.
- Do the learning on your own or with your family.
- Create a product to showcase your learning - you have many choices of what to create.

Independence Expectations:
- This is a project that will require that you plan part of the project each day. You are not creating a day-to-day project, so you are expected to produce a larger final product to share your learning.
- The topic you choose to learn more about can be one that you already know something about or one that you know very little about.
- There should be NEW learning throughout, not just a summary of what you already know.

Details for End Product:
- Your end product can take many forms: A podcast, a story, a presentation, a speech, or something else you imagine.
- Your end product should showcase new learning for you.
- Record where you learned your information - the name of the book, website, person.
<table>
<thead>
<tr>
<th>Day</th>
<th>What is your plan for learning for this day?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
</tr>
<tr>
<td>Day 5</td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td></td>
</tr>
<tr>
<td>Day 8</td>
<td></td>
</tr>
<tr>
<td>Day 9</td>
<td></td>
</tr>
<tr>
<td>Day 10</td>
<td></td>
</tr>
</tbody>
</table>

What is your topic?

How much do you already know about this topic?
- _____ Nothing
- _____ Very little
- _____ Some, but I can learn much more

How will this project challenge you?

What types of resources do you plan on using?

How will you know you have successfully learned something?

What do you plan on creating to show off your newfound knowledge? What is your end project idea?
Choose Your Own Adventure - Graphic Novel Writing

Project Requirements:
- Read a graphic novel or comics.
- Think about your own story that you could write as a graphic novel.
- Write two or more pages each day in words and in pictures.

Independence Expectations:
- This is a project that will require that you plan part of the project each day. You are not creating a day-to-day project, so you are expected to produce a larger final product to share your learning.
- The graphic novel you choose to read should be a new one and the writing should be a new story.
- You can draw the graphic novel by hand, use a template, or make one online.

Day-by-Day Breakdown

<table>
<thead>
<tr>
<th>Day</th>
<th>What is your plan for learning for this day?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
</tr>
<tr>
<td>Day 5</td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td></td>
</tr>
<tr>
<td>Day 8</td>
<td></td>
</tr>
<tr>
<td>Day 9</td>
<td></td>
</tr>
<tr>
<td>Day 10</td>
<td></td>
</tr>
</tbody>
</table>
Write an equation to represent each problem. Show your work.

1. The Lopez family goes to the movies. They buy 2 adult tickets for $6 each and 3 child tickets for $4 each. Write an equation to represent how much money the family spends on movie tickets, \( t \).

2. Grace earns $5 each time she walks her neighbor’s dog. She walks the dog 5 times in one week. Then she spends $7 on a book and $9 on a building set. Write an equation to represent how much money Grace has left, \( m \).

3. During the basketball game, Mika makes 3 baskets worth 2 points each, 2 baskets worth 3 points each, and 2 free throws worth 1 point each. Write an equation to represent how many points Mika scores, \( p \).

4. Will has 20 pounds of apples. He makes 2 batches of applesauce that use 4 pounds each, one batch of apple butter that uses 6 pounds, and he uses 3 pounds to make juice. Write an equation to represent how many pounds of apples Will has left, \( p \).

5. What strategies did you use to write an equation?

6. Is there another way you could write one of your equations? Could you write it as two equations? Explain.
Write and solve an equation for each problem. Show your work.

1. Tasha spends 25 minutes reading on Wednesday night. She spends 17 more minutes reading on Thursday than she did on Wednesday. Write and solve an equation to find how many minutes Tasha spent reading on Wednesday and Thursday nights.

Tasha spent _______ minutes reading.

2. Erik has 2 bags of bird seed. One bag has 10 pounds of seed, and the other bag has 8 pounds of seed. He fills 7 bird feeders with 2 pounds each. Write and solve an equation to find how many pounds of bird seed are left.

There are _______ pounds left.

3. There are 15 boys and 19 girls in math club. The tables in Mrs. Miller’s classroom seat 4 students each. Write and solve an equation to find how many tables Mrs. Miller will need.

Mrs. Miller will need _______ tables.

4. Frankie earns $5 each time he babysits his little sister. He has saved $30. Frankie wants to save $52 to buy a new skateboard. Write and solve an equation to find how many more times Frankie will need to babysit.

Frankie will need to babysit _______ more times.

5. How can you estimate to check one of your answers? Show your work.
Find the product.

1. $500 \times 4 = \underline{\hspace{2cm}}$  
   $501 \times 4 = \underline{\hspace{2cm}}$  
   $506 \times 4 = \underline{\hspace{2cm}}$

2. $300 \times 2 = \underline{\hspace{2cm}}$  
   $299 \times 2 = \underline{\hspace{2cm}}$  
   $298 \times 2 = \underline{\hspace{2cm}}$

3. $400 \times 3 = \underline{\hspace{2cm}}$  
   $405 \times 3 = \underline{\hspace{2cm}}$  
   $410 \times 3 = \underline{\hspace{2cm}}$

4. $499 \times 6 = \underline{\hspace{2cm}}$  
   $706 \times 3 = \underline{\hspace{2cm}}$  
   $195 \times 5 = \underline{\hspace{2cm}}$

7. What pattern do you notice in problem 2? How could it help you solve a problem such as $297 \times 2$?

8. Choose problem 4, 5, or 6. Explain how you could check your answer.
Estimate. Circle all the problems that will have products between 18,000 and 32,000. Then find the exact products of only the problems you circled. Show your work.

1. \(8,491 \times 2 = \) 
2. \(6,148 \times 4 = \) 
3. \(7,062 \times 5 = \) 

4. \(4,362 \times 5 = \) 
5. \(1,789 \times 8 = \) 
6. \(2,206 \times 9 = \) 

7. \(7,218 \times 4 = \) 
8. \(9,821 \times 3 = \) 
9. \(4,762 \times 6 = \) 

10. \(6,739 \times 6 = \) 
11. \(7,964 \times 4 = \) 
12. \(3,618 \times 7 = \)

13. What strategies did you use to solve the problems? Explain.
### Multiplying by Two-Digit Numbers

Estimate each multiplication problem to check if the student’s answer is reasonable. If not, cross out the answer and write the correct answer.

<table>
<thead>
<tr>
<th>Multiplication Problems</th>
<th>Student Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 × 17</td>
<td>2,380</td>
</tr>
<tr>
<td></td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>Estimate: 14 × 20 = 280</td>
</tr>
<tr>
<td>15 × 19</td>
<td>285</td>
</tr>
<tr>
<td>21 × 18</td>
<td>3,078</td>
</tr>
<tr>
<td>16 × 13</td>
<td>28</td>
</tr>
</tbody>
</table>
How does estimating a multiplication problem help you know if an answer is reasonable?
Division in Word Problems

Use a strategy of your choice to solve each problem.

1. There are 5 times as many tulips as rose bushes in a garden. There are 15 tulips. How many rose bushes are in the garden?
   There are _______ rose bushes in the garden.

2. Kelly has 2 times as many quarters as dimes. She has 18 quarters. How many dimes does she have?
   Kelly has _______ dimes.

3. There are 18 blueberries in a bowl. There are 3 times as many blueberries as strawberries in the bowl. How many strawberries are in the bowl?
   There are _______ strawberries in the bowl.

4. Amanda swims for 16 minutes. This is 4 times as many minutes as Julio swims. How many minutes does Julio swim?
   Julio swims _______ minutes.

5. A tile pattern has 6 times as many white squares as gray squares. There are 48 white tiles in the pattern. How many gray tiles are there?
   There are _______ gray tiles in the pattern.

6. Leah has 3 times as many country songs as she has pop songs on her MP3 player. She has 27 country songs. How many pop songs does Leah have?
   Leah has _______ pop songs.

7. Erik sees 42 stars in the sky on Tuesday night. This is 7 times as many stars as he sees on Monday night. How many stars does Erik see on Monday night?
   Erik sees _______ stars on Monday night.

8. Lucas spends 72 minutes cleaning his room. This is 8 times as long as it takes him to wash the dishes. How long does it take Lucas to wash the dishes?
   It takes Lucas _______ minutes to wash the dishes.

9. Write and solve a word problem for this equation: $6 \times n = 54$
Dividing with Arrays and Area Models

The answers to problems 1–12 are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1. \(606 \div 2 = \underline{\phantom{000}}\)  
2. \(606 \div 3 = \underline{\phantom{000}}\)  
3. \(903 \div 3 = \underline{\phantom{000}}\)

4. \(408 \div 8 = \underline{\phantom{000}}\)  
5. \(243 \div 3 = \underline{\phantom{000}}\)  
6. \(721 \div 7 = \underline{\phantom{000}}\)

7. \(545 \div 5 = \underline{\phantom{000}}\)  
8. \(488 \div 8 = \underline{\phantom{000}}\)  
9. \(816 \div 4 = \underline{\phantom{000}}\)

10. \(728 \div 8 = \underline{\phantom{000}}\)  
11. \(459 \div 9 = \underline{\phantom{000}}\)  
12. \(366 \div 6 = \underline{\phantom{000}}\)

13. What strategies did you use to solve the problems?

14. Explain how to use multiplication to check your answer to problem 10.

Answers

<table>
<thead>
<tr>
<th></th>
<th>91</th>
<th>303</th>
<th>61</th>
<th>202</th>
<th>204</th>
<th>109</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81</td>
<td>51</td>
<td>301</td>
<td>103</td>
<td>51</td>
<td>61</td>
</tr>
</tbody>
</table>
Check the student’s answer by multiplying the quotient by the divisor and adding the remainder. If an answer is incorrect, cross out the answer and write the correct quotient, including the remainder.

<table>
<thead>
<tr>
<th>Division Problems</th>
<th>Student Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>637 ÷ 4</td>
<td>149 R 1</td>
</tr>
<tr>
<td></td>
<td>159 R 1</td>
</tr>
<tr>
<td></td>
<td>Check: 149 × 4 = 596</td>
</tr>
<tr>
<td></td>
<td>596 + 1 = 597</td>
</tr>
<tr>
<td>139 ÷ 2</td>
<td>69 R 1</td>
</tr>
<tr>
<td>188 ÷ 5</td>
<td>38 R 2</td>
</tr>
<tr>
<td>344 ÷ 6</td>
<td>57 R 3</td>
</tr>
<tr>
<td>458 ÷ 9</td>
<td>58 R 8</td>
</tr>
<tr>
<td>222 ÷ 7</td>
<td>31 R 5</td>
</tr>
<tr>
<td>692 ÷ 8</td>
<td>85 R 4</td>
</tr>
<tr>
<td>479 ÷ 3</td>
<td>169 R 2</td>
</tr>
</tbody>
</table>
1. Write a word problem that could be solved by one of the problems.

2. Can an answer be incorrect even if it looks reasonable? Explain.
Heidi had $128 in her savings. She spent $45 on a skateboard. How much money does she have left?

1. a. Draw jumps on this number line to count back 45.

   ![Number Line]

   b. Write a number sentence to show what you did.

   \[128 - ___\]

2. a. Suppose Heidi had $128 and spent $52. Show how you would count back 52.

   ![Number Line]

   Think of another way you could have figured it out.

   b. Draw jumps again to show another way.

   ![Number Line]

   c. Complete the number sentence.

   \[128 - 52 = ___\]
1. Figure out each of these in your head. Write the answer. Draw jumps to show how you did it.

a. \[ 126 - 34 = \] 

\[ \begin{array}{c}
40 \hspace{1cm} 50 \hspace{1cm} 60 \hspace{1cm} 70 \hspace{1cm} 80 \hspace{1cm} 90 \hspace{1cm} 100 \hspace{1cm} 110 \hspace{1cm} 120 \hspace{1cm} 130 \\
\end{array} \]

b. \[ 118 - 37 = \] 

\[ \begin{array}{c}
40 \hspace{1cm} 50 \hspace{1cm} 60 \hspace{1cm} 70 \hspace{1cm} 80 \hspace{1cm} 90 \hspace{1cm} 100 \hspace{1cm} 110 \hspace{1cm} 120 \hspace{1cm} 130 \\
\end{array} \]

c. \[ 127 - 53 = \] 

\[ \begin{array}{c}
40 \hspace{1cm} 50 \hspace{1cm} 60 \hspace{1cm} 70 \hspace{1cm} 80 \hspace{1cm} 90 \hspace{1cm} 100 \hspace{1cm} 110 \hspace{1cm} 120 \hspace{1cm} 130 \\
\end{array} \]

2. Write a number sentence to describe each of these.

a. \[ \boxed{\phantom{126-34}} - \boxed{\phantom{34}} = \boxed{\phantom{126-34}} \] 

\[ \begin{array}{c}
50 \hspace{1cm} 60 \hspace{1cm} 70 \hspace{1cm} 80 \hspace{1cm} 90 \hspace{1cm} 100 \hspace{1cm} 110 \hspace{1cm} 120 \hspace{1cm} 140 \\
\end{array} \]

b. \[ \boxed{\phantom{126-34}} - \boxed{\phantom{126-34}} = \boxed{\phantom{126-34}} \] 

\[ \begin{array}{c}
160 \hspace{1cm} 170 \hspace{1cm} 180 \hspace{1cm} 190 \hspace{1cm} 200 \hspace{1cm} 210 \hspace{1cm} 220 \hspace{1cm} 230 \hspace{1cm} 240 \\
\end{array} \]

3. Write the answers.

a. \[ 259 - 63 = \] b. \[ 127 - 44 = \] c. \[ 247 - 83 = \] 

d. \[ 135 - 42 = \] e. \[ 218 - 36 = \] f. \[ 156 - 62 = \]
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
<td>36</td>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>42</td>
<td>43</td>
<td>44</td>
<td>45</td>
<td>46</td>
<td>47</td>
<td>48</td>
<td>49</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>52</td>
<td>53</td>
<td>54</td>
<td>55</td>
<td>56</td>
<td>57</td>
<td>58</td>
<td>59</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>62</td>
<td>63</td>
<td>64</td>
<td>65</td>
<td>66</td>
<td>67</td>
<td>68</td>
<td>69</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>72</td>
<td>73</td>
<td>74</td>
<td>75</td>
<td>75</td>
<td>77</td>
<td>78</td>
<td>79</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>82</td>
<td>83</td>
<td>84</td>
<td>85</td>
<td>86</td>
<td>87</td>
<td>88</td>
<td>89</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>92</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>×</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>18</td>
<td>21</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>28</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>7</td>
<td>14</td>
<td>21</td>
<td>28</td>
<td>35</td>
<td>42</td>
<td>49</td>
<td>56</td>
<td>63</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>40</td>
<td>48</td>
<td>56</td>
<td>64</td>
<td>72</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>9</td>
<td>18</td>
<td>27</td>
<td>36</td>
<td>45</td>
<td>54</td>
<td>63</td>
<td>72</td>
<td>81</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>
Grade 4 Science - Paper Airplane Variables

A variable is anything you can change in an experiment that might affect the outcome. You should only test one variable at a time. Track the effect of different variables by recording your results.

What makes a paper airplane fly straight? Do loops? Fly in a circle and come back to you? A number of variables affect the flight of a paper airplane. Here's a model that lends itself to experimenting with the variables.

1. Fold a standard sheet of paper down the middle to create a midline.
2. Fold corners A and B to the midline, then point C down to the midline.
3. Fold points D and E to the midline, and then fold the little point up to hold points D and E down.
4. Fold the plane in half on the midline. Fold the wings down on the dashed line.
5. Turn the last 1 centimeter of the wing up at an angle to create stabilizers, and cut a couple of flaps on the trailing edges of the wings.

Now adjust the variables to get the plane to do a number of tricks. After you master the variables, try some new ones. What happens to the plane if you make it half scale? Make it out of thinner paper, like magazine paper or newspaper? Let your imagination be your guide into uncharted variable territory.
American Landforms

A landform region is an area of land that has similar landforms all over it. The United States is made up of the following regions:

Coastal Plain
The Coastal Plain is one of the largest landform regions in the U.S. It’s made up of low, flat land and extends from the Atlantic Ocean to the Gulf of Mexico. In the Coastal Plain, you’ll find wetlands.

Appalachians
West of the Coastal Plain lie the Appalachian mountains. The oldest mountains in North America, they are smooth and round, having been worn down over centuries of erosion. The mountains and the areas around them are covered in trees, and the highest peaks in the range are around 6,700 feet high!

Interior Plains
The Interior Plains are the biggest region, stretching across the middle of the country and covering many states. The Interior Plains are mostly flat, with forests to the east and grasslands to the west.

Rocky Mountains
The Rocky Mountains fall to the West of the Great Plains and make up an entire region. The mountain range extends all the way up and down the country, from Mexico to Canada. While the Appalachians are smooth after centuries of erosion, the Rockies are younger and are much sharper and more jagged. Some points in the Rockies are high enough to be covered by snow year round.

The West
West of the Rocky Mountains, the land is uneven and unpredictable. Deserts, beaches, forests and mountain ranges live side by side. The Great Basin, a low, flat area surrounded by higher ground, makes up much of Nevada and some of the states around it. Death Valley in California is the lowest point on the continent, more than 280 feet below sea level. Along the coast, the beaches range from sandy and sunny to cold and rocky.
American Landforms

Circle the words, phrases, and landforms that match each region.

**Coastal Plain**
- dry
- near a body of water
- mountainous
- low

**Appalachians**
- flat
- smooth mountains
- filled with trees
- deserts

**Interior Plains**
- beaches
- mountains
- forests
- grasslands

**Rocky Mountains**
- snowy
- jagged
- oldest mountains
- near the Atlantic Ocean

**West**
- flat
- varied
- swampy
- beaches
When you are traveling, it’s important to know the definitions of each type of land so you know how to travel across it.

**DIRECTIONS:**
Draw a line and match the landform picture with the correct definition.

1. Plateau
   - a. A small piece of land with water all around it
2. Hill
   - b. An area of land that is higher than the land around it, but flat
3. Mountain
   - c. A tall piece of land, usually with steep sides
4. Lake
   - d. A line of water; can be curvy
5. River
   - e. Flat, open land
6. Ocean
   - f. A small mound
7. Plain
   - g. A small body of water, with land all around it
8. Island
   - h. A very large body of water
Today’s Breakfast  My name is __________________

What did you **eat** for breakfast today?
1. I ate _cereal_.
2. I ate ____________________________.
3. I _____ ________________________.
4. I _____ ________________________.
5. I _____ ________________________.
6. I _____ ________________________.
7. I _____ ________________________.
8. I _____ ________________________.

What did you **drink** for breakfast today?
1. I drank _coffee_.
2. I drank ____________________________.
3. I _____ ____________________________.
4. I _____ ____________________________.

fish  an egg  cereal  tea  toast  an apple  juice  a sausage  water  hotcakes  rice  coffee