

# Teacher's Guide



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## OVERVIEW

*In this magazine, readers will encounter ideas, activities and stories that have remained popular or important for many generations.*

***Cricket: September 2016*** includes information about timeless topics, such as the quest for love, the Roman arch, skipping stones, and infinity, as well as folktales and legends from around the world.

## ESSENTIAL QUESTION:

***How can ideas, themes, and stories connect people living in different times and places?***

We invite you to use this magazine as a flexible teaching tool, ideal for providing interdisciplinary instruction of social studies and science content as well as core literacy concepts. Find practical advice for teaching individual articles, or use a mini-unit that helps your students make cross-text connections as they integrate ideas and information.

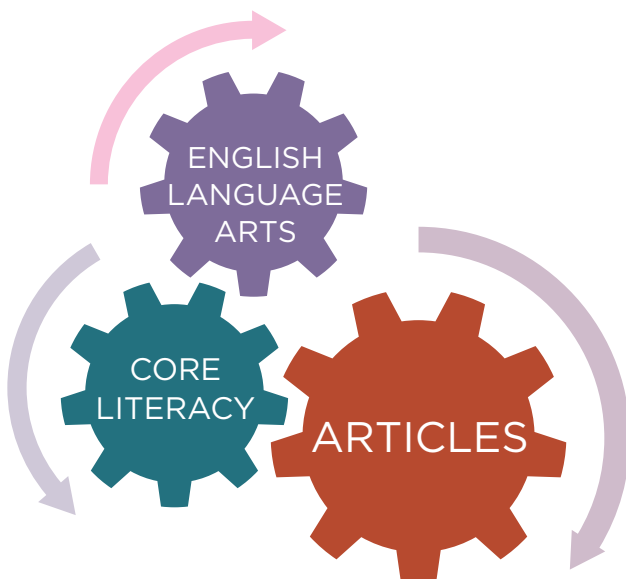
## READ INDIVIDUAL ARTICLES PAGES 4 - 13

Each article in this magazine is well-suited for teaching literacy concepts and content area knowledge. For each individual article in this guide, you'll find the following:



## TEACH A MINI-UNIT PAGES 15 - 17

Magazine articles can be easily grouped to make cross-text connections and comparisons. Our Mini-Unit allows students to read and discuss multiple articles and integrate ideas and information (*CCSS.Reading.9*). Discussing multiple articles (*CCSS.Reading.9*) prepares students to write texts to share and publish in a variety of ways (*CCSS.Writing.2*).



**Essential Question:** How can ideas, themes, and stories connect people living in different times and places?

MAGAZINE ARTICLES	ENGLISH LANGUAGE ARTS CONCEPTS	LITERACY SKILLS	CORRESPONDING CCSS ANCHOR STANDARDS
<b>&lt;3 Quest</b> Contemporary Realistic Fiction	Main characters often overcome difficult obstacles to reach a goal.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Analyze Plot</li> <li>Interpret Word Choice</li> <li>Evaluate Literary Devices</li> <li>Write Narrative Texts</li> </ul>	<i>Reading 1, 4 &amp; 5</i> <i>Writing 3</i>
<b>September</b> Lyric Poem	Poets can present ideas through images.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Analyze Sound Devices</li> <li>Analyze Poetry</li> <li>Interpret Sensory Images</li> <li>Write Poems</li> </ul>	<i>Reading 1, 4 &amp; 5</i> <i>Writing 3</i>
<b>All for a Lizard</b> Historical Fiction	Authors of historical fiction use sensory details to help readers visualize time and place.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Summarize</li> <li>Analyze Relationships</li> <li>Make Predictions</li> <li>Collaborate</li> </ul>	<i>Reading 1, 2 &amp; 5</i> <i>Speaking &amp; Listening 1</i>
<b>Build an Arch, Roman Style</b> Procedure	Authors often combine pictures and words to make procedural directions as clear as possible.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Identify Main Ideas</li> <li>Analyze Text Structure</li> <li>Interpret Visual Information</li> <li>Write Explanatory Texts</li> </ul>	<i>Reading 1, 2, 5 &amp; 7</i> <i>Writing 2</i>
<b>The Legend of the Giant's Causeway</b> Legend	A legend is a story that has been passed down through generations and is believed to contain some element of truth.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Analyze Genre</li> <li>Analyze Characters</li> <li>Interpret Theme</li> <li>Write Plays</li> </ul>	<i>Reading 1, 2, 3 &amp; 5</i> <i>Writing 3</i>
<b>The Time-Honored Sport of Stone Skipping</b> Expository Nonfiction	The main idea in a paragraph may be stated or unstated.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Identify Main Ideas</li> <li>Compare Texts</li> <li>Determine Purpose</li> <li>Research and Write</li> </ul>	<i>Reading 1, 2, 6 &amp; 9</i> <i>Writing 3 &amp; 7</i>
<b>Hope on High</b> Folktale	Authors use dialect to help readers imagine characters from different times and places.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Analyze Literary Devices</li> <li>Analyze Characters</li> <li>Analyze Purpose</li> <li>Present a Text</li> </ul>	<i>Reading 1, 3, 4 &amp; 6</i> <i>Speaking &amp; Listening 1, 4 &amp; 6</i>
<b>The Poor Tinker and the Elves</b> Fable	A fable is a story that teaches a moral, or lesson, about human behavior.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Analyze Characters</li> <li>Analyze Text Structure</li> <li>Analyze Theme</li> <li>Write Narrative Texts</li> </ul>	<i>Reading 1, 2, 3 &amp; 5</i> <i>Writing 3</i>
<b>It's Math—Not Magic</b> Expository Nonfiction	A nonfiction author may explain an idea in several different ways to make sure readers understand it.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Identify Main Ideas</li> <li>Evaluate Tone</li> <li>Interpret Visual Information</li> <li>Present a Text</li> </ul>	<i>Reading 1, 2, 4 &amp; 7</i> <i>Speaking &amp; Listening 4 &amp; 6</i>
<b>Ramanujan</b> Biography	The author of a biography may include information about people who influenced the person they are writing about.	<ul style="list-style-type: none"> <li>Close Reading</li> <li>Analyze Word Choice</li> <li>Analyze Relationships</li> <li>Write Narrative Texts</li> </ul>	<i>Reading 1, 3 &amp; 4</i> <i>Writing 3</i>

**Comparing Texts:** CCSS Reading 9

**Mini-Unit:** CCSS Reading 1, Reading 7, Writing 9, Writing 10





A young boy uses his imagination and knowledge of the past to find courage on his <3 Quest, or search, for friendship.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** Main characters often overcome difficult obstacles to reach a goal.

## CROSS-CURRICULAR EXTENSION

**Literature** <3 Quest stories have been around for a long time. Read a traditional or modern <3 Quest story. Then write an advertisement for the story to display in the classroom.

## KEY VOCABULARY

**mission (p. 5)** an important task or job

**deflect (p. 6)** to cause something to change direction

## PREPARE TO READ

Write the following two sentences on the board: My neighbor was angry. My neighbor had steam coming out of his ears. Ask students which sentence is an example of exaggeration. Then invite them to come up with their own examples. Finally, tell students to notice exaggeration in this story.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Underline details that show that the narrator likes Aberdeen a lot. *CCSS Reading 1*
- Would Aberdeen make a good friend? Use story details to explain why or why not. *CCSS Reading 1*

### Craft and Structure

- Analyze Plot** The main character in "<3 Quest" faces difficult obstacles in order to reach his goal. Work with a partner to identify the narrator's goal and the obstacles he faces. Does he reach his goal? If so, how does he do it? *CCSS Reading 5*
- Interpret Word Choice** On page 5, the narrator states, "When attempting to make allies with an unfamiliar faction, show confidence, show charisma, show something you have that is super awesome." With a partner, rewrite this statement in your own words. Use a dictionary if necessary. *CCSS Reading 4*
- Evaluate Literary Devices** Writers often use exaggeration to create humor in their stories. For example, the narrator in this story calls Aberdeen's tree a "wooden defense tower." With a partner, underline 3-4 other examples of humorous exaggeration. *CCSS Reading 4*

## WRITING

**Write Narrative Texts** Rewrite part or all of the story from Aberdeen's perspective. Be sure to include her thoughts, feelings, and attitudes. See if you can use exaggeration to create humor. Read your story aloud to the class.



The last day of summer vacation is an emotional time for students everywhere. Feelings of excitement and regret mingle as the freedom and joys of summer fade away and a new school year begins.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** Poets can present ideas through images.

## CROSS-CURRICULAR EXTENSION

**Writing** Interview friends, teachers, classmates, and family about how they spent the last day of summer vacation. Record answers and use them to write a short article for the school newspaper.

## KEY VOCABULARY

**whirring (p. 8)** the sound made by something that is spinning very fast

## PREPARE TO READ

Discuss with students what they like to do on the last day of summer vacation. Ask volunteers to describe how they feel on this day—sad, happy, excited? Then tell students to follow along as you read aloud this end-of-summer-vacation poem.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Highlight words and images that stood out to you. *CCSS Reading 1*
- What feelings do you find in this poem? Underline the words and phrases that convey them. *CCSS Reading 1*

### Craft and Structure

- **Analyze Sound Devices** With a partner, take turns reading this poem aloud. As you read, pay attention to line breaks and punctuation. As you listen, pay attention to rhyme and alliteration, or repeated consonant sounds at the beginning of words (silent sea). Highlight and label examples of each. *CCSS Reading 5*
- **Analyze Poetry** How does this poem convey the sense that summer is ending and fall is beginning? Pay attention to the details in the poem and the way the poem looks on the page to answer the question. *CCSS Reading 4*
- **Interpret Sensory Images** Images that appeal to a reader's senses are called sensory images. These images help readers imagine how something looks, feels, sounds, smells, or tastes. Underline sensory images in the poem. How many of the five senses does the poem appeal to? *CCSS Reading 4*

## WRITING

**Write Poems** Write your own poem in which you describe September or the last day of school as clearly as you can. Use sensory details to create an imaginary picture and to show how you feel at this time of year.

# ARTICLE: All for a Lizard

Magazine pages 9-15, Historical Fiction



In this story you will learn about ancient Rome through the adventures of twin brothers. Although the story is set 2,000 years ago, some of the details will seem familiar to you.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** Authors of historical fiction use sensory details to help readers visualize time and place.

## CROSS-CURRICULAR EXTENSION

**History** This story mentions some of the people, places, and customs of ancient Rome. Choose one to research. Create a poster full of information and pictures.

## KEY VOCABULARY

**Latin (p. 9)** the language of ancient Rome

**barbarians (p. 17)** members of a violent group of people

## PREPARE TO READ

Ask students what they know about their parents' experiences in school. Then, encourage them to make predictions about what school was like for students in ancient Rome.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Underline details on page 9 that help you visualize Rome and identify the senses they appeal to. *CCSS Reading 1*
- How do the people of Rome react to Augustus' death? Cite text details in your answer. *CCSS Reading 1*

### Craft and Structure

- Summarize** What is the main idea of this text? What details support the main idea? *CCSS Reading 2*
- Analyze Relationships** Historical fiction contains both facts and fictional details. Facts are statements that can be proven to be true. Fictional details are made up. Create a two-column chart to record several examples of each kind of information in the story. How do you think the two types of information are related? *CCSS Reading 3*
- Make Predictions** Work with a partner to make 3 predictions about what will happen next in this story. Use story details to make and support your predictions. *CCSS Reading 1*

## SPEAKING AND LISTENING

**Collaborate** On page 14, the twins' father says, "We appreciate stability even if it is based on inequalities and unfairness." Work in a group to discuss the meaning of this statement. Do you agree with it? Why or why not? Use a dictionary to look up any unfamiliar words.



Early Roman engineers perfected the use of the arch over 2,000 years ago, and it is still important in architecture today. The arch is truly a timeless invention.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** Authors often combine pictures and words to make procedural directions as clear as possible.

## CROSS-CURRICULAR EXTENSION

**Engineering** With a partner, follow the directions for building an arch. Share what you learned about the strength of an arch bridge versus a beam bridge.

## KEY VOCABULARY

**function (p. 17)** to have a specified role or purpose

**compression (p. 17)** the action of pressing or squeezing

## PREPARE TO READ

Show students photos of structures that incorporate arches. Explain that arches allowed ancient Romans to build longer bridges and bigger buildings. Next, place a bowl of sugar cubes in front of the class and ask volunteers to try to build an arch with them. After a few attempts, discuss why this is difficult and what would make it easier. Tell students that this text will teach them a better way to make an arch.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Underline details that explain how Roman builders used a centering. *CCSS Reading 1*
- What three activities does this text teach you to do? Highlight text details that answer this question. *CCSS Reading 1*

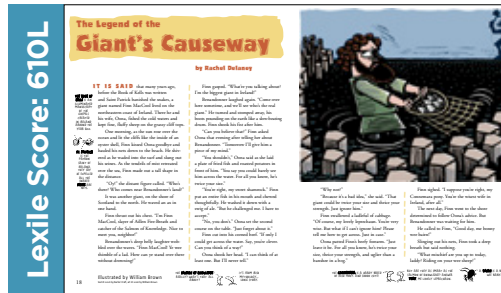
### Craft and Structure

- Identify Main Ideas** The main idea of a paragraph tells what the entire paragraph is about. Work with a partner to write the main idea of the introductory paragraph. *CCSS Reading 2*
- Analyze Text Structure** Authors use headings and smaller subheadings to tell readers what information will come next. What are the headings and subheadings in this text? *CCSS Reading 5*
- Interpret Visual Information** With a partner, explain how the pictures help readers understand the directions. Are some pictures more important than others? Would the directions be clear without the pictures? Explain your ideas. *CCSS Reading 7*

## WRITING

**Write Explanatory Texts** Think of something you don't like to do, such as cleaning your room, waking up early, or raking leaves. Then write a funny how-NOT-to article that explains how to avoid the activity. Make your article fun to read and include visuals.





Many old Irish folktales tell about the deeds and adventures of Finn MacCool—a great hunter and warrior and the strongest giant in Ireland. As you will see from this story, even a famous giant needs a little help once in a while.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** A legend is a story that has been passed down through generations and is believed to contain some element of truth.

## CROSS-CURRICULAR EXTENSION

**Earth Science** Research how the Giant's Causeway was actually created. Share your findings with your class.

## KEY VOCABULARY

**thrice** (p. 19) three times

**banshee** (p. 19) a mythical female spirit who cries loudly to warn people that someone is going to die soon

## PREPARE TO READ

Ask students to name legends they know (for example, the legends of King Arthur and Paul Bunyan). Go over the elements of legends listed below. Then tell students to look for these elements as they read the story.

1. Legends are made-up stories based on something real.
2. The main character is a hero who faces a problem.
3. The hero has unusual abilities and characteristics.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Why does Finn get angry with Benandonner? Highlight details that support your answer. *CCSS Reading 1*
- How is Oona important in this story? Cite story details to support your answer. *CCSS Reading 1 & 3*

### Craft and Structure

- **Analyze Genre** Complete the Elements of a Legend graphic organizer (p. 20) to identify the key characteristics of legends. *CCSS Reading 5*
- **Analyze Characters** What qualities does Finn have? What qualities do you think a hero should have? Is Finn a hero? *CCSS Reading 3*
- **Interpret Theme** Finn and Benandonner are big and strong. Oona is smart and quick-thinking. Which qualities does this legend suggest are more important? Use this information to write a theme for the legend. *CCSS Reading 2*

## WRITING

**Write Plays** Create a play based on “The Legend of the Giant's Causeway.” Use the dialogue from the story to write your script. Add stage directions that tell the characters how to move or look. When you are ready, perform for another class.



Have you ever bounced a stone across a calm pond or lake? Find out how the ancient game of stone skipping has turned into a competitive sport.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** The main idea in a paragraph may be stated or unstated.

## CROSS-CURRICULAR EXTENSION

**Physics** Skip stones and other flat objects, such as shells and pieces of wood, to see which item is the best skipper. Record the results.

## KEY VOCABULARY

**universal (p. 24)** done or experienced by everyone

**amateur (p. 24)** a person who does something for pleasure and not as a job

## PREPARE TO READ

Explain that “time-honored” describes something that is valued because it has been in existence for a long time. Discuss examples of time-honored traditions, such as staying up until midnight on New Year’s Eve or singing “Happy Birthday.” Tell students to look for details about the history of stone skipping in this text.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Underline three ways stone skipping has changed since Marcus Minucius Felix’s time. *CCSS Reading 1*
- How has stone skipping connected people from different times and places? Cite text details to support your answer. *CCSS Reading 1 & 2*

### Craft and Structure

- Identify Main Ideas** Often the main idea of a paragraph is stated in a sentence of the paragraph. Work with a partner to underline the main idea of the third paragraph. Repeat this activity with the fourth paragraph. *CCSS Reading 2*
- Compare Texts** Work in a small group to compare the details about stone skipping at the Mackinac Island competition with the details in the quote from Marcus Minucius Felix on page 26. How are the two descriptions similar and different? *CCSS Reading 9*
- Determine Purpose** Nonfiction writers write to inform, to entertain, to persuade, or to express an opinion. Sometimes writers have more than one purpose. What purpose or purposes did the writer of this text have? *CCSS Reading 6*

## WRITING

**Research and Write** Use the library and the internet to find information about the science behind stone skipping. Then write a brief description of why and how a stone skips on water. Add visuals, such as drawings and diagrams.



How far would you go to get something you really want?  
Would you steal it . . . in the middle of the night . . . from a  
witch . . . who lives on top of a burial mound?

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** Authors use dialect to help readers imagine characters from different times and places.

## CROSS-CURRICULAR EXTENSION

**Social Studies** Use the library and the internet to find out more about Native American burial mounds. When were they built? Where are they? How are they treated today?

## KEY VOCABULARY

**gumption** (p. 29) confidence

**stingy** (p. 31) not wanting to give or share

## PREPARE TO READ

Tell students to listen for unusual words and expressions as you read aloud the first paragraph. Then discuss what students notice (“*gumption*,” “rickety tickety,” “swept across the prairie like a broom,” “scratched in the dirt for years”). Explain that these are examples of dialect—a form of a language spoken in a particular area that uses some of its own words, expressions, and pronunciations. Ask students to notice dialect as they read.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Underline details on page 29 that help you visualize the setting. *CCSS Reading 1*
- What will happen next in this story? Use story details and your own ideas to make a prediction. *CCSS Reading 1*

### Craft and Structure

- Analyze Literary Devices** Work in a small group to review the dialect you underlined as you read. What did you imagine about characters and setting based on the use of dialect? *CCSS Reading 4*
- Analyze Characters** Work with a partner to underline details about Agatha's actions, thoughts, and words. What do you learn about Agatha from these details? *CCSS Reading 3*
- Analyze Purpose** You've heard the expression “there are two sides to every story.” Why do you think the author included two different perspectives on what to do with Agatha's tomatoes? How did the inclusion of different perspectives shape your understanding of the purpose of the text? *CCSS Reading 6*

## SPEAKING AND LISTENING

**Present a Text** Reading dialect aloud can be fun. In a group of four, divide up the parts of the three characters and the narrator. Then read the selection aloud to another class.



Originating long ago in Japan, this fable invites students to evaluate the importance and value of being honest.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** A fable is a story that teaches a moral, or lesson, about human behavior.

## CROSS-CURRICULAR EXTENSION

**Literature** Find 3-4 fables from different countries around the world and compare them. How are the fables similar and different?

## KEY VOCABULARY

**clearing (p. 36)** an open area of land in which there are no trees

## PREPARE TO READ

Review a familiar fable with students, such as “The Tortoise and the Hare” or “The Boy Who Cried Wolf.” Ask which character in the fable makes a bad decision and discuss the outcome of this decision. Finally, invite volunteers to state the lesson of the fable. Tell students to think about characters’ decisions in this fable.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

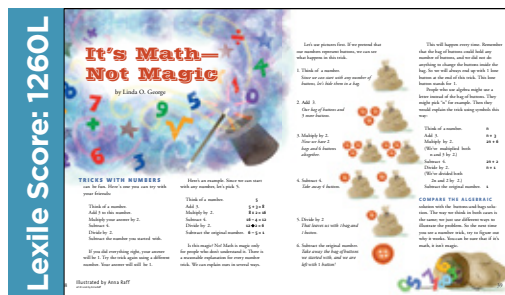
- Underline details that explain why Naoko and Yukio go into the woods. *CCSS Reading 1*
- How do the three characters—Naoko, the chief elf, and Yukio—feel about the wart? Cite story details to support your answer. *CCSS Reading 1*

### Craft and Structure

- Analyze Characters** Explain how the actions of each character in this story are related to one another. *CCSS Reading 3*
- Analyze Text Structure** With a partner, create a timeline showing the order of events in the fable. First draw a straight line from left to right. Then draw a dot on the line for each story event and write a short description of the event next to each dot. *CCSS Reading 5*
- Analyze Theme** Fables teach morals, or lessons, about human behavior. “Treat others the way you want to be treated,” is an example of a moral. The moral of “The Poor Tinker and the Elves” is suggested but not stated. With a group, identify a moral for this fable. *CCSS Reading 2*

## WRITING

**Write Narrative Texts** Think of a simple lesson and write a modern fable to teach it. Use character actions and words to help tell the story. Keep your fable very short. After you draft your fable, swap with a classmate for feedback and then revise. Read aloud to the class when you’re finished.



You don't have to be a magician or a mathematician to perform tricks with numbers. Just read carefully and follow the directions. Remember, a good numbers trick never gets old.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** A nonfiction author may explain an idea in several different ways to make sure readers understand it.

## CROSS-CURRICULAR EXTENSION

**Mathematics** Conduct library or online research to find more math tricks. Try them out on classmates, friends, and family.

## KEY VOCABULARY

**original (p. 38)** existing first or at the beginning

**reasonable (p. 38)**  
sensible or logical

## PREPARE TO READ

Preview the article by reading aloud the first column on page 38. Pause after each step in the trick to allow a volunteer to give an answer. Record answers on the board as you read. If the answer is incorrect, go through the process again. Finally, have students work in groups to read the rest of the article aloud. Remind students to listen and follow along as others read.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- What is the difference between math and magic? Support your answer with text details. *CCSS Reading 1 & 2*
- What does the author use to explain the number trick? Underline details to support your answer. *CCSS Reading 1*

### Craft and Structure

- Identify Main Ideas** What does the author want you to understand about math? Work with a partner to answer this question and identify the main idea of the article. *CCSS Reading 2*
- Evaluate Tone** The tone of a text is the author's feeling about the subject. How do you think this author feels about number tricks? Does she make them seem interesting? Difficult? Boring? Silly? Underline details in the text that support your answer. *CCSS Reading 4*
- Interpret Visual Information** The math trick in this article is explained using pictures of buttons and bags. Work with a partner to rewrite this section using different images. *CCSS Reading 7*

## SPEAKING AND LISTENING

**Present a Text** Present this math trick as if you were a magician. Come up with a name for yourself, such as "Numero Uno." Think of ways to involve different audience members in the trick. You might ask someone to "give me a number, any number." Perform the trick a second time using bags of bananas or other items. Finally, perform the trick using a letter.





Srinivasa Ramanujan has been described as a rock star mathematician. Though he died almost one hundred years ago, his work in mathematics will always be important.

## ESSENTIAL QUESTION

**How can ideas, themes, and stories connect people from different times and places?**

## CORE CONTENT CONCEPT

**Language Arts** The author of a biography may include information about people who influenced the person they are writing about.

## CROSS-CURRICULAR EXTENSION

**Mathematics** Find out about National Mathematics Day in India and Pi Day in the United States. Create a presentation about these events for your class.

## KEY VOCABULARY

**boarded (p. 40)** provided daily meals and a place to live in exchange for money

## PREPARE TO READ

Discuss with students what it might be like to be a genius—to know more than most people know and be able to think in ways most people can't. Ask students to describe benefits and drawbacks to being super smart. Then tell them to think about these ideas as they read about Srinivasa Ramanujan's life and legacy.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- How was Ramanujan different from other children his age? Support your answer with text details. *CCSS Reading 1*
- Why might people have thought Ramanujan was crazy? Cite text details to support your answer. *CCSS Reading 1*

### Craft and Structure

- **Analyze Word Choice** Make a list of adjectives used to describe Srinivasa throughout the text. What do these words suggest about Srinivasa's character? *CCSS Reading 4*
- **Analyze Relationships** Reread the information about Ramanujan in England, beginning with the second paragraph on page 42 and ending at the bottom of the first column on page 43. Lists the ways moving to London affected Ramanujan. *CCSS Reading 3*

## WRITING

**Write Narrative Texts** Use words and pictures to rewrite one part of this biography as a graphic text. Choose a section that you find especially interesting. Use a story frame to plan your words and pictures. Then create your story.



## CROSS-TEXT CONNECTIONS

**SYNTHESIZE:** Guide students to compare texts they read. Help students find the connections between pieces of information in multiple texts. Use prompts, such as the following examples, to have students work together to **Integrate Ideas and Information** (CCSS.Reading.9).

- Compare the way main characters show bravery in “<3 Quest,” “The Legend of the Giant’s Causeway,” “The Poor Tinker and the Elves,” and “Ramanujan.” Which character is the bravest of them all? Support your opinion with details from the texts.
- What ideas about school are conveyed in “<3 Quest,” “September,” and “All for a Lizard”? How are the ideas similar and different?
- Compare Aberdeen in “<3 Quest” with Oona in “The Legend of the Giant’s Causeway.” How are these characters similar in terms of their traits, the way they react to other characters, and the actions they take?
- Consider the importance of deception and dishonesty in “The Legend of the Giant’s Causeway,” “Hope on High,” and “The Poor Tinker and the Elves.” How do the characters in these different stories use deception and dishonesty to try to get what they want? Do all the characters succeed? Explain and support your ideas.
- Both “All for a Lizard” and “Hope on High” are the first parts of longer stories. How do the writers create suspense at the end of each text? Which text is the most suspenseful?
- Compare nonfiction elements in “Build an Arch, Roman Style,” “The Time-Honored Sport of Stone Skipping,” and “It’s Math—Not Magic.” First identify the purpose, key ideas, tone, and organization of each text. Then describe how these elements are similar and different.
- Compare the three poems in this magazine. What elements stand out to you the most in each poem? Which was your favorite? Why?



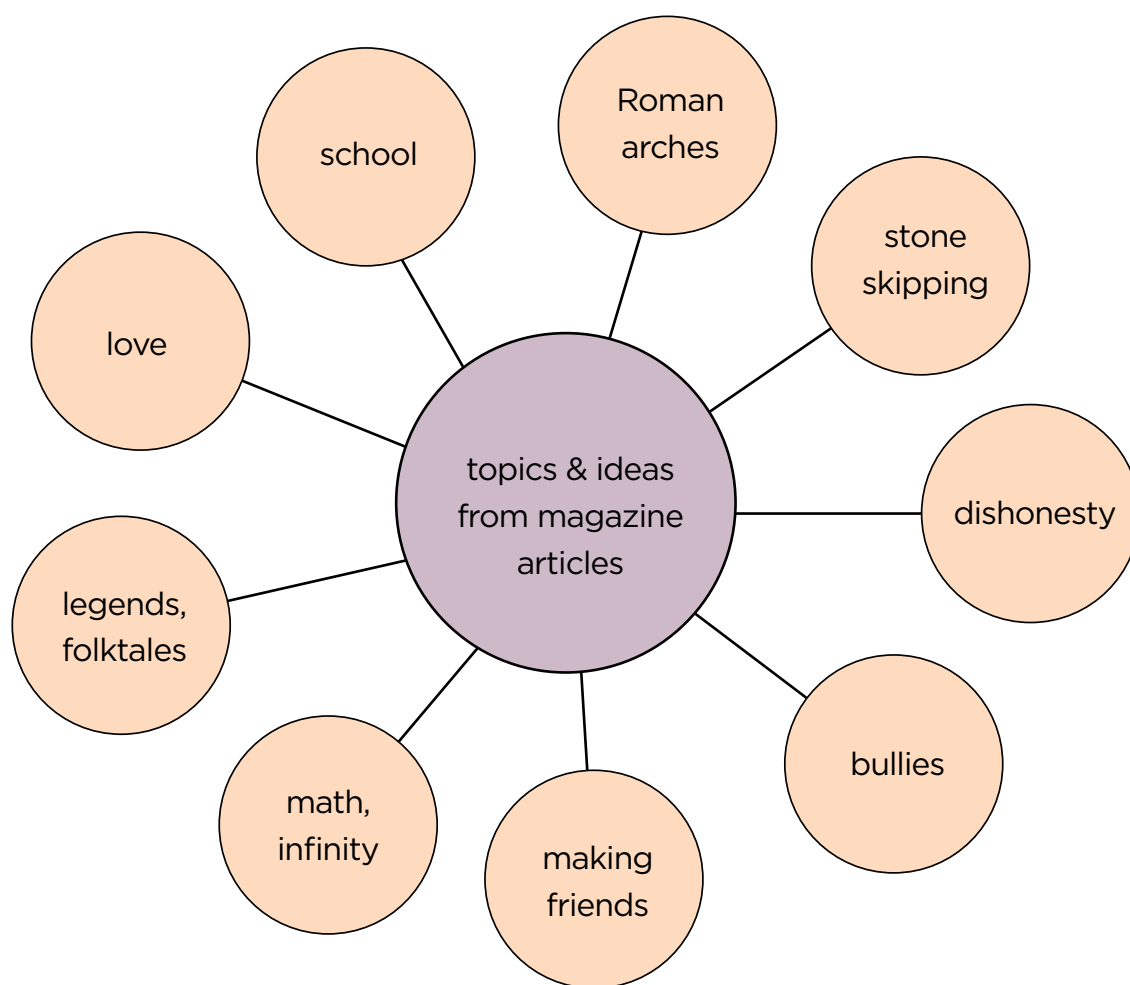
## EXPLORATORY LEARNING - FLEXIBLE MINI-UNIT DESIGN

ENGAGE

READ FOR A  
PURPOSE

APPLY

**ENGAGE:** Engage students in the topic of timeless ideas by first reviewing the Essential Question: How can ideas, themes, and stories connect people from different times and places? Next, brainstorm with students the topics and ideas found in the various magazine articles. Record topics and ideas in a chart like the one below.



**READ FOR A PURPOSE**

**INTRODUCE THE ACTIVITY: TIME CAPSULE** Remind students that the articles in the magazine tell about ideas that have been important for a long time. Explain that they will choose two of these ideas and two of their own ideas to include in a time capsule for students of the future to read. If necessary, explain that a time capsule is a container that is filled with items from the present time and that is meant to be opened by people in the future.

**RETURN TO THE TEXT:** Explain to students that before they can create their time capsules, they must reread some of the magazine articles in order to find ideas or advice for students in the distant future. Using the topics and ideas they chose from the Engage activity to guide them, tell students to:

- reread the texts connected to their topics
- look for ideas to write about by focusing on characters' words, actions, and mistakes, story themes and morals, and main ideas in nonfiction texts
- use a graphic organizer like the one below to record information  
(See the *Story Details* organizer on page 18).

To help students fill out this graphic organizer, share the sample text below.

Topic: Making Friends		
Text Title	Information, ideas, advice found in text	Page number where the material is found
<3 Quest	Narrator says, "When attempting to make allies with an unfamiliar faction, show confidence, show charisma, show something you have that is super awesome."	p. 5
Topic: Roman arches		
Text Title	Information, ideas, advice found in text	Page number where the material is found
Build an Arch, Roman Style	"Ancient Romans were the first great arch builders. They realized that it's impossible to make an arch without supporting it as it goes up."	p. 16



**APPLY: A BLAST FROM THE PAST** Now that students have gathered information from the magazine articles, they are ready to create their time capsules, working individually or in pairs. You may want to have students bring in boxes, jars, or other containers they can use to make their time capsules.

## Materials

- Items to use as time capsules—1 per student or pair
- Markers, colored pencils
- Scissors
- Glue
- Drawing paper
- Writing paper

**Step 1: Build Background** If possible, show students a picture of a time capsule and remind them that they will be filling their capsules with information and advice based on ideas from the magazine articles and from their own experiences.

**Step 2: Brainstorm** Ask students to brainstorm ideas of their own to include in their capsules. Pose the following questions to spark a class discussion on what students might want to say to kids in the future. Allow students time to develop their ideas.

- What is it like to be a kid/student in 2016?
- What might students in the future find interesting about life in 2016?

**Step 3: Draft** Have students draft their time capsule messages on a piece of paper. Students should:

- Use the notes they made in the Return to the Text activity to write the first two messages.
- Rewrite any direct quotes from texts in their own words.
- Use their own experiences and ideas to write two more messages.
- Revise and edit their messages.
- Use the Time Capsule organizer on page 19 to record their final messages.

**Step 4: Decorate and Fill the Capsule** Have students use the art supplies to decorate their time capsules with words, pictures, and slogans. When the capsules are ready, students can place their messages inside.

**Step 5: Share** Have students take turns reading their messages aloud to the class. Invite students to comment on and discuss their own messages as well as their classmates'.



NAME: \_\_\_\_\_

## STORY DETAILS

Topic:		
Text Title	Information, ideas, advice found in text	Page number where the material is found

Topic:		
Text Title	Information, ideas, advice found in text	Page number where the material is found



NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

## TIME CAPSULE

### 1. Message from a text

Text Title: \_\_\_\_\_

### 2. Message from a text

Text Title: \_\_\_\_\_

### 3. Message from me

### 4. Message from me

NAME: \_\_\_\_\_

## ELEMENTS OF A LEGEND

Fill in the chart below with information from “The Legend of the Giant’s Causeway.”

Remember that legends:

- are made-up stories generally believed to be based on something real.
- have a main character who faces a problem heroically.
- involve a hero who has unusual abilities and characteristics.

Elements in “The Legend of the Giant’s Causeway”	
What part of “The Legend of the Giant’s Causeway” is real?	
Who is the hero?	
What problem does the hero face?	
What unusual abilities and characteristics does the hero have?	



## Meeting State and National Standards: Core Instructional Concepts

The articles in this magazine provide a wealth of opportunities for meeting state and national instructional standards. The following pages contain charts listing Core Instructional Concepts for each of three curricular areas: English Language Arts, Science, and Social Studies.

### USING THE STANDARDS CHARTS

#### ELA

Corresponding CCSS anchor standards have been listed next to each item on the Core Instructional Concepts chart. To customize the chart, add your own grade, state, or district standards in the last column. Match the concepts and standards from the chart to the activities on each page of the Teacher's Guide to complete your lesson plans.

#### SOCIAL STUDIES

Content Concepts in each Article Guide are based on Dimension 2 of the CS Framework for Social Studies: Applying Disciplinary Concepts and Tools. Use the last column in the accompanying chart to correlate these concepts to your state or district standards.

#### SCIENCE

Content Concepts in each Article Guide are drawn from the Three Dimensions of the Next Generation Science Standards. You will also find connections to these concepts within individual close-reading questions.

#### MATH

Content Opportunities for math activities are provided in the Cross-Curricular extensions on each Article Guide page.

## CORE INSTRUCTIONAL CONCEPTS: READING, LITERATURE, AND LANGUAGE ARTS

SKILLS AND CONCEPTS	CCSS ANCHOR STANDARD	CORRESPONDING STANDARD
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### KEY IDEAS AND DETAILS

<b>Read closely to determine what a text says explicitly.</b>	Reading 1	
<b>Make logical inferences</b> to determine what the text communicates implicitly.	Reading 1	
<b>Cite specific textual evidence to support conclusions</b> drawn from the text.	Reading 1	
<b>Determine central ideas or themes</b> of a text and analyze their development.	Reading 2	
<b>Summarize key supporting details and ideas.</b>	Reading 2	
Analyze how <b>individuals, events, and ideas develop and interact</b> over the course of a text.	Reading 3	

### CRAFT AND STRUCTURE

<b>Interpret words and phrases</b> as they are used in a text.	Reading 4	
<b>Determine technical, connotative, and figurative meanings.</b>	Reading 4	
Analyze how specific <b>word choices</b> shape meaning or tone.	Reading 4	
Analyze the <b>structure of texts</b> (sequence, cause/effect, compare/contrast, problem/solution)	Reading 5	
Recognize the <b>genre, key elements, and characteristics</b> of literary texts.	Reading 5	
Assess how <b>point of view or purpose</b> shapes the content and style of a text.	Reading 6	
Analyze how an <b>author's style and tone</b> affects meaning.	Reading 6	

### INTEGRATION OF KNOWLEDGE AND IDEAS

<b>Integrate and evaluate content</b> presented in diverse media and formats.	Reading 7	
<b>Identify and evaluate the argument and claims</b> in a text.	Reading 8	
<b>Analyze how two or more texts address similar themes or topics.</b>	Reading 9	

### WRITING

Write <b>arguments</b> to support claims, using valid reasoning and relevant and sufficient evidence.	Writing 1	
Write <b>informative/explanatory texts</b> to examine and convey complex ideas and information clearly and accurately.	Writing 2	
Write <b>narratives</b> to develop real or imagined experiences or events.	Writing 3	
<b>Draw evidence</b> from literary or informational texts to support analysis, reflection, and research.	Writing 9	
Conduct short as well as more sustained <b>research projects</b> .	Writing 10	





# CORE INSTRUCTIONAL CONCEPTS: SOCIAL STUDIES

## C3 INQUIRY ARC DIMENSION 2: APPLYING DISCIPLINARY CONCEPTS AND TOOLS

## STATE OR DISTRICT STANDARD

### CIVICS

Analyze the <b>origins, functions, and structure of different governments</b> and the <b>origins and purposes of laws</b> and key constitutional provisions.	
Summarize core <b>civic virtues and democratic principles</b> .	
Evaluate <b>policies</b> intended to address social issues.	

### ECONOMICS

Evaluate the <b>benefits and costs of individual economic choices</b> .	
Analyze <b>economic incentives</b> , including those that cause people and businesses to specialize and trade.	
Explain the <b>importance of resources</b> (i.e. labor, human capital, physical capital, natural resources) in <b>methods of economic production</b> .	
<b>Explain</b> the <b>functions of money</b> in a market economy.	
<b>Explain</b> the importance of <b>competition</b> in a market economy.	
Apply economic concepts (i.e. interest rate, inflation, supply and demand) and theories of <b>how individual and government actions affect the production of goods and services</b> .	
<b>Analyze economic patterns</b> , including activity and interactions between and within nations.	

### GEOGRAPHY

<b>Construct and use maps</b> and other graphic representations (i.e. images, photographs, etc.) of different places.	
<b>Explain cultural influences</b> on the way people live and modify and adapt to their environments.	
<b>Analyze places, including their physical, cultural and environmental characteristics</b> and how they change over time.	
Analyze <b>movement of people, goods, and ideas</b> .	
<b>Analyze regions, including how they relate to one another</b> and the world as a whole from a political, economic, historical, and geographic perspective.	

### HISTORY

Interpret historical context to <b>understand relationships among historical events or developments</b> .	
Evaluate historical events and developments to identify them as <b>examples of historical change and/or continuity</b> .	
<b>Analyze perspectives</b> , including factors that influence why and how individuals and groups develop different ones.	
<b>Evaluate historical sources</b> , including their reliability, relevancy, utility, and limitations.	
<b>Analyze causes and effects</b> , both intended and unintended, of historical developments.	



# CORE INSTRUCTIONAL CONCEPTS: SCIENCE

## DIMENSION 1: SCIENTIFIC AND ENGINEERING PRACTICES

Dimension 1 focuses on the practice of science, and how knowledge is continually adapted based on new findings. The eight practices of the K-12 Science and Engineering Curriculum are as follows:

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

## DIMENSION 2: CROSSCUTTING CONCEPTS

Dimension 2 provides an organizational schema for integrating and interrelating knowledge from different science domains. The eight NGSS Crosscutting Concepts are as follows:

- Patterns
- Similarity and Diversity
- Cause and Effect
- Scale, Proportion, and Quantity
- Systems and System Models
- Energy and Matter
- Structure and Function
- Stability and Change

## DIMENSION 3: DIMENSIONS AND DISCIPLINARY CORE IDEAS

Dimension 3 presents a contained set of Disciplinary Core Ideas to support deeper understanding and application of content. The following chart details Core Ideas for curriculum, instructional content, and assessments within four domains.

LIFE SCIENCE	PHYSICAL SCIENCE	EARTH SCIENCE	SPACE SYSTEMS
<ul style="list-style-type: none"><li>• Structure and Function of Living Things</li><li>• Life Cycles and Stages</li><li>• Reproduction &amp; Inherited Traits</li><li>• Animals</li><li>• Plants</li></ul>	<ul style="list-style-type: none"><li>• Forces and Interactions</li><li>• Energy</li><li>• Light</li><li>• Sound</li><li>• Electricity/ Magnetism</li><li>• Matter</li><li>• Waves</li><li>• Heat</li><li>• Chemistry</li><li>• Information Processing</li></ul>	<ul style="list-style-type: none"><li>• Weather</li><li>• Climate</li><li>• Rocks &amp; Soil</li><li>• Erosion and Weathering</li><li>• Landforms</li><li>• Water</li><li>• Oceans</li><li>• History of Earth</li><li>• Plate Tectonics</li><li>• Volcanoes, Earthquakes, and Tsunamis</li></ul>	<ul style="list-style-type: none"><li>• Solar System</li><li>• Planets</li><li>• Moon</li><li>• Sun</li></ul>

