Learning Packet
Practicing together while we're at home

MARCH - APRIL 2020

5th Grade
## Elementary Grade 5
### Calendar of Work Activities

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Reading Response&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Reading Response&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Reading Response&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Comprehension Quiz&lt;br&gt;☑ Writing Process Project&lt;br&gt;☑ Connections: Social Studies</td>
</tr>
<tr>
<td><strong>Math</strong>&lt;br&gt;☑ Review 1-1&lt;br&gt;☑ Reteach 1-1</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 1-2&lt;br&gt;☑ Reteach 1-2</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 1-3&lt;br&gt;☑ Reteach 1-3</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 1-4&lt;br&gt;☑ Reteach 1-4</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 1-5&lt;br&gt;☑ Reteach 1-5</td>
</tr>
<tr>
<td><strong>Science</strong>&lt;br&gt;☑ Organs and organ systems of vertebrate classes&lt;br&gt;☑ Review and 4th grade life science MAP Prep review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Movement of matter review and 4th grade life science MAP Prep review.</td>
<td><strong>Science</strong>&lt;br&gt;☑ Materials obtained from plants and movement of energy review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Particles of matter review and 3rd grade physical science MAP Prep review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Conservation of weight review</td>
</tr>
</tbody>
</table>

| Parent Initial: | Parent Initial: | Parent Initial: | Parent Initial: | Parent Initial: |

<table>
<thead>
<tr>
<th>Day 6</th>
<th>Day 7</th>
<th>Day 8</th>
<th>Day 9</th>
<th>Day 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Reading Response&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Reading Response&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Reading Response&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Writing Process Project</td>
<td><strong>ELA</strong>&lt;br&gt;☑ Daily Reading&lt;br&gt;☑ Comprehension Quiz&lt;br&gt;☑ Writing Process Project&lt;br&gt;☑ Connections: Social Studies</td>
</tr>
<tr>
<td><strong>Math</strong>&lt;br&gt;☑ Review 1-6&lt;br&gt;☑ Reteach 1-6</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 2-1&lt;br&gt;☑ Reteach 2-1</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 2-2&lt;br&gt;☑ Reteach 2-2</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 2-3&lt;br&gt;☑ Reteach 2-3</td>
<td><strong>Math</strong>&lt;br&gt;☑ Review 2-4&lt;br&gt;☑ Reteach 2-4</td>
</tr>
<tr>
<td><strong>Science</strong>&lt;br&gt;☑ Separating mixtures and solutions review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Combining substances review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Gravity review and 4th grade physical science MAP Prep review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Interactions of spheres and distribution of water review</td>
<td><strong>Science</strong>&lt;br&gt;☑ Protecting Earth's resources review and 4th grade physical science MAP Prep review</td>
</tr>
</tbody>
</table>

| Parent Initial: | Parent Initial: | Parent Initial: | Parent Initial: | Parent Initial: |
## Day One

### English-Language Arts

- Daily Reading: *The Birmingham Children’s Crusade*
- Reading Response: Sequence Events
- Book Project Menu
  - Select a short story or a book that you recently read and complete one activity from the menu to work on throughout the week.
  - [https://teachingelawithjoy.com/10-favorite-short-stories-for-middle-school-found-online/](https://teachingelawithjoy.com/10-favorite-short-stories-for-middle-school-found-online/)

### Math

- Complete Review 1-1
- Complete Reteach 1-1

### Science

- Complete “Day 1” section to review organs and organ systems across vertebrate classes from quarter 3 and the 4th grade life science MAP prep review in the science packet.
Optional Additional Learning Activity

**Directions:** Supervise your child as s/he completes an activity and marks off the box. You must also initial the box each time your child finishes a task. Have fun!

<table>
<thead>
<tr>
<th>B</th>
<th>I</th>
<th>N</th>
<th>G</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write a summary of an article</td>
<td>Read a biography</td>
<td>Read 5 picture books</td>
<td>Find three mountain ranges on a map</td>
<td>Read a book by your favorite author</td>
</tr>
<tr>
<td>Read an article from online</td>
<td>Write an alternate ending to a book you read</td>
<td>Read a book or article about your dream job</td>
<td>Read outside for an hour</td>
<td>Read a book aloud to a younger child</td>
</tr>
<tr>
<td>Visit the Library</td>
<td>Read 10 blog posts</td>
<td>Draw a picture of a scene from a chapter book you read</td>
<td>Read a newspaper article</td>
<td></td>
</tr>
<tr>
<td>Read a science fiction or fantasy book</td>
<td>Read a book with a one word title</td>
<td>Read two comics from a newspaper</td>
<td>Read 15 road signs to an adult</td>
<td>Read 6 short stories</td>
</tr>
<tr>
<td>Write a poem</td>
<td>Read a book about an athlete</td>
<td>Read for 45 minutes</td>
<td>Read a book in a series</td>
<td>Read a poem</td>
</tr>
</tbody>
</table>
The Birmingham Children’s Crusade

A Reading A–Z Level Z Leveled Book
Word Count: 1,750

Connections

Writing
Why did organizers have students take the leading role in The Birmingham Children’s Crusade? Write an essay exploring how the outcome may have been different if adults had been the ones leading the protests.

Social Studies
Research Martin Luther King Jr.'s “Letter from Birmingham Jail.” Read and discuss as a class the important points Dr. King made in his letter.

Visit www.readinga-z.com for thousands of books and materials.
A Next Generation for Civil Rights

The civil rights movement marched ahead, riding the momentum of the Children’s March. In hindsight, the events in Birmingham proved to be an important turning point.

A month after the protests, President Kennedy made a television address to the nation. In it, he mentioned Birmingham in challenging the country to end segregation once and for all. He promised new federal civil rights laws to protect African Americans. Many black people were moved to tears hearing the president of the United States finally supporting their cause.

Many goals of the civil rights movement became law in the years that followed. The next year, the United States Congress passed the Civil Rights Act of 1964. It outlawed segregation and discrimination based on race, color, religion, gender, or national origin. In 1965, the Voting Rights Act struck down state policies that blocked African Americans from voting.

Racial prejudice and discrimination did not end with these new actions. However, the movement’s fight for fair and equal treatment had opened new opportunities for African Americans and begun a new chapter in the history of the United States.
On May 8, 1963, Dr. King and other leaders agreed to suspend the protests while the two sides negotiated. The talks were tense. On May 10, a cautious agreement was reached. The city agreed to desegregate public restrooms and drinking fountains within ninety days. Downtown businesses promised to desegregate lunch counters and clothing changing rooms. Arrangements were made for the release of the young protesters still in jail. Job discrimination and other issues would be discussed at future meetings.

The campaign had succeeded in desegregating one of the most segregated cities in the nation, inspired by a new generation of young activists.

On May 11, 1963, the Ku Klux Klan bombed the Gaston Motel where Dr. King and other SCLC leaders had been staying. Another bomb wrecked the home of Dr. King’s brother. No one was hurt.

On September 15, 1963, the Klan bombed the 16th Street Baptist Church during Sunday services. Four girls were killed: Denise McNair (11), Cynthia Wesley (14), Addie Mae Collins (14), and Carole Robertson (14). Their deaths stirred new support for civil rights protections.

Table of Contents
An Important Day in Birmingham .......... 4
The Movement ................................ 5
Youth Take the Lead ......................... 8
Facing “Bull” Connor ......................... 11
The Power of Pressure ....................... 13
A Next Generation for Civil Rights .......... 15
Glossary .................................... 16

The Birmingham Children’s Crusade • Level 2
A growing number of African Americans, though, were no longer willing to accept how badly they were treated. Many had served proudly in the U.S. military. They worked and paid taxes. Each school morning, black students stood and recited the Pledge of Allegiance. For generations, African Americans had seen their calls for equal rights rejected. In the 1950s, their organizing had taken on a new urgency. The civil rights movement gained support, momentum, and media attention.

Dr. Martin Luther King Jr. emerged as the best-known leader of the movement. Dr. King, a Baptist minister, served as head of the Southern Christian Leadership Conference (SCLC). He and others developed a strategy of nonviolent direct action. This strategy involved organizing large demonstrations to challenge unjust laws.

The goal was to disrupt segregated communities and overwhelm police with mass arrests. Protestors were trained to stay peaceful no matter what, even when attacked. The belief was that as more Americans saw the cruelty and injustice African Americans endured, more of them would support the cause.

Facing "Bull" Connor

Eugene "Bull" Connor had been elected Birmingham's commissioner of public safety seven times. He was an extreme segregationist with a strong mean streak. He was also in charge of the police and fire departments. Police officers and firefighters were on the front lines, instructed to block the young black protestors from marching the several blocks to downtown, where they intended to go.

By 3:00 p.m. on May 2, more than six hundred young people had been locked up. Behind bars, the marchers prayed and sang to keep up their spirits. The Children's March was having the desired effect, and the nation's attention was drawn to the drama.

The next day, Friday, May 3, black students again skipped school to try to march downtown. Connor was ready to use force to stop them. Reporters and cameramen were waiting to witness what came next.

The Birmingham Children's Crusade • Level 2
African American students began spreading the word about something called "D-Day"—short for "Demonstration Day" or "Ditch Day." DJs at the local black radio station dropped hints on the air. The event, whatever it might be, was scheduled for 11:00 a.m. on May 2, 1963. Black children and teens, from grade schoolers to college students, were advised to bring their toothbrushes. The suggestion was clear: They might not be sleeping in their own beds that night.

The day and hour came. Outside one Birmingham high school, some youth held up a sign that read "It's Time." Within minutes, hundreds of young people were headed to the exits, some climbing out classroom windows.

The young people gathered at the 16th Street Baptist Church. Then, they marched into history.

The Birmingham Children's Crusade, April 12, 1963

By 1963, though, the civil rights movement had lost some of its momentum. Fewer protesters were showing up at demonstrations. Newspapers and TV networks were less likely to send reporters and cameras to cover protests. White officials were learning to dial down violent attacks on protesters to avoid bad news coverage.

SCLC leaders believed the movement needed a high-profile success. They decided to organize a new campaign of protests. They set their sights on what many considered the most segregated city in the United States—Birmingham, Alabama.

The history of segregation and the civil rights movement often focuses on the South. In northern and western states, though, African Americans and other minority groups have faced widespread discrimination. For example, unofficial "sundown towns" set curfews for nonwhites within city limits. Not only could they not live in these places, but they also faced dangerous consequences if they were caught there after dark. Thousands of "sundown towns" existed across the country, from Darien, Connecticut, to La Crosse, Wisconsin, to Glendale, California.

This sign was used to enforce racial segregation in a sundown town in 1949.
Instructions: Number the events of the Birmingham Children’s Crusade in the correct order.

☐ The Voting Rights Act was passed.

☐ On May 2, 1963, more than a thousand black children marched in a nonviolent protest.

☐ More than six hundred black students were locked up in jail.

☐ An agreement between President Kennedy and other leaders was reached.

☐ The Civil Rights Act was passed.

☐ On the second day of the protest, more African American students protested in the streets of Birmingham.

☐ Two thousand more young people were arrested.

☐ African American students began spreading the word about “Demonstration Day.”

☐ President John F. Kennedy urged the Children’s Crusade to call a truce.

☐ Fred Shuttlesworth invited Dr. King to Birmingham.
# Book Project Menu

**Newspaper**
Create a newspaper for your book. Summarize the plot in one article. Cover the "weather" of the book in another article, and do a feature story on one of the more interesting characters in another. Also include a comic strip of a main scene in the book. Include a collection of advertisements that would relate to the story.

**Game Time!**
Make a game for your book. It can be a card game, board game, or other game of your choice. Be sure to incorporate the characters and their traits into the game. You should also use the problems from the story as part of the game's challenges.

**Lights, Camera, Action!**
Pretend that suddenly, your book became a best seller! Write a letter to a movie producer trying to get that person interested in making your book into a movie. Explain why the story, characters, conflicts, etc. would make a good film. Suggest a filming location and actors to play the various roles. *You may only use books which have not already been made into a movie!*

**Time Capsule**
Put together a time capsule for the novel. It will be opened 200 years from the future, so it must contain items and descriptions that truly highlight the major components of the novel. What artifacts would be preserved? What letters would the main characters write? Where would the capsule be buried? Be creative! You may list items and give descriptions, or you may actually create a time capsule!

**ABC Book**
Create an ABC book based on the events and the characters in your story. You will need something for each letter of the alphabet. Describe various elements of the story—traits of the characters, descriptions of the setting, main parts of the plot, etc. Be creative!

**Plain Jane**
If you do not wish to take the creative route, write out a simple book report/review. It must be typed. Include well-organized paragraphs which highlight the following: an introduction to the book, the setting (time and place), main characters and how they change throughout the story, the overall plot, the main problem and its solution, and your overall opinion of the book.
1. Eli's family starts with 2 whole pizzas. They eat $1\frac{3}{8}$ pizzas. How much pizza do they have left?
   A. $\frac{3}{8}$ pizza
   B. $\frac{5}{8}$ pizza
   C. $1\frac{3}{8}$ pizzas
   D. $3\frac{3}{8}$ pizzas

2. Barbara spent $3,825 for care of her pets last year. Sam spent $2,450 last year. How much more than Sam did Barbara spend?
   A. $1,375
   B. $1,400
   C. $2,000
   D. $6,275

3. Which fraction is less than $\frac{3}{8}$?
   A. $\frac{3}{5}$
   B. $\frac{5}{8}$
   C. $\frac{3}{10}$
   D. $\frac{4}{9}$

4. Which of the following numbers are prime?
   [ ] 21
   [ ] 23
   [ ] 25
   [ ] 27
   [ ] 29

5. Mr. Martin worked 9 hours last week. Mr. Stevens worked 5 times as many hours as Mr. Martin. Write an equation to find how many hours Mr. Stevens worked.

6. Jan is painting on a rectangular canvas. The length of the rectangle is 6 feet. The area of the canvas is 24 square feet. What is the width of the rectangle?

7. This drawing shows two streets that cross each other.

   [Diagram of Oak Street and Main Street intersecting]

   What kind of angle is formed where Main Street and Oak Street cross?
Vocabulary

The number 100 can be written as a power of 10 using 10 as the base and 2 as the exponent.

\[ 100 = 10 \times 10 = 10^2 \]

1. An exponent is a number that tells how many times to use the base number as a factor.

Which number is the exponent in \(10^5\)?

2. When a number is written with an exponent, the base is the number that is used as a factor.

In the expression \(2 \times 10^4\), which base is used as a factor 4 times?

3. When we write 1,000 as a power of 10, we can find the value of the exponent by counting the number of zeros in 1,000.

1,000 written as a power of 10 is equal to \(\ldots\).

4. 10,000 written as a power of 10 is equal to \(\ldots\).

5. One bee colony on Mr. Gordon's farm contains 60,000 bees. Complete the pattern to write 60,000 using an exponent.

\[ 6 \times 10^1 = 6 \times 10 = \]
\[ 6 \times 10^2 = 6 \times 10 \times 10 = \]
\[ 6 \times 10^3 = 6 \times \times \times = \]
\[ 6 \times 10^4 = 6 \times \times \times \times = \]

So, 60,000 written with an exponent is \(\ldots\).

On the Back!

6. Write \(10 \times 10 \times 10 \times 10 \times 10\) with an exponent.
5. **LS1.A.1** Compare and contrast the major organs/organ systems (e.g. support, reproductive, digestive, transport/circulatory, excretory, response) that perform similar functions for animals belonging to different vertebrate classes.

Below are models of the skeletal systems of a penguin and a bear.

1. **Describe one similarity between the skeletal system of the penguin and the bear.**

   ___________________________________________________________

   ___________________________________________________________

   ___________________________________________________________

2. **Describe one difference between the skeletal system of the penguin and the bear.**

   ___________________________________________________________

   ___________________________________________________________

   ___________________________________________________________
4th Grade Science Review – MAP Prep

4.151.A.1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and plant reproduction.

A student sees a video of a raccoon searching for food around a pond. The raccoon finds a small piece of fruit and holds it with both of its paws. The raccoon rolls the fruit in its paws under the water and does this several times before eating it. The student wonders how the raccoon holds onto the fruit and why the raccoon rolls the fruit in the water. After doing some research, the student learns the following facts:

- Raccoons eat both plants and animals like humans do.
- Raccoons prefer to find food at night and sleep during the day.
- Raccoons roll items around in their paws under water because the water improves their sense of touch.
- Even if there is no water around, raccoons will roll items around in their paws.
- Raccoons can hold objects with their paws, but they cannot grasp objects as well as humans do.
- Humans have opposable thumbs, which means that humans can touch the tip of the thumb to the tip of every other finger. Raccoon thumbs are not opposable.

Later the student finds more information about the sense of touch in raccoons and humans that is shown in Figures 1 and 2.

1. Compare the image of the cat paw in Figure 3 to the raccoon paw in Figure 1. What are some advantages of the raccoon paw?

Write each answer in the correct box. Not all answers will be used. Each answer may be used more than once.

<table>
<thead>
<tr>
<th>A. easier</th>
<th>B. food</th>
<th>C. harder</th>
<th>D. longer</th>
<th>E. predator</th>
<th>F. shorter</th>
</tr>
</thead>
</table>

The raccoon paw has ______________________ toes that make it ______________________ to hold objects when searching for ______________________. This trait makes it ______________________ for the raccoon to survive in its environment.

2. Explain how an external structure, other than its paws, allows a raccoon to survive.

__________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________
# Day Two

## English-Language Arts

- Daily Reading: *The Birmingham Children’s Crusade*
- Reading Response: Pronouns
- Book Project Menu

## Math

- Complete Review 1-2
- Complete Reteach 1-2

## Science

- Complete “Day 2” section to review the movement of matter from quarter 2 and the 4th grade life science MAP prep review in the science packet.
Instructions: Read the pronouns in the word box. Then, read each sentence. Replace the underlined word or words in each sentence with a pronoun from the word box. Pronouns may be used more than once. Write the new sentence on the line.

he they him

1. Many black breadwinners worked for white people, and black breadwinners feared losing their jobs.

2. Dr. Martin Luther King Jr. emerged as the best-known leader of the movement, and Dr. King developed a strategy of nonviolent action.

3. African American boys and girls were told to bring their toothbrushes to the protest.

4. Protesters marched through the streets of Birmingham. Protesters were clapping, laughing, and singing.


6. At first, Dr. King and other leaders said no. Dr. King and other leaders did not want to put children and teens in harm’s way.

7. President Kennedy saw what happened at the protest, and it sickened President Kennedy.
1. A group of 12 students goes on a school field trip. Of all the students on the trip, 6 are in third grade. Which fraction is equivalent to $\frac{6}{12}$?
   A. $\frac{1}{3}$
   B. $\frac{1}{4}$
   C. $\frac{1}{6}$
   D. $\frac{1}{2}$

2. Conor feeds his cats a total of 9 ounces of food each day. How many days will 414 ounces of food last?
   A. 21 days
   B. 27 days
   C. 46 days
   D. 49 days

3. In 2010, the population of Tennessee was 6,346,105 people. What is the value of the digit in the ten-thousands place in 6,346,105?
   A. Ten thousand
   B. Sixty thousand
   C. Forty thousand
   D. Thirty thousand

4. What fraction of these boxes are open?

5. Mr. Lou gets 385 free minutes each month on his cell phone plan. How many free minutes does Mr. Lou get in 7 months?

6. The table shows the total cost of tickets to the museum.

<table>
<thead>
<tr>
<th>Number of Tickets</th>
<th>4</th>
<th>6</th>
<th>7</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$44</td>
<td>$66</td>
<td>$77</td>
<td></td>
</tr>
</tbody>
</table>

The rule to find the total cost is to multiply the number of tickets by 11. What is the total cost for 9 tickets?
**Vocabulary**

The **number name** for this number is six hundred forty million, four hundred nine thousand, two hundred ten.

1. **Expanded form** is a way to write a number as the sum of each digit multiplied by its place value. Fill in the blanks to write the number in expanded form.

   \[ 6 \times \quad + 4 \times \quad + 4 \times \]

   \[ + 9 \times \quad + 2 \times \quad + 1 \times \]

2. Use your work in Exercise 1 to write the number in expanded form using powers of 10 with exponents.

   \[ 6 \times 10 \quad + 4 \times 10 \quad + 4 \times 10 \quad + 9 \times 10 \quad + \]

   \[ 2 \times 10 \quad + 1 \times 10 \]

3. Write the **value** of the underlined digit in 42,980,005.

4. What is the relationship between the value of the two 5s in 1,550,304?

   The first 5 is in the hundred thousands place, so the value is .

   The second 5 is in the ten thousands place, so the value is .

   How many times as great as the value of the first 5 is the value of the second 5?

**On the Back!**

5. Write 4,007,603 in expanded form using powers of 10 with exponents.
A student reads about growing plants in water with no soil. The student’s teacher tells the student that fish can be raised using the same water in which aquatic plants grow. The student researches to discover if the fish and the plants somehow help each other to grow. The student makes a sketch of a model of how a system like this might work (Figure 1).

Figure 1. Growing Plants and Raising Fish with No Soil

1. In the system shown in Figure 1, fish, worms and bacteria, and plants help keep the system healthy. What would happen if parts of these systems were missing? Match each part to the effect it would have on the system if that part were missing.

Write the correct answer in each box.

<table>
<thead>
<tr>
<th>Plants</th>
<th>Fish</th>
<th>Bacteria and Worms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Water would contain less oxygen.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Water would contain fewer nutrients.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Water would contain more waste and dead matter.</td>
<td></td>
</tr>
</tbody>
</table>
4th Grade Science Review – MAP Prep

4LS1.D.1 Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

A student sees a video of a raccoon searching for food around a pond. The raccoon finds a small piece of fruit and holds it with both of its paws. The raccoon rolls the fruit in its paws under the water and does this several times before eating it. The student wonders how the raccoon holds onto the fruit and why the raccoon rolls the fruit in the water. After doing some research, the student learns the following facts:

- Raccoons eat both plants and animals like humans do.
- Raccoons prefer to find food at night and sleep during the day.
- Raccoons roll items around in their paws under water because the water improves their sense of touch.
- Even if there is no water around, raccoons will roll items around in their paws.
- Raccoons can hold objects with their paws, but they cannot grasp objects as well as humans do.
- Humans have opposable thumbs, which means that humans can touch the tip of the thumb to the tip of every other finger. Raccoon thumbs are not opposable.

Later the student finds more information about the sense of touch in raccoons and humans that is shown in Figures 1 and 2.

1. The same raccoon later finds another piece of the same type of fruit and rolls the fruit in its paws under the water. What events will likely follow this one?

Write the answers in the table to correctly order the events.

<table>
<thead>
<tr>
<th>Step</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A. The raccoon’s brain processes sensory signals.</td>
</tr>
<tr>
<td>2</td>
<td>B. The raccoon knows the fruit is safe to eat and takes a bite.</td>
</tr>
<tr>
<td>3</td>
<td>C. Whisker-like hairs on the paws send sensory signals to the raccoon’s brain.</td>
</tr>
<tr>
<td>4</td>
<td>D. The raccoon remembers what it learned about the fruit it has already eaten.</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
2. 75% of the sensory part of the raccoon’s brain is dedicated to processing touch. Explain how this is important for the survival of a raccoon.

3. Only 8% of the sensory part of a human’s brain is dedicated to processing touch. Explain how senses other than touch are important for the survival of a human.
# Day Three

## English-Language Arts
- Daily Reading: *The Birmingham Children's Crusade*
- Reading Response: Prefixes
- Book Project Menu

## Math
- Complete Review 1-3
- Complete Reteach 1-3

## Science
- Complete "Day 3" section to review materials obtained from plants and movement of energy from quarter 3 the in the science packet.
Instructions: Use the prefix dis- to complete each sentence correctly.

1. Many people dis- with segregation. (did not agree)

2. President Kennedy dis- how he saw children being treated. (did not like)

3. Most parents dis- , fearing for their children’s safety. (did not approve)

4. Dr. King wanted to dis- many unfair practices. (not continue)

5. The children dis- the rules when they chose not to go to school. (did not obey)
1. A swimmer wins a race by \( \frac{2}{10} \) of a second. Which decimal is equal to \( \frac{2}{10} \)?
   - A 0.02
   - B 0.20
   - C 2.00
   - D 2.10

2. A baker starts with \( \frac{4}{10} \) kilogram of flour to make bread. He adds \( \frac{3}{100} \) kilogram of flour to his bread mixture. How much total flour is used to make the bread?
   - A \( \frac{7}{10} \) kilogram
   - B \( \frac{7}{100} \) kilogram
   - C \( \frac{43}{100} \) kilogram
   - D \( \frac{43}{10} \) kilogram

3. Which fraction is equivalent to \( \frac{8}{12} \)?
   - A \( \frac{4}{6} \)
   - B \( \frac{6}{8} \)
   - C \( \frac{3}{4} \)
   - D \( \frac{6}{10} \)

4. Frida saves $25 each week for 12 weeks. How much money does Frida save in all?
   - A $13
   - B $37
   - C $275
   - D $300

5. Marti's cat weighs 12.37 pounds. What is this weight written as a mixed number?

6. Eliza started the pattern shown below.

```
□□□□□□□□□□□
```

If she continues the pattern, what will she use for the 27th shape?

7. What is the value of the underlined digit?
   - 34.25

8. A ray separates a right angle into two acute angles. One of the acute angles measures 37°. What is the measure of the other acute angle?
Vocabulary

One thousandth is one out of 1,000 equal parts of a whole.

1. Write six thousandths in standard form.

2. A decimal place-value chart can help you write a decimal as a fraction. The place farthest to the right that contains a digit tells you the denominator of the fraction. The number written in the decimal place-value chart tells you the numerator of the fraction.

Write 0.025 as a fraction.

3. Write $\frac{11}{1,000}$ as a decimal.

4. Fill in the blanks to show how the values of each place-value position are related.

The middle 5 in 0.555 is $\frac{1}{10}$ the value of the 5 to its...

The middle 5 in 0.555 is 10 times the value of the 5 to its...

On the Back!

5. Write the decimal that is 10 times as great as 0.009.
Day 3

5. LS1.C.1 Support an argument that plants get the materials (i.e. carbon dioxide, water, sunlight) they need for growth chiefly from air and water.

A student is walking and sees acorns all over the sidewalk. The student collects one for further investigation. The student then does some research and learns the following facts:

- Acorns are the seeds of oak trees.
- Deer, wild turkeys, squirrels, blue jays, and acorn weevils eat acorns.
- The acorn weevil, an insect, lays eggs inside of acorns.
- Acorns that are dropped from oak trees are called “mast.”
- The Sun helps the acorn make food once it becomes a seedling.

The student learns that factors in both the living and non-living environment can affect the acorn mast or the number of acorns produced from year to year. The mast ratings for recent years are provided in Figure 1. Mast ratings range from 0 to 5. A mast rating of 0 indicates no acorns are present. A mast rating of 5 indicates a very large number of acorns are present.

The student decides to plant an acorn to perform the investigation described in Figure 2.

The student plants an acorn in a pot of soil after determining their masses. The student places the pot on a windowsill in their classroom in direct sunlight. They add 25 milliliters of water to the soil every day for two months. After two months of growth, the oak seedling is carefully removed from the pot. All soil is scraped off the roots and returned to the pot. The mass of the seedling was determined to have more mass than the acorn that was planted. After the soil is allowed to dry, the mass of the pot and soil was determined to be the same before and after the acorn was planted.
1. After examining Figure 1, the student argues that in the years 2010 and 2014, the tree had more of the materials it needed to make food. What evidence could the student use to support this idea?

2. After completing the acorn investigation shown in Figure 2, the student makes the claim that plants gain mass by taking matter from air and water. Write the answers that support the claim in the box. Not all answers will be used.

| A. Plant gained mass          | B. Plant received direct sunlight |
| C. Soil did not lose mass    | D. Plant was provided water daily |

Support the Claim
A student is walking and sees acorns all over the sidewalk. The student collects one for further investigation. The student then does some research and learns the following facts:

- Acorns are the seeds of oak trees.
- Deer, wild turkeys, squirrels, blue jays, and acorn weevils eat acorns.
- The acorn weevil, an insect, lays eggs inside of acorns.
- Acorns that are dropped from oak trees are called “mast.”
- The Sun helps the acorn make food once it becomes a seedling.

The student learns that factors in both the living and non-living environment can affect the acorn mast or the number of acorns produced from year to year. The mast ratings for recent years are provided in Figure 1. Mast ratings range from 0 to 5. A mast rating of 0 indicates no acorns are present. A mast rating of 5 indicates a very large number of acorns are present.

The student plants an acorn in a pot of soil after determining their masses. The student places the pot on a windowsill in their classroom in direct sunlight. They add 25 milliliters of water to the soil every day for two months. After two months of growth, the oak seedling is carefully removed from the pot and all soil on the plant roots is scraped off the roots and returned to the pot. The mass of the seedling is determined, and after the soil is allowed to dry, the mass of the pot and soil is determined.
1. Make a model to show how squirrels get the energy they need to live. The narrowing of the pyramid as it gets taller represents the loss of some energy each time energy is transferred. The bottom of the pyramid is the source of energy in the system. Write the correct answer in each box to complete the model. Not all answers will be used.

![Energy Pyramid Diagram]

- A. acorn
- C. oak tree
- E. soil
- B. squirrel
- D. sunlight
- F. water

2. Describe the flow of energy from the non-living environment to the acorn weevil.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3. Describe how the acorn weevil obtains and uses matter from the non-living environment for its growth.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
# Day Four

## English-Language Arts

- Daily Reading: *The Birmingham Children’s Crusade*
- Book Project Menu

## Math

- Complete Review 1-4
- Complete Review 1-4

## Science

- Complete “Day 4” section to review particles of matter from quarter 2 and the 3rd grade life science MAP prep review in the science packet.
1. Acme Nails made 55,672 nails last year. The Jones Company made more nails than Acme did. Which could be the number of nails made by the Jones Company?
   - A 55,599
   - B 55,674
   - C 55,573
   - D 55,672

2. The chart shows the distance to City X from 4 other cities.

   **Distances to City X**
   
<table>
<thead>
<tr>
<th>Cities</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>6,239 miles</td>
</tr>
<tr>
<td>Q</td>
<td>6,340 miles</td>
</tr>
<tr>
<td>R</td>
<td>6,240 miles</td>
</tr>
<tr>
<td>S</td>
<td>6,308 miles</td>
</tr>
</tbody>
</table>

   Which lists the cities in order from least to greatest distance to City X?
   - A P, R, S, Q
   - B P, Q, R, S
   - C S, R, Q, P
   - D S, P, Q, R

3. Which number is greater than 998,999 but less than 1,000,000?
   - A 998,898
   - B 989,999
   - C 998,909
   - D 999,009

4. Write two whole numbers that are less than 941,020.

5. Look at the shape below.

   [Diagram of a pentagon]

   How many lines of symmetry does this shape have?

6. A rectangle is 25 feet long. Its area is 375 square feet. What is the width of the rectangle?

7. What is the perimeter of the rectangle?
Vocabulary

1. **Equivalent decimals** name the same amount.

\[
0.6 = 0.60
\]

Shade the tenths decimal model to show an equivalent decimal. Write the equivalent decimal.

\[
0.20 =
\]

2. Write a decimal that is equivalent to 1.2.

3. Complete the place-value chart for 8.542.

4. Write 8.542 in expanded form. Use the chart to help.

\[
(\quad \times \quad) + (5 \times \quad) + (4 \times \quad) + (2 \times \quad)
\]

5. Write the number name for 8.542. What is the value of the digit 4?

On the Back!

6. Use a place-value chart to write the number name for 3.252 and tell the value of the underlined digit.
Day 4

5. PS1.A.1 Develop a model to describe that matter is made of particles too small to be seen.

A group of students are on a trip and notice white crystals on some rocks along the beach. The white crystals look just like salt. The students collect some of the crystals, along with some pebbles and sand from the beach. They decide to test whether the properties of the substances are similar to salt. The students know that salt dissolves, so they investigate by mixing the different substances into 50 milliliters of water. The students record the results of the five different tests in Table 1.

Table 1. Substances Mixed with 50 Milliliters of Water

<table>
<thead>
<tr>
<th>Test</th>
<th>Substance</th>
<th>Mass</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>salt from kitchen</td>
<td>10 grams</td>
<td>not visible</td>
</tr>
<tr>
<td>2</td>
<td>white crystals from beach</td>
<td>10 grams</td>
<td>not visible</td>
</tr>
<tr>
<td>3</td>
<td>rock salt from kitchen</td>
<td>10 grams</td>
<td>partly visible</td>
</tr>
<tr>
<td>4</td>
<td>sand from beach</td>
<td>10 grams</td>
<td>visible</td>
</tr>
<tr>
<td>5</td>
<td>pebbles from beach</td>
<td>10 grams</td>
<td>visible</td>
</tr>
</tbody>
</table>

1. After completing Test 1, the students cannot see any salt in the container. They are not sure if the salt is still there. They want to investigate the water to find out. Which investigation would show that salt is still in the water?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Why could the students no longer see the substances that they mixed with the water in Tests 1 and 2?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Reversible & Irreversible

A science class is discussing how water changes from different states (liquid, solid, gas). Student A claims that all substances go through the same states and respond the same way to heating and cooling. Student B claims that water is different and goes through reversible changes, while some other substances undergo changes that are not reversible.

1. Use evidence to construct an argument that some changes caused by heating or cooling can be reversed and some cannot.
Water Investigation

Water is a special substance for many reasons and reacts in specific ways when heated and/or cooled.

1. Describe how water is transformed from each stage in each of the pictures provided. The following terms should be used in your descriptions and may be used more than once. (decrease, increase, temperature)

Figure 1: Different forms of Water

Description:


Figure 2: Snow, Water, and Clouds

Description:
## Day Five

### English-Language Arts

- Daily Reading: *The Birmingham Children's Crusade*
- Comprehension Quiz
- Finish Book Project Menu
- Connections: Social Studies
  - Research Martin Luther King Jr.'s "Letter from Birmingham Jail. Read and discuss with your family the important points Dr. King made in his letter."

### Math

- Complete Review 1-5
- Complete Review 1-5

### Science

- Complete "Day 5" section to review conservation of weight from quarter 2 in the science packet.
1. Which of the following is an example of discrimination against African Americans mentioned in the text?
   - A. They were not allowed to attend the same churches as white people.
   - B. They could not use the same drinking fountains as white people.
   - C. They were not allowed to be employed by white people.
   - D. They could not serve in the military with white people.

2. Why did the civil rights movement lose some momentum by 1963?
   - A. Too many protesters got hurt in violent demonstrations.
   - B. Americans grew tired of seeing protests.
   - C. Many African Americans decided to accept how badly they were treated.
   - D. Protests were not having as much impact as before.

3. African American activists thought Birmingham would be a good place to organize protests in 1963 because _______.
   - A. it was considered the most segregated city in the United States at the time.
   - B. its black population was eager to take part in civil rights demonstrations.
   - C. it was the most dangerous place in the nation for African Americans to live.
   - D. its black workers were enthusiastic about organizing a strike for better pay.

Quick Check continued on following page
4. Why was the idea of children leading a protest in Birmingham controversial?

   A. Some adults believed there were better ways for young people to speak out.
   B. Some adults worried that the protest could turn violent.
   C. Some adults feared that they might lose their jobs if their children protested.
   D. Some adults thought the demonstration would reflect badly on Birmingham.

5. Why did many young people want to participate in the Children’s March?

   A. They wanted to show their parents how to be strong community leaders.
   B. They wanted to protest the discrimination their parents were experiencing.
   C. They wanted to confront the police and go to jail.
   D. They wanted to show their pride in their city.

6. Which of the following events happened before the Children’s March?

   A. President Kennedy made a televised speech about segregation.
   B. The United States Congress voted to pass the Civil Rights Act.
   C. The Ku Klux Klan bombed a church during services and killed four girls.
   D. Dr. Martin Luther King Jr. was arrested while protesting for civil rights.

7. Which of the following was a direct effect of the Children’s March?

   A. Hundreds of children were put in jail, and the nation noticed.
   B. The city of Birmingham immediately changed its segregationist laws.
   C. It forced “Bull” Connor out of his job as public safety commissioner.
   D. It led to hundreds more children’s marches across the country.
8. How was the protest on May 3 different from the protest on May 2?
   A. On May 3, many young people were arrested and put in jail.
   B. On May 3, jailed protesters sang songs to keep up their spirits.
   C. On May 3, Birmingham business owners realized that racism hurt the city.
   D. On May 3, police and firefighters violently attacked the protesters.

9. Which of the following details supports the idea that the Children’s March was a high-profile success?
   A. Protests continued despite the violent actions of police and firefighters.
   B. The protesters were called heroes in national newspapers and on TV.
   C. President Kennedy sent negotiators to help desegregate Birmingham.
   D. Thousands of adults joined the march after seeing the young people’s courage.

10. According to the text, why was the Birmingham Children’s Crusade an important event in the civil rights movement?
    A. It led to other protests that caused the government to outlaw segregation.
    B. It was the first time that children successfully demonstrated for civil rights.
    C. It proved that civil rights were worth fighting for in the American South.
    D. It taught a generation of young people to become political activists.

11. Extended Response: Explain how the events in Birmingham became a turning point in the civil rights movement.

12. Extended Response: Discuss how “Bull” Connor’s terror tactics affected the young protesters in the Children’s March and their goal.
Main Comprehension Skill: Sequence Events

1. □ Main Idea and Details
2. □ Make Inferences / Draw Conclusions
3. □ Cause and Effect
4. □ Vocabulary
5. □ Cause and Effect
6. □ Sequence Events
7. □ Cause and Effect
8. □ Compare and Contrast
9. □ Main Idea and Details
10. □ Main Idea and Details

11. Answers will vary. Example: The events in Birmingham became a turning point because people around the country saw images of the violence against the young protesters. When President Kennedy saw these images, he took steps to help negotiate a settlement between the sides. Soon the city of Birmingham agreed to end segregation of restaurants, restrooms, and water fountains. After Kennedy gave a speech about the need to end segregation once and for all, the U.S. Congress passed laws to outlaw segregation and protect African Americans’ rights.

12. Answers will vary. Example: Birmingham’s commissioner of public safety, “Bull” Connor, ordered police and firefighters to use violence against the protesters on May 3, the second day of the march. The police hit people, arrested them, and put them in overcrowded jails. Firefighters blasted marchers with water hoses. Despite these tactics, the young people kept their spirits up, which inspired the adults in Birmingham to overcome their fears and join the protest. In the end, the terror tactics became less effective. People became less and less afraid of them and continued to protest for their rights.
1. The population of a city is 765,483. What is this number rounded to the ten thousands place?
   A) 750,000
   B) 760,000
   C) 765,000
   D) 770,000

2. Lucy’s ranch has 1,718 acres and Paul’s ranch has 2,484 acres. What is the difference in size between the two ranches?
   A) 766 acres
   B) 776 acres
   C) 1,766 acres
   D) 1,776 acres

3. Stuart is 4 1/2 feet tall. How tall is he in inches?
   A) 45 inches
   B) 48 inches
   C) 50 inches
   D) 54 inches

4. Which of the following numbers are prime?
   □ 31
   □ 33
   □ 35
   □ 37
   □ 39

5. Gina estimates that her mom’s truck weighs about 6,000 pounds. How can you write 6,000 using exponents?

6. The attendance of the Strawberry Festival over two weeks was 645,300. Write the number in expanded form using exponents.

7. Tucker weighed 3.835 kilograms when he was born. Write the number in expanded form.

8. A towing company has 135 tow trucks. Each tow truck needs 6 tires. How many tires does the company need for its tow trucks?
Vocabulary

Compare 0.40 and 0.04 using <, >, or =.

Line up the decimal points. 
Start at the left and compare digits of the same place value.

Both numbers have zero ones.
0.40 has four tenths, but 0.04 has zero tenths.

So, 0.40 > 0.04.

Compare each pair of decimals using <, >, or =.

1. 0.770 0.707 0.080 0.08 0.005 0.050 0.60 0.6

2. Write the numbers 4.25, 4.312, and 4.241 in the chart, lining up the decimal points.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

Order the numbers from least to greatest. Start at the left.

Find the first place where the digits are different.
4.312 has 3 tenths, so it is the greatest number.
Both 4.25 and 4.241 have only 2 tenths.
So, look at the hundredths place.

3. Compare the digits in the hundredths place of 4.241 and 4.25.

4 is less than 5, so 4.241 is 4.25.

4. Write the numbers from least to greatest: 4.241, 

5. Order the decimals from least to greatest: 0.312, 0.032, 0.203.


On the Back!

Day 5

5. PS1.A.2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.

A group of students are on a trip and notice white crystals on some rocks along the beach. The white crystals look just like salt. The students collect some of the crystals, along with some pebbles and sand from the beach. They decide to test whether the properties of the substances are similar to salt. The students know that salt dissolves, so they investigate by mixing the different substances into 50 milliliters of water. The students record the results of the five different tests in Table 1.

<table>
<thead>
<tr>
<th>Test</th>
<th>Substance</th>
<th>Mass</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>salt from kitchen</td>
<td>10 g</td>
<td>not visible</td>
</tr>
<tr>
<td>2</td>
<td>white crystals from beach</td>
<td>10 g</td>
<td>not visible</td>
</tr>
<tr>
<td>3</td>
<td>rock salt from kitchen</td>
<td>10 g</td>
<td>partly visible</td>
</tr>
<tr>
<td>4</td>
<td>sand from beach</td>
<td>10 g</td>
<td>visible</td>
</tr>
<tr>
<td>5</td>
<td>pebbles from beach</td>
<td>10 g</td>
<td>visible</td>
</tr>
</tbody>
</table>

For Test 1, the students begin by measuring the mass of the salt and the mass of the water separately on a balance. They find that the mass of 50 milliliters of water is 50 grams. Then they mix the substances together and measure the combined mass. They make a graph to compare the masses.

1. Draw and shade each bar to the correct height.
After the students complete Test 1, they leave the container near the window. After a week, the look at the container. There is no water left, but salt crystals have formed at the bottom of the container.

1. How many grams of salt are left in the container?
# Day Six

## English-Language Arts
- Daily Reading: *Alien Collective I: Resistance*
- Reading Response: Draw Conclusions
- Book Project Menu
  - Select a second short story or a book that you recently read and complete one activity from the menu to work on throughout the week.
  - [https://teachingelawithjoy.com/10-favorite-short-stories-for-middle-school-found-online/](https://teachingelawithjoy.com/10-favorite-short-stories-for-middle-school-found-online/)

## Math
- Complete Review 1-6
- Complete Reteach 1-6

## Science
- Complete “Day 6” section to review separating mixtures and solutions from quarter 2 in the science packet.
Optional Additional Learning Activity

**Directions:** Supervise your child as s/he completes an activity and marks off the box. You must also initial the box each time your child finishes a task. Have fun!

<table>
<thead>
<tr>
<th>B</th>
<th>I</th>
<th>N</th>
<th>G</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read a non-fiction text</td>
<td>Read 3 picture books</td>
<td>Read in a tent or fort</td>
<td>Find three state capitals on a map</td>
<td>Read 15 road signs to an adult</td>
</tr>
<tr>
<td>Read an article on Newsela.com</td>
<td>Read for 60 minutes</td>
<td>Read something published in 2013</td>
<td>Read 10 short stories</td>
<td>Write a letter to a friend</td>
</tr>
<tr>
<td>Make something from a recipe</td>
<td>Read a book or article about your hobby</td>
<td>Find Europe on a map</td>
<td>Read aloud 15 road signs to an adult</td>
<td></td>
</tr>
<tr>
<td>Read about someone famous</td>
<td>Read outside for an hour</td>
<td>Read a book with a one word title</td>
<td>Read two comics from a newspaper</td>
<td>Read a book by your favorite author</td>
</tr>
<tr>
<td>Draw a picture of a scene from a chapter book you read</td>
<td>Read a non-fiction book</td>
<td>Read a Newbery Award winning book</td>
<td>Visit the Library</td>
<td>Read a book with more than 250 pages</td>
</tr>
</tbody>
</table>
**Alien Collective I: Resistance**

A Reading A-Z Level Z Leveled Book

Word Count: 2,087

---

Connections

**Writing and Art**

Do you think the aliens have come to Earth to help or to take over? Why? Write an essay explaining your answer, using specific details from the text as support.

**Science and Art**

Research other planets in our solar system. Create a poster including a diagram of the planets and the facts you learned.

---

Visit www.readinga-z.com for thousands of books and materials.
After the first explosion, the real attack began. Bullets and grenades struck the shields in dazzling blue light. The main force focused its fire on the south side of the tower. A small team of five from the backup force approached the north side. Though they all carried weapons, they didn’t fire. Instead, they snuck up to the tower. Then, one by one, with a flash of blue light, they passed through the shield and onto the grounds.

"We can get in there!" Charlotte gasped. Before Sam could reply, she sprinted across the open area. She kept close to the ground, heading toward the point where the soldiers had passed through the shield.

She reached the shield at a full run, expecting to pass through it as they had. Instead, she felt a flash of pain and a tingling sensation all over her body. Everything went dark.

Alien Collective I: Resistance • Level Z
You're making very good progress with the link. Artie smiled. The way his scaled lips turned up made his face look more scary than kind. No, we are not torturing you. The pain will end soon. Your brain is processing the Collective's experience—or at least part of it. It's an incredible amount of information.

"I understand what you're trying to do, but your threats won't get me to help you," Charlotte snapped.

There is a threat, but not in the way you're thinking. I assure you, we pose no danger to humans or Earth. In fact, the opposite is true. We're trying to save you from yourselves.

"I don't believe you. You're just trying to brainwash me into betraying my species like all the others. It won't work. I know what you really are—invaders, conquerors, colonizers."

I see you've remembered some of the Resistance's labels. Your recovery is going well. We should be able to perform the second procedure soon.

Charlotte tried to jump off the bed, but her bonds held. She struggled with all her strength, and when they didn't give, she spit at her captor.

Artie simply nodded and left the room.

* * *

Destruction. Annihilation.

Pain. Sorrow. The images flooded Charlotte's brain: a lush green planet filled with amazing creatures destroyed when an experiment set its entire atmosphere on fire.

Images of another world, one with advanced civilizations living beneath violet seas. The ocean was their home, their livelihood, and ultimately, their power source. Huge factories grown from something like coral released clouds of seemingly harmless gases. The gases became the main food source for tiny organisms few had studied. Before the time the inhabitants discovered that the food chain was turning the water toxic, it was too late.


How were the aliens doing this to her? The pain was horrible and didn't seem to end.

To her, the aliens' message was clear: submit and change—or die.

* * *
I'm sorry, Charlotte heard in her mind. It wasn't her voice, though, or one she recognized. She opened her eyes and blinked. Her head throbbed, as if her brain were trying to burst out of her skull.

She was on a bed in a stark, clean room. A glowing ball near the ceiling provided a bright but pleasant light.

I know you're in a great deal of pain, but the first procedure was a success. The voice came again, but this time she could somehow tell it was coming from her right. Turning her head was painful. You are now partially connected to the Collective Link.

The aliens provided free energy sources in the form of egg-shaped generators. Though only the size of a small car, each one could somehow power an entire city without any fuel.

In exchange, governments began building the Sterilization and Re-education Centers in cities around the world. All humans were expected to report and register at them. The governments also required people to do "Reconstruction Work"—planting trees, cleaning up landfills, and doing other tasks. The aliens said the work would "return the Earth to a balanced and healthy ecosystem."

Charlotte's dad started trying to convince people that the aliens were really preparing Earth for colonization. His materials claimed that there were sinister motives behind the aliens' actions. First, they made humanity dependent upon free energy. Then, they began using sterilization to reduce the human population to a more manageable size. Re-education was a way to make people accept the aliens' eventual rule.

According to Charlotte's dad, the aliens were "playing the long game." In time, they would be able to simply take over the planet without a fight. He said the human race needed to fight them while they still could. 

Alien Collective: Resistance • Level 2

Six

The ship took a deep breath and powered him up. The thrusters were running and the ship was ready to move. Charlotte nodded, and she turned the ship to the left.

I don't think anyone will notice us. The ship flew closely to the beach and beach, close enough to be visible from the shore. As the ship coasted to a stop, she watched the alien craft with interest.

"We need to move on, we'll need everything," he whispered. "The chance to save this planet might depend on how far we've come."
Sneaking through the north gate was easy. Charlotte and Sam simply put up the hoods on their sweatshirts and walked out. Anyone watching likely thought they were just another pair of fighters. Once outside, they stayed a little off the road as they followed the backup force. They wanted to see the attack with their own eyes, but neither of them had a weapon.

Charlotte and Sam stayed silent as they walked, careful not to draw anyone's attention. Charlotte's mind wandered to the time before the aliens invaded. She had been a normal teenager, going to school, playing volleyball with friends, eating fast food. She wished she had appreciated it more at the time. How could she have known alien ships would appear in the sky on her fifteenth birthday?

The aliens had used their blue beams to disable all nuclear weapons, power, and other capabilities around the globe. Her father said that was the first attack, a warning shot to show how easily they could destroy the world.

Soon afterward, world governments began collaborating with the invaders. They said they were forming a partnership that would make humans one of the great civilizations of the galaxy.

Standing near the bed was some kind of lizard person who watched her with its head slightly tilted. It wore a long, bright-red robe with small gold baubles.

"Lizard person" is close enough, the voice said, or even "lizard man," since I am male. Given your experience, I can understand the comparison.

"What's happening?" Charlotte croaked. Her throat was painfully dry. "How are you talking in my head?"

The Collective Link has many uses, the creature said. Species from all over the galaxy are part of the Collective. It would be impossible for all of us to communicate with sound. The original races developed the link as a way to translate meaning.

The explanation was dumped into Charlotte's mind all at once, and it took a moment to sort it out. Painfully, she realized that if she was talking with an alien, they must have captured her.

She tried to sit up, but her arms and legs were strapped to the bed somehow. She couldn't lift them more than a few inches. The pain in her head was so bad when she tried to move that she quickly gave up. The alien ignored her struggle and kept talking in her head. The tone was almost like someone talking to a small child.
**Instructions:** Use clues from the book and what you already know to make inferences about the events or characters in the book.

<table>
<thead>
<tr>
<th>Story Clues</th>
<th>+</th>
<th>What I Know</th>
<th>=</th>
<th>Inference</th>
</tr>
</thead>
</table>

Skill: Make Inferences / Draw Conclusions
# Book Project Menu

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Game Time!</th>
<th>Lights, Camera, Action!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a newspaper for your book. Summarize the plot in one article. Cover the &quot;weather&quot; of the book in another article, and do a feature story on one of the more interesting characters in another. Also include a comic strip of a main scene in the book. Include a collection of advertisements that would relate to the story.</td>
<td>Make a game for your book. It can be a card game, board game, or other game of your choice. Be sure to incorporate the characters and their traits into the game. You should also use the problems from the story as part of the game's challenges.</td>
<td>Pretend that suddenly, your book became a best seller! Write a letter to a movie producer trying to get that person interested in making your book into a movie. Explain why the story, characters, conflicts, etc. would make a good film. Suggest a filming location and actors to play the various roles. You may only use books which have not already been made into a movie!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Capsule</th>
<th>ABC Book</th>
<th>Plain Jane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put together a time capsule for the novel. It will be opened 200 years from the future, so it must contain items and descriptions that truly highlight the major components of the novel. What artifacts would be preserved? What letters would the main characters write? Where would the capsule be buried? Be creative! You may list items and give descriptions, or you may actually create a time capsule!</td>
<td>Create an ABC book based on the events and the characters in your story. You will need something for each letter of the alphabet. Describe various elements of the story-traits of the characters, descriptions of the setting, main parts of the plot, etc. Be creative!</td>
<td>If you do not wish to take the creative route, write out a simple book report/review. It must be typed. Include well-organized paragraphs which highlight the following: an introduction to the book, the setting (time and place), main characters and how they change throughout the story, the overall plot, the main problem and its solution, and your overall opinion of the book.</td>
</tr>
</tbody>
</table>
1. What is the value of the underlined digit?
   \[1.207\]
   A. 0.007  
   B. 0.7  
   C. 2.07  
   D. 2.7

2. Caroline has five and six hundred twenty thousandths yards of batting to put into a quilt. What is that number in standard form?
   A. 5,620  
   B. 5,600.20  
   C. 5.620  
   D. 0.5620

3. 27,563 is greater than _______.
   A. 27,536  
   B. 27,563  
   C. 27,567  
   D. 27,653

4. Choose all of the numbers that are greater than 13.706.
   - 13.7
   - 13.67
   - 13.76
   - 13.607
   - 13.766

5. Nico’s new skateboard is 7.75 inches wide. Write 7.75 in word form and in expanded form.

6. Name two decimals that are equivalent to 7.7.

7. Kari has a mass of thirty-eight and ninety-seven hundredths kilograms. What is her mass in standard form?

8. What is the value of the digit 9 in the number that shows Kari’s mass?
Vocabulary

1. **Rounding** replaces one number with another number that tells about how many or how much.

Round 6.13 to the nearest tenth.

6.13 is between 6.1 and 6.2. It is closer to 6.1. So, 6.13 rounded to the nearest tenth is 6.1.

Use the number line to write a number that rounds to 6.2.

2. Round the decimal 17.46 to the nearest tenth.

17.46

Draw a line under the rounding place. Circle the digit to the right.

3. If the circled digit is 5 or greater, increase the underlined digit by 1. If the circled digit is less than 5, the underlined digit stays the same.

What is the circled digit?
Is the circled digit 5 or greater or is it less than 5?
What do you do with the underlined digit?

4. Drop any digits to the right of the rounding digit.

So, 17.46 rounded to the nearest tenth is

5. Round 17.46 to the nearest whole number:

On the Back!

6. What is 8.545 kilograms rounded to the nearest hundredth? to the nearest tenth?
Day 6

5.PS1.B.1 Plan and conduct investigations to separate the components of a mixture/solution by their physical properties (i.e., sorting, filtration, magnets, screening).

The Williamson’s have a closet where they store all of their craft supplies. One day, one of the shelves collapsed and went crashing to the floor. Unfortunately, all of the containers on the shelf also broke when they hit the floor. As a result, the contents of the containers spilled all over the floor and mixed together. Their family wanted to save as much as they could, so they tried to figure out a way to separate the new mixture. The items that fell included the following list:

- Sand
- Gravel (small rock)
- Small metal stars made of iron
- Craft paper
- Scissors

1. Identify and describe the method the Williamson’s could use to separate the sand from the mixture.

2. Identify and describe a method the Williamson’s could use to separate the gravel of the mixture.

3. Identify and describe a method the Williamson’s could use to separate the small metal stars from the mixture.
4. Identify and describe a method the Williamson's could use to separate the scissors from the mixture.
## Day Seven

### English-Language Arts
- Daily Reading: *Alien Collective I: Resistance*
- Reading Response: Past-Tense Verbs
- Book Project Menu

### Math
- Complete Review 2-1
- Complete Reteach 2-1

### Science
- Complete “Day 7” section to review combining substances from quarter 2 in the science packet.
Instructions: Fill in the missing present-tense or past-tense verb. Then, choose six past-tense verbs and use them to write sentences about the story *Alien Collective I: Resistance.*

<table>
<thead>
<tr>
<th>Present-Tense Regular Verbs</th>
<th>Past-Tense Regular Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>accept</td>
<td>reflected</td>
</tr>
<tr>
<td>sort</td>
<td>added</td>
</tr>
<tr>
<td>call</td>
<td>worked</td>
</tr>
<tr>
<td>stay</td>
<td>served</td>
</tr>
<tr>
<td>blink</td>
<td>pushed</td>
</tr>
</tbody>
</table>

My Sentences:
1. Find the product.
   \[ 9 \times 10^5 \]
   A 9,000  
   B 90,000  
   C 900,000  
   D 9,000,000

2. Which number is \( \frac{1}{10} \) as great as 0.7?
   A 70  
   B 7  
   C 0.07  
   D 0.007

3. The table shows the thicknesses of four kinds of paper.

<table>
<thead>
<tr>
<th>Kind of Paper</th>
<th>Thickness (in millimeters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book</td>
<td>0.147</td>
</tr>
<tr>
<td>Cover</td>
<td>0.152</td>
</tr>
<tr>
<td>Index</td>
<td>0.216</td>
</tr>
<tr>
<td>Rag</td>
<td>0.081</td>
</tr>
</tbody>
</table>

   Which lists the kinds of paper in order from thinnest to thickest?
   A Book, Cover, Index, Rag  
   B Book, Cover, Rag, Index  
   C Rag, Cover, Index, Book  
   D Rag, Book, Cover, Index

4. Complete the boxes in the decimal grid below.
   \[ \begin{array}{c|c|c} 0.3 & 4 & 5 \\ \hline 0.3 & 4 & 8 \end{array} \]

5. Write the number in expanded form using exponents.
   2036,017

6. Write 45.803 in expanded form.

7. Order the numbers from greatest to least.
   12.012  12.001  12.102  12.01

8. Round 13.467 to the nearest hundredth.
Vocabulary

1. **Commutative Property**  You can add two numbers in any order. The sum stays the same. For example, $9.5 + 21.4 = 21.4 + 9.5$.

   **Associative Property**  You can change the grouping of the addends. $(5.50 + 7.83) + 3.50$ can be changed to $+ ( + )$

2. One way to use **compensation** is to adjust a number to make it easier to add. Then adjust the other number in the opposite way.

   $198 + 34 = ?$  
   To adjust 198 to 200, add .

   To compensate, adjust the other number, 34, by subtracting .

   So, $198 + 34 = 200 + =$

3. To add $6.53 + 1.28$, adjust 1.28 to make it easier to add.

   $6.53 + 1.28$
   \[\text{add 0.02}\]
   \[\text{adjusted number}\]

4. Adjust the other number in the opposite way.

   $6.53$
   \[\text{subtract 0.02}\]
   \[\text{adjusted number}\]

5. Add. Use your adjusted numbers.

   $6.51$  
   \[\text{adjusted number}\]
   $+$  
   \[\text{adjusted number}\]
   \[\text{sum}\]

6. $6.53 + 1.28 =$

On the Back!

7. Use compensation to add $3.55 + 1.17 + 2.1$. Explain how you adjusted the numbers.
Day 7

5. PS1.B.2 Conduct an investigation to determine whether the combining of two or more substances results in new substances.

Reactions with Vinegar

A student wants to know if they can combine different ingredients with vinegar to create a new substance. She gathers the following items: vinegar, baking soda, sugar, salt, a graduated cylinder, and three beakers. Then, she follows the following procedure:

1. Measure out 10g of baking soda, 8g of sugar, and 8g of salt and place each in a separate beaker.
2. Measure out 10ml of the vinegar in the graduated cylinder.
3. Mix the baking soda and vinegar together in a beaker and record your observations.
4. Measure out 12ml of the vinegar in the graduated cylinder.
5. Mix it with the sugar and record your observations.
6. Measure out 10ml of the vinegar in the graduated cylinder and heat it to 35°C.
7. Pour the vinegar over the salt and stir it for 2 minutes. Then, record your observations.
8. Each ingredient was mixed with vinegar at the same time.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount of Ingredient (g)</th>
<th>Amount of Vinegar (ml)</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>baking soda</td>
<td>10</td>
<td>10</td>
<td>bubbles formed in the beaker; some of the baking soda disappeared</td>
</tr>
<tr>
<td>sugar</td>
<td>8</td>
<td>12</td>
<td>the sugar sank to the bottom of the vinegar and stayed there</td>
</tr>
<tr>
<td>salt</td>
<td>8</td>
<td>10</td>
<td>the salt dissolved in the vinegar</td>
</tr>
</tbody>
</table>

Using the information from the investigation, complete the following questions.

1. Select two ways the student’s investigation could be changed to make it a fair test.

2. Part A: Do you think the student’s observations are reliable and accurate?

Part B: Explain your reasoning to Part A.
# Day Eight

## English-Language Arts

- Daily Reading: *Alien Collective I: Resistance*
- Reading Response: Suffix-ly
- Book Project Menu

## Math

- Complete Review 2-2
- Complete Reteach 2-2

## Science

- Complete “Day 8” section to review gravity from quarter 1 and the 4th grade physical science MAP prep review in the science packet.
Instructions: Add the suffix -ly to each word. Then, choose the correct word from the word bank to complete each sentence. At the bottom of the page, add the suffix -ly to each word and use it in a complete sentence.

painful_____  seeming_____  apparent_____  ultimate_____  partial_____ 

1. The ocean was their home, their livelihood, and ___________________________ their power source.

2. Huge factories grown from something like coral released clouds of ___________________________ harmless gases.

3. Her throat was ___________________________ dry.

4. You are now ___________________________ connected to the Collective Link.

5. She had ___________________________ sent the entire memory over the link.

eventual: ________________________________________________________________

simple: _______________________________________________________________
1. At a clothing store, Kayla finds two sweaters that she likes.

<table>
<thead>
<tr>
<th>Sweater Sale</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V-neck</td>
<td>$20.75</td>
</tr>
<tr>
<td>Crew neck</td>
<td>$34.95</td>
</tr>
</tbody>
</table>

She wants to know if she has enough money to buy both sweaters. Since $34.95 is about $35, she adds $20.75 and $35 mentally and gets $55.75. How should Kayla compensate to get the exact sum of the two prices?

A. Subtract 5 cents.
B. Add 5 cents.
C. Subtract 35 dollars.
D. Add 10 dollars.

2. Which number is 100 times as great as 0.005?

A. 50
B. 5
C. 0.5
D. 0.05

3. Which statement is NOT true? Select all that apply.

☐ 4.913 < 4.931
☐ 8.001 > 8.002
☐ 5.63 = 5.630
☐ 7.831 < 7.809
☐ $10^5 = 100,000$

4. Antonio draws a square that has a side length of 13 centimeters. What is the perimeter of Antonio’s square? Write an equation to show your work.

5. Write 230.071 in expanded form.

6. Which of the following numbers is the greatest?

16.007
15.999
15.99
16.01

7. What is the value of the underlined digit?

8,531,980,112.45
1. To **round** a number means to follow agreed-upon rules for finding a number near the actual number.

![Number Line](image)

The nearest tenth to 3.54 is      

The nearest whole number to 3.54 is      

2. An **estimate** is a number that is close to the exact amount.

To **estimate** means to find out about how many or how much. You can use rounding to estimate.

Estimate $3.23 + 3.89$ by rounding to the nearest whole number.

$$+ =$$

3. Estimate $6.8 + 13.2 + 2.5$. Round each decimal to the nearest whole number.

The nearest whole numbers to 6.8 are 6 and 7.

6.8 is nearer to      

The nearest whole numbers to 13.2 are 13 and      

13.2 is nearer to      

The nearest whole numbers to 2.5 are      and      

If the digit to the right of the rounding place is 5, round to the greater whole.

So, 2.5 rounds to      

4. Use your rounded numbers to estimate the sum.

$$7 + + =$$

So, $6.8 + 13.2 + 2.5$ is about      

---

**On the Back!**

5. Estimate $9.1 + 12.5 + 10.4$. Round each number to the nearest whole number. Show your work.
Day 8

Support an argument that the gravitational force exerted by Earth on objects is directed toward the planet's center.

Students on a camping trip in Maryland saw the sun setting as they played on a hilltop (Figure 1). When stars appeared overhead one student noticed that the stars were dim and tiny compared to the sun. The student picked up a pebble and held it up at arm's length toward the sky. The pebble covered up one star, then another, and another. One of the students said that in South American night skies, there are many stars that are not visible in North America. Later, the student with the pebble threw pebbles toward the stars. Each pebble thrown toward the sky followed a similar path as it returned to the Earth’s surface (Figure 2).

1. What causes the pebble to follow the path shown in Figure 2 and fall back down to the Earth, after it is shown in the air?

   a. The force of Earth’s gravity

   b. The force of the Sun’s gravity
4th Grade Science Review – MAP Prep

4.PS2.B.1 Plan and conduct a fair test to compare and contrast the forces (measured by a spring scale in Newtons) required to overcome friction when an object moves over different surfaces (i.e., rough/smooth).

A coach of a basketball wants to invest in new tennis shoes for his players. The shoes that the players are wearing now have worn off the treads and are very smooth on the bottoms. This caused the players to slide too much; therefore, the coach decided to test three different brands of tennis shoes. He decided to use a spring scale to pull the tennis shoes across the gym floor as shown in Figure 1.

Figure 1: Tennis Shoe Test

Each shoe that was tested had a different amount of treads (texture) on the bottom the shoes. See the images below to understand the differences in the bottoms of the 3 shoes he tested.

Shoe A  Shoe B  Shoe C

1. **Part A:** Identify the pair of shoes that will have the greatest reading on the spring scale.

2. **Part B:** Explain your reasoning to Part A.

The coach decided that he wanted shoes that didn’t stick too much, making it hard to move. He also didn’t want shoes that were too smooth, making his players slide too much.

2. **Part A:** Identify which pair of shoes the coach should pick

**Part B:** Explain your reasoning to Part A.
## Day Nine

### English-Language Arts
- Daily Reading: *Alien Collective I: Resistance*
- Book Project Menu

### Math
- Complete Review 2-3
- Complete Reteach 2-3

### Science
- Complete “Day 9” section to review interactions of spheres and distribution of water from quarter 1 in the science packet.
1. Estimate the difference by rounding each number to the nearest ten.

   $728.25 - 403.1$

   (A) 320
   (B) 324.9
   (C) 325
   (D) 330

2. The table shows the distance that Ethan hiked each day of a 5-day trip.

<table>
<thead>
<tr>
<th>Day</th>
<th>Miles Hiked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>8.5</td>
</tr>
<tr>
<td>Wednesday</td>
<td>10.3</td>
</tr>
<tr>
<td>Thursday</td>
<td>12.1</td>
</tr>
<tr>
<td>Friday</td>
<td>9.6</td>
</tr>
<tr>
<td>Saturday</td>
<td>11.2</td>
</tr>
</tbody>
</table>

   Estimate the total distance that Ethan hiked by rounding each number to the nearest whole number.

   (A) 51 miles
   (B) 51.7 miles
   (C) 52 miles
   (D) 53 miles

3. What is 22.88 rounded to the nearest tenth?

   (A) 20
   (B) 22.8
   (C) 22.9
   (D) 23.0

4. Ryan wants to buy two video games. One costs $35.89 and the other costs $43.65. He estimates the total cost of the two games to be about $80. Is his estimate higher or lower than the actual cost? Explain.

5. Use compatible numbers to estimate $248.26 + 159.72$.

6. Order the numbers from least to greatest.

   7.8  7.88  7.78  7.87  7.77

7. What is the number below rounded to the place of the underlined digit?

   582.091
Vocabulary

1. One part of 100 equal parts of a whole is called a **hundredth**. Determine how many squares are shaded and then write a decimal for each model shown below.

Add or subtract. Use hundredths grids to help.

2. Add $0.32 + 0.17$.

   How many squares are shaded to show 0.32?

   How many squares are shaded to show 0.17?

   How many total squares are shaded?

   So, $0.32 + 0.17 =$

3. Subtract $0.79 - 0.6$.

   How many squares are shaded to show 0.79?

   How many of the shaded squares are crossed out to show subtracting 0.6?

   How many shaded squares are not crossed out?

   So, $0.79 - 0.6 =$

On the Back!

4. Use a hundredths grid to find the sum of $0.35 + 0.57$. 
A student is hiking and notices a small spring. The student sees that the water is coming up through rocks. The student wonders where the water comes from, and whether it is fresh or salty. The student finds a diagram of the area (Figure 1) and a graph of the amount of salt in the aquifer water (Figure 2). The student realizes that much of what is pictured in the diagram can be explained by the interaction of the Earth’s four spheres: the geosphere, hydrosphere, biosphere, and atmosphere.

1. The interaction of what two spheres causes the water to come out of the spring?

2. The student wants to identify the parts of the map in Figure 1 that shows the relationship between the hydrosphere and atmosphere. What information from Figure 1 shows a relationship between only the hydrosphere and atmosphere?

3. Explain how the different spheres work together to provide water for the deer.
5. ESS2.C.1 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

Model 1

Model 2

Distribution of Earth’s Water

Looking at Models 1 and 2, select the three responses that best represent the information given.

a. The world has about 95% more saltwater than freshwater.

b. Glaciers and permanent snow contain the most saltwater.

c. The majority of the Earth’s surface water can be found in groundwater, glaciers, and ice caps.

d. Freshwater can be found in soil moisture, swamps, and marshes.

e. The majority of the world’s salt water is found in the oceans.
# Day Ten

## English-Language Arts

- Daily Reading: *Alien Collective I: Resistance*
- Comprehension Quiz
- Finish Book Project Menu
- Connections: Science and Art
  
  Research other planets in our solar system. Create a poster including a diagram of the planets and the facts you learned.

## Math

- Complete Review 2-4
- Complete Reteach 2-4

## Science

- Complete “Day 10” section to review protecting Earth’s resources from quarter 1 and the 4th grade physical science MAP prep review in the science packet.
1. When someone is assisting or cooperating with enemy forces they are __________.
   A colonizing
   B collaborating
   C congealing
   D categorizing

2. What conclusions can you draw about Charlotte’s character on the basis of her actions in the story?
   A She is too frightened to do anything about the aliens.
   B She is unsure if her dad is right about the aliens being a threat.
   C She is passionate and committed to fighting the Collective.
   D She is quiet and often looks to others for direction to fight the aliens.

3. Which event occurs last in the timeline of the story?
   A Charlotte has a conversation with her dad about fighting for the Resistance.
   B Charlotte is prepared by the aliens for the second procedure.
   C Charlotte and Sam sneak out at night.
   D Charlotte runs toward the shield and cannot get through.

4. What is the effect of Charlotte being connected to the link?
   A She can communicate with Artie without speaking out loud.
   B She can see into the future and see what the aliens plan to do.
   C She can communicate with Sam and let him know where she is being held.
   D She has gained super powers that she will use against the aliens.
5. What happens right after Charlotte attempts to run through the shield?
   A. Her dad finds her and tries to rescue her before she is captured.
   B. The first attack from the Resistance is initiated.
   C. The aliens tell the humans that they are on Earth to help.
   D. She wakes up in a strange room tied to a bed.

6. What problem on Earth do the aliens at first claim they are attempting to solve?
   A. They want to help the humans communicate with other life forms.
   B. They want to clean up the environment.
   C. They want to stop the spread of deadly diseases.
   D. They want to stop all fighting and war on Earth.

7. Why does Charlotte want to fight in the Resistance?
   A. Her dad doesn’t think she is strong enough to fight and she wants to prove him wrong.
   B. She is bored with living in the compound and wants some more excitement in her life.
   C. Sam has convinced her that it is the only way to remove the aliens from Earth.
   D. She wants to inspire other people to join in the fight against the aliens.
8. What is the effect of the aliens’ presence on Earth?
   A. Governments throughout the world have set up Sterilization and Re-education Centers.
   B. People are under the control of the aliens and must do as they say.
   C. The aliens are bombing different places on Earth and trying to take control.
   D. People have been forced to learn the language of the aliens so that they might make a peace agreement.

9. Colonization means _________.
   A. being able to communicate without talking
   B. creating a plan of attack
   C. taking control over an area for one’s own use
   D. working together to find a peaceful resolution

10. What conclusion can you draw about Charlotte’s dad?
    A. He is willing to give the aliens a chance to prove that they will help the humans.
    B. He believes the aliens must be conquered before they become too strong.
    C. He trusts that governments throughout the world will protect their people.
    D. He does not trust everyone in the Resistance and often works alone.

11. Extended Response: What do you believe is the truth behind the alien’s presence on Earth? What clues from the text support your response?

12. Extended Response: Why do you think the author starts the story with images of different planets being destroyed?
Quick Check Answer Sheet

Main Comprehension Skill: Make Inferences / Draw Conclusions

1. B  Vocabulary
2. C  Make Inferences / Draw Conclusions
3. B  Sequence Events
4. A  Cause and Effect
5. D  Sequence Events
6. B  Problem and Solution
7. D  Main Idea and Details
8. A  Cause and Effect
9. C  Vocabulary
10. B  Make Inferences / Draw Conclusions

11. Students may draw their own conclusions but should reference evidence in the text to support their responses.

12. Student responses will vary but should include the idea that the visions that Charlotte sees give a clue to the reader about what is happening in other parts of the galaxy and why the Collective was formed.
1. Vanessa scored one million points on a video game. Which of the following is one million written with an exponent?

   A. $10^3$
   B. $10^4$
   C. $10^5$
   D. $10^6$

2. Which expression is represented by the model below?

   A. $0.40 + 0.03$
   B. $0.20 + 0.23$
   C. $0.26 + 0.17$
   D. $0.30 + 0.13$

3. Estimate by rounding each decimal to the nearest whole number.

   $5.85 + 23.24$

   A. 28
   B. 29
   C. 29.1
   D. 30

4. Use the hundredths grid to subtract.

   $0.74 - 0.15 =

5. What number is $\frac{1}{10}$ as great as 7,962?

6. What number is 10 times as great as 7,962?

7. Jake wants to estimate $15.92 + 0.85$. How can he use rounding to estimate the sum? What is the estimate?
Vocabulary

1. The value of a digit is determined by its place in a number.

   0.28
   The value of the digit in the ones place is .
   The value of the digit in the tenths place is
   tenths or .
   The value of the digit in the hundredths place is
   or .

2. A hundredths grid can be used to model decimals.
   Each square has a value of one hundredth.
   Each column has a value of one tenth.
   Ten hundredths equals one tenth.

   Two columns and three squares are shaded.
   So, there are tenths and hundredths.
   The decimal in standard form is .

3. Add 0.74 + 0.52.

   Use hundredths grids to help.
   Write the missing digits in the boxes.

   \[
   \begin{array}{c}
   \text{Step 1} \\
   \text{Step 2} \\
   \text{Step 3} \\
   \text{Step 4}
   \\
   \text{Add the hundredths.} \\
   \text{Add the tenths.} \\
   \text{Write the decimal point.} \\
   \text{Add the ones.}
   \\
   0.74 \\
   +0.52
   \end{array}
   \]

   \[
   \begin{array}{c}
   \text{Add the hundredths.} \\
   \text{Add the tenths.} \\
   \text{Write the decimal point.} \\
   \text{Add the ones.}
   \\
   0.74 + 0.52 = 1.26
   \end{array}
   \]

   6 hundredths
   7 tenths + 5 tenths = 12 tenths
   12 tenths = 1 one, 2 tenths

   So, 0.74 + 0.52 = .

On the Back!

4. Find the sum of 0.94 + 0.63 + 1.2. Show all your work.
Day 10

5.ESS3.C.1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

In September 1900, a strong hurricane ripped through Galveston, a small island off the coast of Texas. The hurricane had strong wind gusts that tore rain gauges off the weather building, blew signs across roads, and flooded the town. Most of the buildings in the town were destroyed. The waves from the storm rose as high as 5 meters.

**Figure 1: 1900 Hurricane Damage**

In 1904, the town of Galveston built sea walls along the coast. One concrete sea wall was 3.3 km long, 5 m thick and 4 m high. Sand was used to fill the space behind the sea wall, increasing the height of the island. Rocks were put at the base of the seawall to help with the force of the waves crashing against it.

**Figure 2: Galveston Seawall**

The list describes some features of the Galveston seawall:

- The top of the seawall is a trail for hiking and biking.
- Fishing piers reach out from the seawall into the Gulf of Mexico.
- A beach is located in front of the sea wall.
- Artists paint murals on the part of the seawall facing the beach.
Building a seawall in Galveston has had both positive and negative effects.

1. List one example of a negative effect that the seawall has had on the environment in Galveston.

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

2. List one example of the positive effect that the seawall has had on the environment in Galveston.

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
A student was playing catch by himself and grew tired of throwing the ball into the air. He decided to throw the ball with two different forces against a wall. During trial 1, he threw the ball at the wall with 10N of force. During trial 2, he threw the ball at the wall with 15N of force.

1. Part A: Which trial will most likely result in the ball bouncing off the wall and traveling a farther distance?

Part B: Explain your reasoning in Part A.

A student has a bowling ball and a basketball shown in Figure 1. The student rolled them both down a smooth floor.

![Figure 1: Bowling Ball and Basketball](image)

2. Part A: Which object will require the most amount of force to get the ball to start rolling?

Part B: Explain your reasoning to Part A.