Unit 9

The Science of Breakable Things

by Tae Keller





Grade 5

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by Tae Keller

Novel Guide



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Dear Teachers.

Welcome to the Amplify Core Knowledge Language Arts (CKLA[™]) novel guide for *The Science of Breakable Things*. We know that you do a nearly impossible job, and we hope this guide helps make that job a little easier.

This guide contains nearly everything needed to facilitate a novel study—the only thing you will supply is the book. This novel study will help your students grow in their reading abilities and their enjoyment of authentic texts, but—crucially—it will also help them grow as individuals, because it will challenge them to consider important issues facing today's adolescents, including how to navigate adolescent friendships, how to integrate the different kinds of learning they do throughout the school day, how to develop their social and emotional well-being, and how to (and in some cases, not to) respond when a loved one struggles.

They will also, of course, develop their skills in reading, writing, speaking and listening, and language. Each set of activities offers opportunities for students to practice each skill, and activities are designed for flexible implementation and differentiation. The following pages contain more detail about how to use this guide.

Thanks for all you do to enhance and enrich the lives of students.

The **Amplify**CKLA Team

About the Book

The Science of Breakable Things is Tae Keller's first novel, published by Random House in 2018. It has earned the following recognition:

- Starred reviews on Booklist and Kirkus
- Kirkus "The Best Books of 2018" (Fiction/Middle Grade)
- Chicago Public Library "Best of the Best Books" 2018
- NPR "Best of 2018"

Why We Selected It

The Science of Breakable Things is a remarkable middle-grade novel about a seventh grader, Natalie, and her attempts to "grow a miracle": to win an egg drop contest (and its prize money) and buy her mother—a botanist struggling with depression—a rare Cobalt Blue Orchid. Simultaneously, Natalie navigates the challenges of adolescent friendships, learning that sometimes what she thinks about others is not always accurate.

Through Natalie's witty (and often sarcastic) observations, the novel portrays the up-and-down life of a young girl, her struggles with her friends and her Korean-American identity, and the lengths to which she will go to reach her mother. *The Science of Breakable Things* tackles many difficult subjects. Whether students have never encountered such issues or have struggled with them personally, they can gain rich empathy and growth from reading about Natalie and her family's experiences.

This book offers numerous opportunities for exploring science content such as botany, physics, and health; developing students' social-emotional learning competencies; and studying the techniques authors use to create great works of literature.

About the Author

Tae Keller is the debut author of *The Science of Breakable Things*, a bestselling novel starred by *Booklist* and *Kirkus* and listed on NPR's "Best of 2018" list. When Keller isn't reading and writing, she travels the country talking to students about the stigmas of mental illness and the joy of reading.

Connections to CKLA Domains

A core foundation of Amplify CKLA is developing content connections throughout all units and domains, within and across grades. As students work through *The Science of Breakable Things*, you may choose to relate the subject matter to the following domains Amplify CKLA students have encountered previously.

- Kindergarten, Domain 4, Plants
- Grade 2, Domain 6, Cycles in Nature
- Grade 4, Unit 4, Eureka! Student Inventor (amplify.com)
- Grade 5, Unit 9, Chemical Matters (amplify.com)

Things to Know

- A few themes throughout *The Science of Breakable Things* may provoke strong emotional responses in students. These are opportunities to offer students information for coping and the chance for social-emotional learning. For example, students will learn that Natalie's mother struggles with depression. Before students begin the novel, you may choose to discuss symptoms of depression, debunk any myths or misconceptions, and talk about ways people suffering from depression can be helped and supported. This will be useful both for students unacquainted with the subject and those who are already familiar with it.
- Similarly, a running theme through the novel is Natalie's father's struggle to reconcile his Korean heritage with his life in the United States. Readers learn that he is embarrassed by his mother speaking Korean, and he won't eat Korean food or go by his Korean birth name. For many students, this may be a familiar struggle.
- There are several opportunities to discuss these themes with students as the novel progresses; if needed, consult the "Additional Resources" section below for supporting materials.

Additional Resources

The following resources may be of use as you facilitate students' exploration of *The Science of Breakable Things*. We recommend that teachers preview any external resources prior to sharing them with students. Please note that these materials are not all-encompassing, and some student questions may not be answered in them.

Videos of egg drop competitions are available through many online sources such as YouTube.

As students read this book, you may wish to facilitate discussions of race and ethnicity, identity, and mental health. The following resources may aid in your preparation and help further your own understanding of the subjects.

- YoungMinds is based in the United Kingdom, but its data and helpful
 tools are universal and geared towards young people. It includes a
 definition of depression, its symptoms, and how to move forward if you
 or a loved one is struggling with it.
- EmbraceRace is an organization dedicated to teaching children about race and racial inequality. It includes resources for reading aloud to students and talking to children about racial issues.
- **Teaching Tolerance** contains a variety of tools to facilitate classroom and school activities that instill tolerance and empathy among students.

If students finish the book early, or if they enjoy it and want to read further, they may enjoy the following recommendations, which are also located in the "Student Resources" Blackline Master. We recommend that you review texts and use your discretion to choose those that will be most effective and appropriate for your classroom.

- The Miscalculations of Lightning Girl by Stacy McAnulty
- Front Desk by Kelly Yang
- Hello, Universe by Erin Entrada Kelly
- Where the Watermelons Grow by Cindy Baldwin

Implementing Novel Study

Amplify CKLA novel studies are designed for flexible implementation. They may be used for an entire class, or they may be assigned to individuals or groups of students. The following list contains some possible scenarios for implementing a novel study:

- **Dedicated classroom reading time**—Many schools have dedicated reading time set aside throughout the school day or week.
- Enrichment or extension—Students in need of an additional challenge may benefit from the novel study materials, which they may pursue independently if desired.
- Gifted and Talented Instruction—Novel studies may be used in pullout time for students.
- After-school or summer programs—Students in these programs may benefit from novel study, as it offers engaging and flexible materials designed around authentic texts.
- Flex unit—Teachers who already designate some classroom time to novel study may enjoy having more text options without having to create their own scaffolding.
- Post-Assessment unit—Novel studies offer a way to capitalize on classroom time after high-stakes assessments without making students feel burned out on learning.

In the Classroom

The Science of Breakable Things is not divided into chapters per se; rather, it is grouped by steps and assignments. Students will therefore read "assignments" rather than "chapters," and the detailed guide uses these labels for consistency's sake.

For each reading selection, this guide contains a Blackline Master of activities, divided into five categories.

 Ask contains questions for discussion, reflection, or brief written responses. These questions cover information all students should understand as they read the text.

- Explore offers students brief research opportunities centered around items mentioned in the text. These opportunities help students build background knowledge and deepen their understanding of what they have read. If you would like to assign students activities from this category, assemble resource materials for them to consult as they research.
- Imagine activities allow students to use creativity to develop themes and ideas from the text through further reflection. They may write new scenes, explore character motivation, visualize a setting from the text, or consider how they would respond to characters' ideas.
- Observe prompts students to take notes or make other kinds of observations about what they have read. Students analyze characters' conclusions, explore the use of text features, make Venn diagrams and T-charts, and use other forms to gather and interpret information.
- Understand questions push students to explore Social-Emotional
 Learning connections to the text. Sometimes they consider a
 character's emotional or behavioral response, weighing possible
 alternative actions a character could have taken. At other times,
 students reflect on their own understanding of and response to
 challenging situations or experiences. These questions, which we
 recommend a teacher facilitate, offer a springboard to help students
 develop social-emotional learning competencies.

These activities are designed for customization and flexible implementation to best fit your students' needs. They may be conducted as whole- or small-group activities, or students can pursue them individually or with a partner. Teachers may wish to have students respond to the activities in writing, orally, or in other formats (such as multimedia).

Although teachers may use discretion to have students write about or discuss any of the prompts, those marked with are particularly well-suited for writing, while those marked with are especially useful for discussion.

Students who are ready for a challenge may complete each type of activity for every set of assignments; however, this is not a requirement. We suggest that students always start with the "Ask" activities to ensure that they understand a sufficient portion of the text. Then teachers may allow students to customize their experience with the book. If a student needs to build confidence, you may wish to assign them the activity type with which they are most comfortable. Conversely, you may wish to help students

build particular skills by focusing on an activity type that targets those skills. We do suggest that students attempt each activity type at least once throughout the novel study experience.

Many of these questions are designed to be open-ended; however, questions for which specific answers exist have those answers provided in the Answer Keys located in the Teacher Resource section of this guide.

Fluency Practice

Students who need additional practice in fluency may benefit from any of the following options.

- Read-Alouds—Ask students to read the text aloud. This may be employed as a routine part of reading and works well in a whole- or small-group setting. Students may read chorally or individually.
- At-Home practice—If classroom policies allow, students may take
 the novel home to read aloud to a family member, pet, or any other
 listener.
- **Performance**—Students should pick (or you may assign) a passage from the text that they will practice reading, then read aloud to the class or other audience. We recommend a short passage of approximately 150 words. In this performance, students should read the text rather than memorizing it; reading, rather than reciting, is an important criteria of fluency practice.
- Five-Day Fluency Routine—Have students practice the Amplify CKLA Five-Day Fluency Routine with a passage from the text. We recommend a short passage of approximately 150 words for this routine. A detailed description of this routine appears near the end of this guide.

Vocabulary Acquisition

Students may use any of the following strategies to develop their vocabulary during the novel study.

- Vocabulary notebooks—Students may list unfamiliar words they
 encounter in the text, then research and record definitions for those words.
- Amplify Vocabulary App—Students may gain additional practice of Tier 2 words through the Amplify Vocabulary App.

Additional Prompts for Longer Assignments

The following suggestions pertain to longer assignments you may wish to assign in conjunction with this text.

Writing

- Narrative Writing: Ask students to compose a new scene for the book. Perhaps they might write a scene showing Natalie and Mikayla's friendship before Twig came to their school, one depicting Mr. Neely in his job before teaching, or one showing Natalie's family doing something together before her mom began struggling with depression. The idea is to have students consider a part of the book that could be elaborated with a new scene, then to craft that scene logically based on what they already know about the book's characters.
- Informative Writing: Ask students to write book review or a summary of *The Science of Breakable Things*. You may customize this to a particular audience; for example, consider having a book review column in your classroom or school newspaper.
- Opinion Writing: Ask students to write an essay explaining whether
 or not they would like to be in Mr. Neely's class. Remind them to
 use evidence from the text to develop and support their opinion.
 Alternatively, ask students to use the evidence in the text to write an
 essay that considers whether or not people are like plants.
- Writing about Literature: Many opportunities exist for applying literature standards to writing. For example, you may wish to have students compare and contrast two characters (Twig and Natalie, Mikayla's mom and Mr. Neely, Dari and Natalie's dad, Natalie and her mom, etc.). They could investigate how Natalie responds to challenges and what she learns through the process, or they could describe how Natalie's point of view affects the way the story is told.

Research

Ask students to research in depth a question they have derived from a topic in the text, using resources found in the classroom, school library, or (with proper supervision) the Internet. Students may share their research in different ways—writing reports, recommending changes they would like to see in their community based on what they have learned, poster presentations, short presentations to peers or community members, a blog post or school newspaper article, and so on. It is important to help students determine an appropriate application and venue for their research.

Potential research questions include:

- What are the best conditions for growing house plants?
- What kind of outdoor plant would make a good gift for someone in our area?
- What are the signs of depression?
- How can you support someone who is experiencing depression?
- What is the most popular board game of all time?
- What are some traditional foods of Korea, and how do you prepare them?

Performance Task

After students have read the novel, ask them to develop a poster or book trailer for it. This is similar to a movie poster or trailer, in that it is meant to interest others in reading the book. Students should think about how best to make others curious about the book without giving away the most important parts of its plot. They should think about the tone they want to convey about the book—whether it is exciting, scary, heartwarming, or something else. We recommend you base your assignment on the tools typically available to your students. If video cameras or phones are available, you may wish to let them write, rehearse, and perform their trailer for recording and sharing. If these tools are not available, you may prefer to ask them to create book posters for the halls of your school.

For additional metacognition, we recommend you ask students to reflect on their work, including explaining why they decided to present the text in the manner selected. Their decisions will likely reveal insights about the text and its significance to them.

Experiment

For a real challenge, you may wish to help students conduct school or classroom versions of a scientific challenge covered in the book. You could host your own egg drop competition, conduct experiments on growing plants in different light conditions, and so forth. These possibilities may require more substantial teacher support than others listed; we recommend advance planning and, when possible, alignment to your science curricular goals.

Reading: Assignments 1-3

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Natalie says she does not know why Mr. Neely misspells the word *skills*. Why might he use a z instead of an s?
 - » He is an optimistic, first-year teacher, so he may be trying to relate to his students.
- 2) How does Natalie feel about Mr. Neely's attitude?
 - » She thinks students will disappoint him; the assignment is a "lost cause."But she also thinks he has patience.
- 3) How has Natalie's relationship with Mikayla Menzer changed?
 - » They used to be friends, but they are not any longer.
- 4) What does it mean to "tighten your belt"?
 - » to save money, not to spend much
- 5) Find a quotation in the book that explains what Natalie thinks has happened to her mom.
 - » Answers may vary, but one common response is that Natalie thinks she "got bored with life" and with her family.

Explore

Use the resources your teacher provides to investigate the following items.

- 1) Natalie repeatedly notices that Mikayla misuses the word *literally*. Look up the definition of the word, then describe what is incorrect about how Mikayla uses it.
- 2) Natalie's lab book is organized around steps. Research the steps of the scientific method to learn what they are and why it is important to follow set steps when conducting an experiment. After researching, consider how the steps of the scientific method compare with the ones Natalie has introduced so far in her lab book.
- 3) Twig's mom named her after the model Twiggy. Research Twiggy and gather information about her and her importance.



Direct students to Footnote 4 and Assignment 3 for information about Mikayla and Natalie.



Direct students to Assignment 3, in which Natalie explains her understanding of the situation.

Remind students that the book lists the steps of the scientific method at the start of each section in the book.

Imagine

- 1) Mr. Neely uses hashtags (marked with the # symbol) to summarize or describe his messages. Write a hashtag (or a few of them) about what happens in the first assignment. If you have time remaining, write additional hashtags for Assignments 2 and 3.
- 2) Mr. Neely asks his students to identify a "capital-Q Question." Think of a similar question you would like to learn more about, then name at least three different things you could do to investigate it.

Observe

- 1) Reread the footnotes Natalie uses in her lab notebook. How is the information in these notes different from the information she presents in the main text?
 - » The information is more personal or subjective. It is less objective or directly related to the topic.
- 2) Assignments 1 and 2 both contain a simile. Review the definition of a simile, then find both similes in these assignments. Once you have identified them, describe what they reveal about the situation or narrative.
 - » Mr. Neely looks "like an overeager hula dancer," which is a pretty funny image. This shows that Natalie does not take him very seriously. The kitchen looks "like a war zone," which means that it was very messy. However, war is also a time of conflict and problems, and this shows how the kitchen has changed over time. When her mom was there, the problem was messiness. Now that she is sick, the problems are more serious.

Remind students that similes use the words like or as to

compare two different things.

Understand

- 1) Natalie describes her dad cooking, saying that she wasn't "sure whether this was funny or sad" as she watched him struggle. What are some ways you could deal with a situation that makes you feel confusing or conflicting emotions?
- 2) Natalie says she and her dad ate dinner in "the bad kind of silence." What is the difference between good and bad silence? If you were experiencing the bad silence, what might you do?
- 3) Natalie says she will not "waste time being sad" about her mom. Do you think being sad is ever a waste of time? Why or why not?

Ask students to think of ways that other people, such as friends or family members, help them, as well as ways they deal with this kind of situation on their own.



Reading: Assignments 4-6

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Today's reading comes from the "Step 2: Questions" section of the book. Natalie has not yet chosen a question for her Wonderings project, but she has a lot of questions about other parts of her life. What are some of them?
 - » She wonders if her mom is still a botanist and what her mom is like now.
- 2) Mr. Neely tells his class that they are not taking a test for a grade but a different kind of test. What does he mean by this?
 - » He wants them to "explore their knowledge" and go on "a scientific quest."
- 3) What new information does this section reveal about Natalie's mom?
 - » Answers may vary but could include that she was a botanist, she used to laugh, she wrote a book about plants, etc.
- 4) How does Natalie describe Dari?
 - » She calls him a "super-genius."

Explore

Use the resources your teacher provides to investigate the following items.

- Explore
- - 1) Mr. Neely introduces the class to the concept of homeostasis. List examples of how different creatures use homeostasis in their everyday lives. As a follow-up, think about Natalie and her mom. Based on what you know so far, how might the concept of homeostasis relate to them?
 - » Answers will vary, but students may notice that Natalie and her mom may not be experiencing real homeostasis. For example, Natalie admits that she has not been doing much of her homework. Her mom does not seem to be functioning normally. This means there are some disruptions in their environment.
 - 2) Natalie's plant parts diagram only describes the function or purpose of some parts. List the remaining parts from her diagram and write descriptions of their function. If you like, you may draw your own version of Natalie's diagram and use these descriptions to complete it.



Assign students a different page or paragraph of the reading and ask them to identify what that part of the text reveals about Natalie's mom, then compile student answers.



Refer students to Footnote 9, which contains Mr. Neely's definition of homeostasis.

Imagine

- 1) Mr. Neely asks Natalie to consider competing in the egg drop contest. If you were going to try dropping an egg from the top of your school without breaking it, how might you do it? List as many ideas as you can to describe possible ways to protect your egg during the drop.
- 2) Natalie describes how her dad sometimes acts like Normal Dad and sometimes acts like Therapist Dad. Draw an illustration or create a Venn Diagram showing both versions of her dad. What do they have in common? What is different about them?

Natalie introduces these terms in Assignment 6, but students may consult earlier assignments to gather information that fits into each category. The flashback in Assignment 4 has particularly good material about her dad before her mom got sick.

Observe

- 1) Review the plant parts diagram, paying attention to the description Natalie offers. Natalie's mom once argued that plants and people are not that different. Based on the descriptions Natalie writes, do you think Natalie agrees or disagrees with her mom's idea? Give a reason or reasons for your answer.
 - » Answers will vary, but students should recognize that the descriptions could also be used to describe people; for example, one could say that in a difficult time, a person should practice "digging deep and finding strength."
- 2) Natalie describes the gradual change that has happened with her mom and their household by using an analogy: "like when you grow out of your favorite jeans and you don't even realize how short they've gotten." Create another analogy to describe something that happens so slowly you do not notice it for some time.
- 3) Natalie describes her mom as she used to be and as something she calls "Not Mom," or how her mom is now. Use a T-chart to note what Natalie says about her mom and Not Mom.

For additional analysis, have students compare how Natalie's mom has changed with the ways her dad changes between Normal Dad and Therapist Dad.

Understand

- 1) Natalie finds it uncomfortable to think about plants during class and journals instead of completing her assignment. What are some other things that could help Natalie work through her feelings?
- 2) Natalie feels embarrassed that the whole class knows Mr. Neely wants her to stay late. Mr. Neely does need to talk to Natalie, but what are some less embarrassing ways he could tell her this?



3) Natalie says that when she started realizing what was happening with her mom, she "could hardly breathe." How could you help a friend who was feeling this way?

Reading: Assignments 7-9

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Natalie believes that her mom lost her job. What evidence does she have to support this belief?
 - » She overhears her mom say there is limited money and that someone recommended she "take a break."
- 2) Natalie describes how one of her mom's techniques was to list what you know and don't know. In Assignment 8, Natalie makes her own list. What does she say that she does not know? Are there any things you think she does not know that she left off her list?
 - » Natalie says she does not "know how to fix her" mom. Student answers may vary regarding what Natalie does not realize she does not know; however, some students may understand that she does not actually know if Mrs. Menser was the person who told her mom to take a break.
- 3) What is Natalie's "secret question"?
 - » Answers may vary, but students should understand that it concerns her mother's condition.

Explore

Use the resources your teacher provides to investigate the following items.

- 1) Natalie describes her mom's greenhouse as once being one of her favorite places. What characteristics does a greenhouse have? Why are these characteristics important in helping a greenhouse fulfill its purpose?
- 2) Natalie sometimes references genus, species, and other kinds of classification when she names plants. These are part of a classification system known as taxonomic rank. List the different groups in taxonomic rank, then pick a creature of your choice and research its full taxonomic classification.

Have students review the text and identify the facts Natalie knows versus what she thinks those facts mean.



Ask students to reread the passage and think about what Natalie believes her mom needs to remember. Have them use this information to think about the idea Natalie's planning.

- 3) At the end of Assignment 9, Natalie gets an idea. What do you think it might be?
 - » Answers will vary, as the idea is not yet fully revealed to students. However, students should understand that Natalie wants to remind her mom about the flowers in New Mexico.
- 4) Natalie says that the Cobalt Blue Orchid field is "full of miracles and hope." What makes her feel this way?
 - » The orchid lived despite the toxic environment, so it is miraculous.

Imagine



Allow students to consult familiar board games for ideas and inspiration.

- 1) Whose Pants? is a board game invented by Tae Keller, the author of *The Science of Breakable Things*. Imagine and create your own board game, complete with a board, pieces for each player, instructions, and other needed items. Be sure to think about the objective of your game, or what someone has to accomplish to win. You might also consider whether any setbacks can happen in your game; for example, can a player ever lose a turn or be sent back to the starting point?
- 2) Natalie's mom worked to research and understand the Cobalt Blue Orchid. Imagine you discovered a new type of plant. What would it look like, and what special qualities would it have?

Observe

- 1) The excerpts from Natalie's mom's book describe the miracle of the Cobalt Blue Orchid. In your own words, summarize this miracle.
 - » Answers will vary, but students should understand that the flowers that grew in the toxic soil had a blue color previously unknown in orchids.

Understand



If your students are relatively new to social-emotional learning conversations, you may wish to have them talk in the abstract by thinking about how people in general can decide what to share or what not to share. This may be easier for some students than speaking about their own experiences.

- 1) Natalie says that she and Twig do not talk about everything, even though they are best friends. When might it be okay to avoid a topic? How do you decide if you should talk to your friend about a subject or not?
- 2) Natalie says that her dad is most comfortable in research. What are some activities that make you feel most comfortable?

Reading: Assignments 10-12

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Why does Mr. Neely ask Natalie to stay after class again?
 - » She has not picked a question yet.
- 2) What does Dari think of Mr. Neely? How does this compare to what Natalie thinks of him?
 - » Dari thinks he is smart and caring. He also knows some things about him, like how he is more excited about teaching than he was about his old job. This shows that he is more empathetic or understanding than Natalie has been to Mr. Neely; he thinks about Mr. Neely's situation a bit more.
- more about how Dari thinks of his teacher.
- Encourage students to list things Dari knows about Mr. Neely, then use those to infer

- 3) Why does Dari wear the potato costume?
 - » It reminds his family of a happy time.
- 4) What happened when Natalie was sick?
 - » Her mom stayed with her for a very long time, she slept a lot, and eventually she got better.
- 5) What does Natalie's mom say when Natalie mentions their orchid?
 - » She does not know what Natalie means: Natalie decides her mom does not know it has died.

Explore

Use the resources your teacher provides to investigate the following items.

- 1) What does a hāpu'u pulu fern look like? How might you make a costume that looks like this plant?
- 2) What is Paris Fashion Week? What kinds of things happen during this event? Why might Twig and Natalie have different feelings about it?

Imagine

1) Imagine that Natalie asked you to help make her plant Halloween costume this year. What plant would you pick for her, and how would you make the costume?

Allow students to use outside resources to research plant species, then draw their costume version of the selected plant.



2) Using evidence from Natalie's descriptions of Dari's potato costume, draw what you think it looks like.

Observe

- 1) List the different hypotheses Natalie offers during this section of the reading.
 - » She hypothesizes that Mr. Neely's costume is in "microphase" and that adults prefer not to understand how kids really feel.
- 2) Natalie describes how Mr. Neely smiles by using a simile: "like I'd just thrown a parade in his honor." Create three more similes that could describe how someone smiles.

Understand

- 1) Natalie often describes what she wants to say to other people—Twig, her parents, Mr. Neely—but decides not to say. How do you decide if you should share or not share what you are thinking?
- 2) Natalie's dad wants to schedule an appointment for her to talk to a therapist. If someone you cared about was having a hard time, would you ask them to talk to a counselor or therapist? Why or why not?



Provide a bank of objects or events that might evoke an emotional reaction and have students write similes using these.



You may wish to use this conversation as an opportunity to share information about school counseling resources.

Reading: Assignments 13-15

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) What is Twig's mom like?
 - » Answers will vary, but students should understand that she is very different from Natalie's parents. She expects Natalie to call her by her first name, she walks as if she were floating, and she is very sophisticated.
- Encourage students to focus on the following words Natalie uses when Twig's mom first appears: floated, posh, peasants.



- » Operation Egg is the new name; it makes the project seem more official and significant.
- 3) What words does Natalie use to describe Twig's house? What do these words reveal about how she feels about it?
 - » She calls it "a mansion" and "giant." Because her family is worried about money, she might be more aware of Twig's big house.

Ask students how Natalie's family money situation might affect her feelings about Twig's house.



Explore

Use the resources your teacher provides to investigate the following items.

- 1) Natalie researches egg drop techniques to help her decide how to win the competition. Do the same thing to learn about different approaches to egg drops, then based on what you have learned, decide which technique you would use if you were in this kind of competition. (It's okay if after researching you decide to use an original idea, but you should explain why your research helped you make this choice.)
- 2) Mr. Neely suggests that the team consider velocity as one of their questions. What is velocity, and why might it be something important to consider in the egg drop?



Encourage students to write their scenes and, if desired, collaborate to produce them. You may wish to provide several initial scenarios, such as "Planning a surprise," "When there is bad news," or other ideas as a starting point.

Imagine

- 1) Natalie says that "adults are good at pretending." Create a scene in which an adult would pretend about something. What would the scene involve? Who would be part of it? Why would the adult want to pretend? Would it work?
- 2) Natalie says, "everyone expects me to have a plan." Imagine that you are Natalie and decide to plan for the egg drop competition. What steps would you take?

Allow students to consult any part of the book they have read so far. Split students into groups and have each group collect information on one character, then have groups combine their notes.

Observe

- 1) By this point in the book, you have learned a great deal about Twig and Natalie—their personalities and preferences, their families, and their taste. Use what you have learned to create a Venn Diagram comparing and contrasting these two characters.
- 2) Twig's diagrams of egg drop ideas have lots of creativity. Review her drawings and evaluate each suggestion, listing why it might or might not work. Decide which of her ideas you believe is best and explain your choice.

Understand

- 1) After encountering her mom, Natalie describes all the things she does not do. When is it better not to do something than to do it?
- 2) Natalie chooses not to share her mom's suggestion for the egg drop technique. How do you decide when to keep things to yourself and when to share them?

Reading: Assignments 16-18

Ask

Use evidence or quotations from the text to answer the following questions.

- Natalie says that when her mom greets her in the kitchen, it sounds like "a recording of her." What does this suggest about how she is speaking?
 - » It may mean that she sounds a little different or distant, maybe a bit forced or stiff.
- 2) Natalie's mom is acting differently about her mother-in-law's Thanksgiving visit this year. What is different about her behavior?
 - » She is not worried and has not been preparing for a long time like she usually would.
- 3) Why might Natalie be happy to be back at school?
 - » Answers may vary, but students should understand that she is likely glad to have a distraction from her mom's sleeping.
- 4) Natalie describes how there is "strength in the cold." How might her thoughts about the cold relate to her mother?
 - » Answers may vary, but students should understand that she is hopeful that her mother will also someday emerge from her room and "be all right again."
- 5) Natalie has a lot of complicated feelings about her mom in Assignment 18. What are they, and why does she feel them?
 - » She feels mad and angry about her mom not paying attention to her. She is probably disappointed about not being able to connect with her mom.

If technology permits, allow students to record themselves talking, then listen to it. Does the recorded voice sound the way their voice usually sounds?

Have students reread the Assignment 18 title and think about why Natalie has crossed part of it out.



Explore

Use the resources your teacher provides to investigate the following items.

- 1) Natalie mentions some of her favorite Korean foods, including bibimbap, kalbi, and mandoo. What is each of these dishes like? What ingredients do they contain, and how are they prepared? Do they have any similarities to foods you have eaten?
- 2) Natalie says that Dari explains the magnet experiment, but she does not share his explanation. Research magnets and temperature to learn why the cold magnet worked best.



Prompt students to think about food they eat at special events such as holidays or other celebrations.

Imagine

- This section explains how important food has been to Natalie's family, from her mother's cran-apple pie to her grandmother's Korean foods. Describe a food that is special to your family, including when you eat it, who prepares it, what it symbolizes or reminds you of, and any other important details.
- 2) Natalie says that "once you know a word, you can own it—it's yours, and it's a part of you." What is a word you own? How did you come to really know it, and why is it significant or important to you?

Observe

- 1) What is Twig's relationship with her parents like?
 - » Answers will vary, but students should recall that she claims to like her father more than her mother. However, her mother is more present and dependable, always doing things to support Twig.
- 2) What makes Dari seem older than the other kids in his grade?
 - » He seems comfortable with himself and does not seem bothered by what other people think of him.
- 3) What do the superpowers Natalie and Twig most want reveal about their characters?
 - » Answers may vary, but students should be able to connect the characters' superpowers to what they have read about their personalities.

Understand

- Natalie decides that if her mom can pretend that she's feeling okay, Natalie will, too. Do you think there are ever times when it is okay to pretend you feel something you don't? Why or why not?
- 2) Natalie says that her dad "could go on forever pretending that the Korean half of him didn't exist." Why might he find it challenging to be half-Korean living in the United States?
- 3) Natalie asks if it is "possible to be mad at someone for being sad." How would you respond?



You may wish to connect this to earlier questions about what causes adults to pretend.

Reading: Assignments 19-21

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Natalie says that in some ways she and Twig are "from totally different galaxies." What makes her say this?
 - » Twig is not worried about the prize money for the egg drop contest the way Natalie is.
- 2) What is the "natural magic" that the students practice in Mr. Neely's lab?
 - » They use magnets to turn a needle into a compass.
- 3) Natalie says she and her dad "were compass needles, pointing straight at Mom." What might she mean by this comparison?
 - » Answers will vary, but students should understand that Natalie and her dad have been focused on her mom; her mom's illness has affected their whole family.
- 4) What is Dr. Doris like? Based on what you have observed, do you think she will be a good counselor for Natalie? Make sure to include evidence to support your choice.
 - » Answers will vary but should be based on textual evidence.

Walk students through the purpose of a compass, helping them realize that its needle points north and helps people find their way.

Direct students to Assignment 21, in which Natalie and Dr. Doris meet for the first time.



Use the resources your teacher provides to investigate the following items.

1) Research how to make a compass needle and describe the process.

Use what you have learned to write descriptions for each illustration

Natalie made in her lab notebook entry in Assignment 20.





Have students work in small groups to brainstorm ideas for each incident before they start writing.

Imagine

- 1) Natalie references "the Eyewash Incident" and "the Stolen Turtle Incident," but she does not explain what happened in each of these things. Pick one of these incidents and create a new scene that describes what might have happened in it. Make sure that you draw on what you know about Twig's character to shape your scene.
- 2) Natalie describes Dr. Doris's office in great detail. If you were a therapist, how would you design your office to make clients feel comfortable? Describe or draw your ideal office, explaining what it would include and why.

Observe

- 1) Over the last few assignments, Natalie has had some moments where she has acted like her mom. List some of their common behaviors.
 - » Answers will vary but could include that she pretends to be happy and does not talk about their problems or that she goes to her room and shuts the door.
- 2) Once Dari officially joins Twig and Natalie's lab group, they assign each other titles. Name those titles and any details about each character that help explain why his or her title might be a good fit.
 - » Twig—Head Sheriff, Dari—Mission Analyst, Natalie—Captain; character details will vary, but students should provide logical evidence connecting the character to his or her title.

Understand

- 1) When Natalie's dad arrives at school instead of letting her bike home, she knows that something is up. What do adults in your life do that warns you that things are not normal?
- 2) Natalie feels like her dad has "ambushed" her by not warning her about the appointment with Dr. Doris. What are some better ways her dad could have handled this?



Have students list characteristics or traits of each title, then compare those to the characters with each title.

Reading: Assignments 22-24

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) What is the team's plan for testing their egg drop ideas?
 - » They will go to the volleyball game at school on a weekend, then slip upstairs to drop their eggs from the top of the building.
- 2) How does the egg testing go?
 - » All their ideas fail; the eggs all break.
- 3) Why does Natalie call Twig "reckless" and "illogical"?
 - » She pushes all the eggs out the window at one time.
- 4) Why does Natalie leave her dad at the mall?
 - » She doesn't want to hear her dad talk to Mikayla's mom.
- 5) Why does Natalie pick the camellia japonica for her mom?
 - » She likes the idea that it can live through almost anything. She wants a "plant that keeps going."

Ask students to consider its common name and the description Natalie reads about it. How are these things connected to Natalie's life and family?

Explore

Use the resources your teacher provides to investigate the following items.

- 1) Mr. Neely teaches his students about "the science of snow." What are the weather conditions needed to produce snow?
- 2) Research the *camellia japonica*, learning about the plant's characteristics and how to grow it.

Imagine

- 1) Pretend that Natalie cannot get her mom a plant for Christmas. What is an alternative gift that would be good for her mom? Give reasons to explain your choice.
- 2) Natalie describes the initial awkwardness of her class's snow outing. How would you spend a class period if your teacher let you go outside in the snow?

What are other gifts that a botanist might like? What are gifts you could give to comfort or help someone who is sick?





Have students list the steps of the plan on one side of a page and the steps from the book on the other side, then compare them.

Observe

1) Compare the steps of the team's egg drop test plan with the steps into which of the book's assignments are grouped. Are they the same or different?

Understand



Have students imagine what her expectations might be, then use that to infer the phrase's meaning.

- 1) When preparing for the egg drop, Natalie mentions managing her expectations. What does this mean? When is another time someone might need to manage their expectations?
- 2) Natalie says that sometimes if you believe in something, you can make it come true. Why is the way you think about things important?

Reading: Assignments 25-27

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Why might Natalie make so many observations during her visit with Dr. Doris?
 - » They are a distraction that helps keep her from talking to Dr. Doris.
- 2) How do Dari's parents differ from Natalie's and Twig's?
 - » They are more involved in what Dari is doing; they are affectionate in a way Natalie's parents have not been in a long time.
- 3) How and why does Natalie start to feel different when they are going to test their eggs?
 - » She feels much more nervous, because this is the last chance they have for testing their designs.
- 4) What happens when the team tests Cotton Ball Heaven and S'meggs?
 - » The egg in Cotton Ball Heaven breaks. The egg in S'meggs does not break.
- 5) What does Natalie's dad do with the egg she hands him on Christmas? Why does this upset Natalie?
 - » He puts it back in the carton. She thinks this is worse than if he had thrown it.

Explore

Use the resources your teacher provides to investigate the following items.

Natalie notices that Dari has Bollywood posters up in his room.
 Research Bollywood to learn more about it. If time permits, once you have learned about Bollywood, draw your own poster to represent what Dari might have in his collection.

How do Natalie's observations affect her focus on Dr. Doris's questions?



Give students a word bank with terms such as *share*, *feel*, *emotion*, *favorite*, *dislike*, etc., to use in their questions.

Imagine

1) Dr. Doris asks Natalie twenty-six questions during their session. If you were trying to get someone to open up, what would you ask them? For an extra challenge, brainstorm twenty-six different questions.

Observe



Encourage students to look back in earlier sections of the text for more details about Mrs. Menzer.

- 1) Natalie says she thinks Mrs. Menzer must be evil, but then she tells a story about Mrs. Menzer giving her a seed. Drawing on this story and other observations you have made about Mrs. Menzer, explain whether or not you believe she is evil.
 - » Answers will vary, but students should use textual evidence to support their conclusions.

Understand



Encourage students to think of a time when they talked to someone about a problem, then use that experience to imagine what it would be like to talk to a counselor.

- 1) Natalie feels pretty conflicted in her times with Dr. Doris. On one hand, she does not want to talk about her mom. On the other, though, she feels like it might be a relief to share what she is feeling. Why might she (or any other person) have these different feelings about talking to someone? If you had a challenging situation in your life, how would you feel about talking to a counselor or therapist about it?
- 2) Natalie says that the way she has approached her background has never felt wrong before she visits Dari's house. How do they approach their nationalities and ethnicities differently?

Reading: Assignments 28-30

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) What event left Twig without knowing what to say? Why might this leave her speechless?
 - » Twig is speechless when she visits Natalie on Christmas and sees her cry. Student explanations for this behavior may vary, but they should be rooted in the text.
- 2) What does Twig imagine is upsetting Natalie?
 - » She thinks Natalie is tired of her or of playing board games.
- 3) How does Natalie's mom change her behavior on New Year's Eve?
 - » She comes and joins the family; she smiles, though it is not quite her old smile.
- 4) What is Natalie's favorite memory of her mom?
 - » Her favorite memory is the day they spent at the arboretum, on which her mom told her the story of the Cobalt Blue Orchid.

Have students describe why Natalie might have such good feelings about this memory.

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Explore

Use the resources your teacher provides to investigate the following items.

- 1) Natalie says that her mom is depressed. Use the resources that your teacher provides to learn more about depression.
- 2) Natalie's family makes *dduk* for New Year's Eve. Explore other traditional foods or customs that different communities follow to celebrate a new year.

Imagine

- 1) Imagine that you wanted to create a new tradition to increase your luck in the new year. What would you do and why?
- 2) Describe a tradition your family has. This may be a holiday tradition or one that you practice at a different time.

Encourage students to use descriptive details in their work.





Direct students to think about Natalie's call with her grandmother and the things she thinks about during it.



Have students think about why Natalie might feel tricked by some of these things.

Observe

- 1) Name the ways that Natalie starts to show her interest in her Korean background.
- 2) Throughout her interactions with her dad and Dr. Doris, Natalie identifies what she calls "Therapist Tricks." Identify as many of these as possible; you may refer to earlier reading selections as you work. Would you call them tricks? Why or why not?

Understand

- 1) When Twig visits on Christmas, Natalie says she knows what their pattern has been; they do not talk about hard family things. But Natalie decides to change that pattern and ask Twig about her dad. When is it a good idea to talk with friends about hard things?
- 2) When Natalie tells Twig that her mom is depressed, it is the first time she has admitted this. What may have led her to say it this time?

Reading: Assignments 31-33

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) What does Natalie learn about Mr. Neely at the egg drop competition?
 - » He used to work in pharmaceutical research.
- 2) The team from Valley Hope describes S'meggs as creative and cute. Do you think they believe that it is a good design? What details from the text help you know your answer?
 - » Answers may vary, but it is likely that they are speaking sarcastically. Students should use evidence from the text to support their answer.
- 3) Why does Natalie have a strong reaction to the Valley Hope team's design?
 - » It uses cereal like her mom suggested.
- 4) What is the new plan for getting Natalie's mom a flower?
 - » Natalie will go to her mom's old lab and steal a seed.

Explore

Use the resources your teacher provides to investigate the following items.

- Natalie mentions Isaac Newton during her description of the science lab. Investigate Newton to learn more about his life and his contributions to science.
- 2) Natalie describes the idea of the pendulum, but she does not explain the scientific reasons behind it. Research the science behind how pendulums work, and if time and materials permit, build your own washer pendulum.

Imagine

 Natalie determines a plan to break into her mom's old lab. Name other options she could have selected for helping her mom. If time permits, pick one option you listed and describe in detail how it could work.

Have students brainstorm ideas that could have involved Natalie on her own, Natalie's dad, Dr. Doris, Mr. Neely, or other characters.

Encourage students to think about what tone of voice the Valley Hope team uses to say each word.







Have students give a thumbs up or down to describe whether each word has a good or bad association for them. Use this as a starting point for the discussion.

Observe

1) Describe the setting for the egg drop competition, using as many words and phrases from the text as possible. How might this setting make the competitors feel?

Understand

- 1) Mr. Neely says that "there are no losers in #science." Do you agree with him? Based on your answer, what would you tell a group of scientists whose experiments failed?
- 2) Natalie has a lot of conflicting feelings when she sees Mr. Neely talking to other people at the egg drop competition. But she says that she "realized I was being ridiculous, so I took a few breaths and tried to calm down." What are some ways you use to reflect on your feelings when you get overwhelmed?



Ask students to think about calming techniques for the mind, such as thinking of something positive, and the body, such as taking deep breaths.

Reading: Assignments 34-36

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Why did Natalie skip preschool?
 - » She went to the lab with her mom.
- 2) How does the team get past the lab's guard?
 - » He is sleeping, so they pass him quietly without waking him up.
- 3) What does Natalie observe about the bag she takes out of the filing cabinet?
 - » It's the bag she saw Mrs. Menzer take out, but the name on the bag is
- 4) What makes Natalie grateful that Dari is with them?
 - » He tells her to take her time in her mom's office.

Explore

Use the resources your teacher provides to investigate the following items.

- 1) Twig says the lab "looks like a fancy IKEA catalogue." Investigate IKEA, learning what it is and looking at pictures from its catalogues online, and use what you see to create an image showing what the lab might look like.
- 2) Natalie uses her knowledge of Latin plant names when she's looking for the orchid seed. Pick a plant—either your favorite plant or one that you think is interesting—and research its Latin name. What does the name mean, and why was the plant given that name?

Imagine

1) Natalie remembers playing a game with her mom on the bus: they would try to imagine the lives of people around them. Pick a person you have seen outside of school—maybe someone you see on your way to school, at the grocery store, or elsewhere—and imagine what their story might be.

Provide students with images of people; have them pick one and make that person the basis of their story.

Ask students to name the flower Natalie is looking for.



2) When Natalie picks up the picture of her family at Disneyland, she says she wishes she could "escape into the memory." If you could choose a picture of yourself and jump into that point in time, what picture would you choose and why?

Observe



Reread the start of Assignment 36 and look for details that help predict her questions.



Ask students to focus on the questions Natalie asks as a way to figure out what the observations might mean.

- 1) When Natalie finds the seed, she suddenly has a lot of questions but does not explain what they are. Use details from what you read to help you predict some of her questions and what their answers might be.
- 2) In Assignment 36, Natalie lists observations about her mother and her office. What do you think these observations mean when you put them together? Name some possibilities.

Understand

- 1) When Natalie realizes that Twig brought Dari on the mission, she feels like everything the two of them had said to each other "felt empty now." What does Natalie mean by "empty"? How could Twig make this situation better?
- 2) Natalie is surprised that the bus driver does not stop their mission. She says that they got on the bus because it was part of the procedure. When is following a plan a good idea, and when can it lead to problems? How do you know when you should change a plan?

Reading: Assignments 37-39

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) Who does Natalie tell the guard to call instead of the police?
 - » She tells him to call Dana Menzer, Mikayla's mom.
- 2) Natalie realizes something about her mom during the forty-five minute wait for Mrs. Menzer. What is it?
 - » She realizes that her mom was not fired.
- 3) What does Mrs. Menzer do with the team? What do her actions reveal about the kind of person she is?
 - » She listens to their story and takes them home. She kisses Natalie on the forehead like she does her own daughter, showing that she is kind and loving.
- 4) Why does Twig think Natalie is the team captain?
 - » She brings everyone together.
- 5) What has really happened with Natalie's mom's job and research?
 - » The research did not go very well, and the project lost its funding. Eventually Mrs. Menzer had to stop the project.

Give students a list of words describing kinds of people (nice, patient, kind, mean, harsh, etc.) and have them decide which words fit Mrs. Menzer's different actions.





Explore

Use the resources your teacher provides to investigate the following items.

1) Natalie has confused her Bearded Blue Iris for a Cobalt Blue Orchid. Investigate what a Bearded Blue Iris looks like, then compare it to images of different kinds of orchids. What do these flowers have in common? What makes them different from each other?

Imagine

1) Natalie includes a footnote about the time she and Twig tried to crash a child's birthday party. Imagine that scene, including as much detail as possible to show what it would have been like.

Have students list a few words that describe Twig and Natalie, then use those to pick actions that reflect those descriptions.





Have students use a T-chart to note what Natalie thought the clue meant versus what it really meant.

Observe

1) Natalie learns that she has misunderstood a lot of things about her mom and her mom's work. List some of those things, then pick one of them to explore more deeply. For the one you pick, go back through the book and list clues that held information about it. How did Natalie misunderstand these things?

Understand

- 1) Natalie says that she tells Mrs. Menzer the story "for the first time ever, spoken aloud so I could never get it back." Why might Natalie feel like telling the story aloud makes it more real?
- 2) At the lab, Natalie starts to feel like all the things she believed about her mom "had been a lie." If you were learning that someone you loved differed from who you thought they were, how would you feel? What would you do because of your feelings?

Reading: Assignments 40-42

Ask

Use evidence or quotations from the text to answer the following questions.

- 1) What does Natalie learn about the time she and her mom stayed in bed for a long time?
 - » Natalie was not the one who was sick; her mom had been depressed then.
- 2) What changes about Natalie's mom in the final few Assignments?
 - » She starts seeing a therapist and goes back into the garden; Natalie says that she seems "real again."
- 3) What happens when both Natalie and Mikayla arrive at school at the same time?
 - » Natalie offers to help Mikayla carry her project into school.
- 4) Why does Natalie say she has stopped writing?
 - » She says she can now speak, so she doesn't need to write.
- 5) What is Natalie's ultimate conclusion about breakable things?
 - » You cannot always keep them safe.

Explore

Use the resources your teacher provides to investigate the following items.

1) Natalie describes Mikayla's plant project. Research your own version of this project by exploring what sort of light conditions plants need to grow. Do all plants need the same amount of light? How do we know what conditions are best?

Imagine

1) Natalie says that she had felt so hurt by Mikayla that she had not considered how she might have made Mikayla feel. Pick a scene from the book and think about it from Mikayla's perspective. How does it change when you look at it from her point of view instead of Natalie's? Have students compare Natalie's mom's behaviors in this section to those in the start of the book.





Arrange students in pairs and have one assume the role of Natalie, the other the role of Mikayla. Have students discuss their friendship from the perspective of each character.



Have students use a Venn diagram to record Twig's character at the beginning of the book versus at the end, observing similarities and differences.

Observe

- 1) Natalie says that Twig is different from the person she has always known. Go back through what you have read and identify ways that Twig has changed. In your opinion, are these changes positive or negative?
- 2) Natalie and Mikayla have had a complicated relationship over the years. Chart the different stages of it, including the ones we learn about through Natalie's memories.

Understand

- 1) Natalie's mom says they "deserve a second chance." Do you think it is important to have second chances? Is there any situation in which you would not want to give someone a second chance?
- 2) Natalie says that not every day is easy, but she and her mom work together each day in the greenhouse, because it is how they show they are "trying." Why might it be important to have "trying" activities you do with someone, even if you all are not doing what you would really like to do?



Have students think about this in different contexts, such as family, friend groups, and school settings.

Overview of the Five-Day Fluency Routine

Research demonstrates that fluency practice produces gains in reading comprehension. Amplify CKLA's fluency instruction includes modeled reading, assisted reading (such as choral or paired reading), and independent reading, along with breadth of text encounters and extended deep reading of selected texts. This multi-faceted approach ensures that students receive low-stakes practice along with engaging, authentic fluency tasks, such as performances. Daily instruction regularly provides students with fluency practice. Additionally, each unit includes at least one extended fluency performance, which requires students to spend five days with a single short text, culminating in a performance. The program also includes supports for students to practice fluency at home.

It is important to remember that the primary goal of the five-day fluency routine is to equip students to read the passage accurately and with expression. As they gain accuracy and confidence, they will naturally begin to read more quickly. However, because students who are pushed to read more quickly often sacrifice accuracy, it is important not to pressure students to race through the text or to read with undue speed. Because this is not a memorization drill, students should read the text as they perform; even if students say they have memorized the passage, encourage them to read the words rather than recite them from memory.

The five-day fluency performance routine includes the following components.

- Day 1: Teacher introduces text and reads it aloud several times, modeling different tones or inflections and encouraging students to reflect on each one. For example, if the teacher reads in a monotone, students should realize that this is not a stellar reading; they may suggest better approaches, such as reading in a happy tone, an excited tone, a nervous tone, or other tone appropriate to the selected text.
 - During this week, students are encouraged to start reading the target text aloud at home using reading logs to record each session with a student's "Happy Hearer." Alternatively, students may create their own log page in their reading journals.
- Day 2: Students practice reading the text chorally, with varying inflection, tone, or other elements.

- Day 3: Students practice both choral and paired readings, continuing to develop tone, inflection, and expression.
- Day 4: Students continue practicing paired readings in preparation for the following day's performance.
- Day 5: Student pairs perform their reading.

If you choose to evaluate students' performance at this stage, you may use the Fluency Passage Performance Rubric to evaluate each performance. Students who still struggle with fluency at this stage in the year may benefit from additional practice with the materials in the Fluency Supplement, available on the Amplify CKLA website.

Fluency Passage Performance Rubric

	Advanced	Proficient	Basic
Accuracy	Reading contains no errors in pronunciation.	Reading contains minimal errors in pronunciation.	Reading contains numerous errors in pronunciation.
Rate	Reading is conversationally paced or paced to show appropriate emphasis and inflection.	Reading is uneven, with interspersed periods of speed and sluggishness.	Reading is labored and slow.
Expression	Expression is strong throughout the reading. While the tone and volume may vary, they do so in keeping with the student's understanding of the piece.	Reading generally sounds like everyday speech, with possible lapses into expressionless speech.	Words are pronounced, but they are not spoken in a manner that indicates an understanding of their meaning.

Dear Family Member,

Your child has been assigned a Fluency Performance Passage in conjunction with the texts we are studying in class. This passage will be introduced in class, and students will spend several lessons practicing reading this passage aloud. On the fifth day, students will perform a reading of this passage. We follow this routine because repeated readings of text help build reading fluency, which includes automatic word recognition, expression, accuracy, and speed. Additionally, over one hundred studies have shown that deep reading, in which students spend time reading and rereading a single text, has a dramatic impact on reading comprehension. In fact, it is such an important impact that it helps students better comprehend the passage they have practiced as well as passages they will read in the future.

As part of our in-class practice, students study and discuss this passage. I will demonstrate different ways of reading it aloud, and students will analyze what makes a good reading. They will also practice reading this passage aloud in various ways.

You can assist your child by asking him or her to read the passage aloud at home. Even if your child remembers some or all of the words, remind him or her to read the passage rather than recite it from memory. Children may practice by reading to family members, caregivers, or even the family pet. Please log each reading your child completes in the Happy Hearers Log, which accompanies this letter.

Thank you for your help!

Happy Hearers Log

An important way to prepare for your Fluency Passage Performance is to practice reading the passage to others. They may be your parents, your siblings, another family member or friend, or even the family pet. Whoever they are, they're sure to be a Happy Hearer when they get to listen to you read your passage!

Each time you practice reading your Fluency Passage to a listener at home, record it in the Happy Hearers Log.

Day of the reading	Name of the Happy Hearer	Notes

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Unit 9 Novel Guide The Science of Breakable Things by Tae Keller

Teacher Guide
GRADE 5

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