

# Teacher's Guide

# Ladybug™

the magazine for young children



## MAGAZINE ARTICLES

Max and Kate . . . . .	3
Contemporary Realistic Fiction	440L
My Hair Grew. . . . .	8
Fantasy	440L
Fiddler in the Moonlight . . . . .	19
Lyrical Poem	
The City Mouse and the Garden Mouse . . . . .	20
Narrative Poem	
Ready for Rain. . . . .	28
Contemporary Realistic Fiction	710L

From Cricket Media



**Teacher’s Guide for *Ladybug*:  
September 2016**

Using This Guide . . . . . **2**

Skills and Standards Overview . . . . . **3**

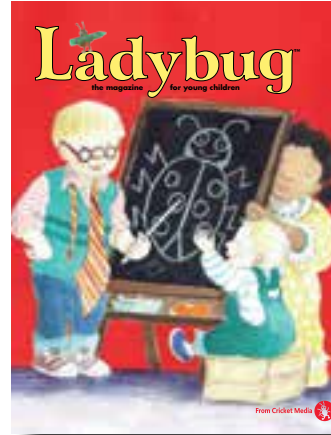
Article Guides . . . . . **4**

Cross-Text Connections . . . . . **9**

Mini-Unit . . . . . **10**

Graphic Organizers . . . . . **13**

Appendix: Meeting State and  
National Standards . . . . . **16**



**OVERVIEW**

*In this magazine, readers will encounter an assortment of interesting and fun characters.*

***Ladybug: September 2016***

*features stories and poems about friends and families and the ways they spend time with each other.*

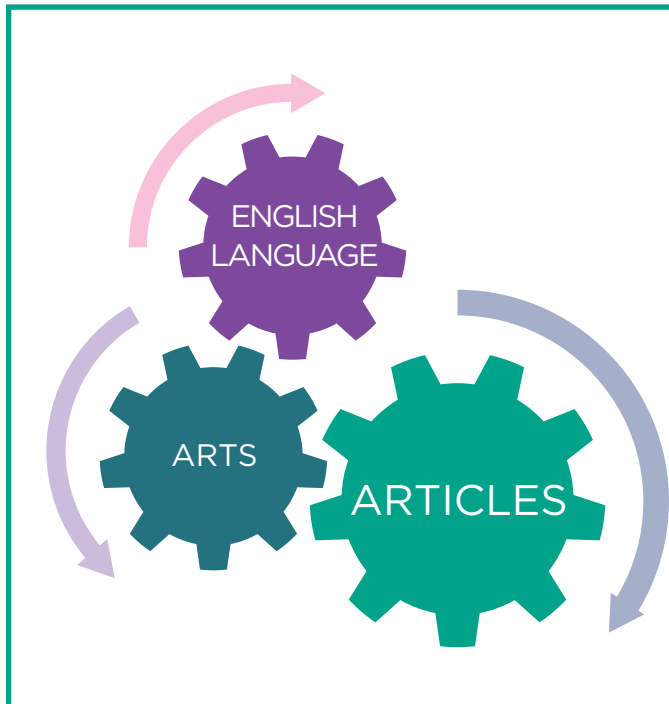
**ESSENTIAL QUESTION:**

***How do authors bring their characters to life?***

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 - 8

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 10 - 12

Magazine articles can easily be 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 do authors bring their characters to life?

MAGAZINE ARTICLES	CORE CONTENT CONCEPT	LITERACY SKILLS	CORRESPONDING CCSS ANCHOR STANDARDS
<b>Max and Kate</b> Contemporary Realistic Fiction	Authors use descriptive words and the characters' words and actions to bring characters to life.	<ul style="list-style-type: none"> <li>• Close Reading</li> <li>• Make Inferences</li> <li>• Describe Characters</li> <li>• Retell a Story</li> </ul>	<i>Reading 1, 2 &amp; 3</i> <i>Speaking &amp; Listening 4 &amp; 6</i>
<b>My Hair Grew</b> Fantasy	A character's actions tell a lot about him or her.	<ul style="list-style-type: none"> <li>• Close Reading</li> <li>• Analyze Word Choice</li> <li>• Interpret Visual Information</li> <li>• Write Narrative Texts</li> </ul>	<i>Reading 1, 2, 3, 4 &amp; 7</i> <i>Writing 3</i>
<b>Fiddler in the Moonlight</b> Lyrical Poem	Poets use sensory words and phrases to help readers visualize events, things, or characters.	<ul style="list-style-type: none"> <li>• Close Reading</li> <li>• Draw Conclusions</li> <li>• Interpret Visual Information</li> <li>• Write Narrative Texts</li> </ul>	<i>Reading 1, 4 &amp; 7</i> <i>Writing 3</i>
<b>The City Mouse and the Garden Mouse</b> Narrative Poem	Poems can tell a story and compare and contrast two things.	<ul style="list-style-type: none"> <li>• Close Reading</li> <li>• Identify Main Ideas</li> <li>• Analyze Text Structure</li> <li>• Research and Write</li> </ul>	<i>Reading 1, 2 &amp; 5</i> <i>Writing 2 &amp; 7</i>
<b>Ready for Rain</b> Contemporary Realistic Fiction	Stories can feature animals, objects, and people.	<ul style="list-style-type: none"> <li>• Close Reading</li> <li>• Analyze Purpose</li> <li>• Analyze Word Choice</li> <li>• Collaborate</li> </ul>	<i>Reading 1, 4 &amp; 6</i> <i>Speaking &amp; Listening 1</i>

**Comparing Texts:** CCSS Reading 9

**Mini-Unit:** CCSS Reading 1, Reading 7, Writing 3, Writing 9, Writing 10

# ARTICLE: Max and Kate

Magazine pages 3 - 7, Contemporary Realistic Fiction



Max and Kate are helping their parents clean out the garage. They find a chalkboard and other fun things and decide to play school.

## ESSENTIAL QUESTION

**How do authors bring characters to life?**

## CORE CONTENT CONCEPT

**English Language Arts** Authors use descriptive words and the characters' words and actions to bring characters to life.

## CROSS-CURRICULAR EXTENSION

**Math** Count the things that Max, Kate, and their parents find. Then group items and count the things in each group.

## KEY VOCABULARY

**garage (p. 3)** a place to park a car or store things

## PREPARE TO READ

Ask students if they have ever helped their parents clean out the garage, attic, or a closet. What types of things did they find? Were there funny things? Useful things? Record students' responses in a graphic organizer, such as a cluster diagram.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- What are Kate, Max, and their parents doing? *CCSS Reading 2*
- What are some of the things Max, Kate, and their parents find? Use details to support your answer. *CCSS Reading 1*
- What types of things does the family do? Use details to explain what they do. *CCSS Reading 1*

### Craft and Structure

- **Make Inferences** What is Kate's idea? Why do you think she has this idea? *CCSS Reading 1*
- **Describe Characters** What words and phrases does the author use to describe Kate and Max? How do Kate's and Max's words help you understand them? *CCSS Reading 3*

## SPEAKING AND LISTENING

**Retell a Story** Work with a partner and take turns retelling the story. Be sure to include important events and details. Ask and answer questions when you have finished the story.



A creature gets a haircut, but he doesn't like it. It's too short. So he blows and blows on his thumb to make his hair grow long. Suddenly his hair is wrapped all the way around Earth. He gets another haircut, and this time, it's not too short.

## ESSENTIAL QUESTION

**How do authors bring characters to life?**

## CORE CONTENT CONCEPT

**English Language Arts** A character's actions tell a lot about him or her.

## CROSS-CURRICULAR EXTENSION

**Science** Go to the library and find out facts about Earth's size. How long would something have to be to wrap around Earth?

## KEY VOCABULARY

**accidentally (p. 10)** happening in a way that wasn't planned

**crummy (p. 11)** not good or happy

## PREPARE TO READ

Ask students about their experiences with haircuts. Ask questions such as: *Do you remember your first haircut? What is it like to get a haircut? Do you like going to get haircuts? Why? Have you ever had a haircut you didn't like? Why?* Share stories about your own haircuts to get the discussion started.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- What is the main idea of this story? What details support this main idea? *CCSS Reading 2*
- What does the creature decide to do? What happens? Use details to support your answer. *CCSS Reading 1 & 3*
- What does the creature do to solve his problem? Use details from the text to support your answer. *CCSS Reading 1 & 3*

### Craft and Structure

- **Analyze Word Choice** On page 12, the creature states that his "hair crawled." Is this description meant to be literal? What emotions does the use of this phrase cause you to have? *CCSS Reading 4*
- **Interpret Visual Information** What do you learn from the illustrations that you don't learn from the story? How do the illustrations help you understand the story? *CCSS Reading 7*

## WRITING

**Write Narrative Texts** Write a different ending to the story. Think about the problem and other ways it could be solved. Draw a picture to go with your ending.



A cricket chirps all night long, and the speaker asks for it to play another melody.

## ESSENTIAL QUESTION

**How do authors bring characters to life?**

## CORE CONTENT CONCEPT

**English Language Arts** Poets use sensory words and phrases to help readers visualize events, things, or characters.

## CROSS-CURRICULAR EXTENSION

**Science** Use books or the internet to learn more about crickets. Then illustrate a real or fictional cricket.

## KEY VOCABULARY

**chirping (p. 19)** making a high-pitched sound

**twitching (p. 19)** moving with a sudden motion

**melody (p. 19)** song

## PREPARE TO READ

Show students pictures of crickets. Ask students if they have ever seen or heard a cricket. Ask students to describe the sound crickets make. Then play a recording of a cricket. Explain how crickets make that sound.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- What does the speaker ask the cricket? Use details from the text to support your answer. *CCSS Reading 1*
- Think about the words the speaker uses. What do you see when you hear these words? *CCSS Reading 4*
- Identify the words that rhyme. Why do you think the poet used rhyming words? *CCSS Reading 4*

### Craft and Structure

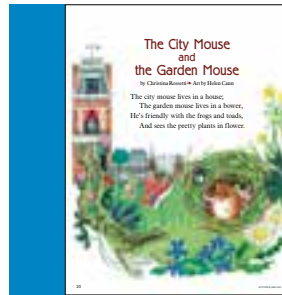
- **Draw Conclusions** Why do you think the speaker asks the cricket to play another song? What details from the poem support your conclusion? *CCSS Reading 1*
- **Interpret Visual Information** Describe the cricket. How does this illustration support the poem? *CCSS Reading 7*

## WRITING

**Write Narrative Texts** Write a short poem about an insect or animal. Use descriptive words and follow the same rhyming pattern as this poem. Read your poem to a partner or the class.

# ARTICLE: The City Mouse and the Garden Mouse

Magazine pages 20 - 21, Narrative Poem



A city mouse and a garden mouse are compared in this poem. The speaker tells where they live and what they eat.

## ESSENTIAL QUESTION

**How do authors bring characters to life?**

## CORE CONTENT CONCEPT

**English Language Arts** Poems can tell a story and compare and contrast two things.

## CROSS-CURRICULAR EXTENSION

**Research** Find out more about mice. Draw pictures of mice and share what you learned with the class.

## KEY VOCABULARY

**bower (p. 20)** a shady place in a garden

**grudge (p. 21)** to give in a way that is not willing

**stalks (p. 21)** thick stems of a plant

## PREPARE TO READ

Create a word web on the board with the word “mouse” in the center. Ask students what they know about mice—what they look like, where they live, what they eat, etc. Record students’ responses in the web. Then tell students they are about to read a poem about two mice.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- Where does the city mouse live? Where does the garden mouse live? Use details from the text to support your response. *CCSS Reading 1*
- What does the garden mouse see? What does it eat? Use details from the text to support your response. *CCSS Reading 1*
- What does the city mouse eat? Use details from the text to support your response. *CCSS Reading 1*

### Craft and Structure

- **Identify Main Ideas** What is the main idea of this poem? How do you know? Cite details from the poem to support your answer. *CCSS Reading 2*
- **Analyze Text Structure** The author follows a compare and contrast structure. How do you think this structure helps the author communicate the main idea of this poem? *CCSS Reading 5*

## WRITING

**Research and Write** Work with a partner to research the differences between a city mouse and a garden mouse. Then, write a short summary of these differences. Think about what they do and see and what problems they might have.





On a warm day, the wind starts blowing. The trees and animals feel the wind and know a storm is coming. Then a woman feels the wind and calls her children home. They read while the storm rages.

## ESSENTIAL QUESTION

**How do authors bring characters to life?**

## CORE CONTENT CONCEPT

**English Language Arts** Stories can feature animals, objects, and people.

## CROSS-CURRICULAR EXTENSION

**Writing** Write a short poem about the wind or rain.

## KEY VOCABULARY

**crests (p. 28)** the highest parts of a wave

**bellow (p. 29)** to make a deep, low sound

**billow (p. 30)** to be pushed outward by air

**ferocious (p. 30)** very strong or severe

## PREPARE TO READ

Ask students about their experiences with rain or thunderstorms. Encourage students to describe what it looks like, sounds like, and feels like. Then tell them that some pets do not like thunderstorms.

## CLOSE READING AND TEXT ANALYSIS

### Key Ideas

- How do the gulls, cows, and flowers react to the wind? Use details to support your response. *CCSS Reading 1*
- What does the woman do when she smells the rain? Use details to support your response. *CCSS Reading 1*
- What do the children do during the storm? How do they feel? Use details to support your response. *CCSS Reading 1*

### Craft and Structure

- **Analyze Purpose** What is the author trying to communicate through this story? How does this affect what the characters do and say? *CCSS Reading 6*
- **Analyze Word Choice** Why does the author have the animals and plants say, "Storm is coming"? Are they really saying this? How does the author want the reader to feel? *CCSS Reading 4*

## WRITING

**Collaborate** Work with a partner to verbally summarize the story. Be sure to discuss the main events, characters, and important details.

## CROSS-TEXT CONNECTIONS

**SYNTHESIZE:** Guide students to compare articles 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 “Max and Kate” and “My Hair Grew.” How are the texts the same? How are they different? How are the characters the same or different?
- Find stories and poems that feature animals. What do the animals do? How are the animals alike and different?
- Compare the rhyme scheme in “Fiddler in the Moonlight” and “The City Mouse and the Garden Mouse.” Which poem did you like better? Why?
- Think about the characters in “My Hair Grew” and “Ready for Rain.” What problems do the characters face? How do they solve their problems?
- Think about the stories “Max and Kate” and “Ready for Rain.” Both stories have mothers and children.
  - What do the mothers do with their children?
  - How are their actions similar and different?
  - How do the illustrations help you understand the mothers and children?

## EXPLORATORY LEARNING - FLEXIBLE MINI-UNIT DESIGN

### ENGAGE

Hold up a comic book and pass some out to the class. Ask students if they have ever read a comic book. They are a lot of fun to read because each frame shows what the characters are doing and saying. Comic books can even have “sound effects.” Comic books are different from a regular story because the action is told in frames. The characters talk a lot, and the setting and what the characters do are shown in the pictures. Sometimes there is a box that tells readers what is happening.

ENGAGE

READ FOR A PURPOSE

APPLY

Engage students in the topic of comic books by telling them that they will create their own comic to retell one of the stories in this issue. Direct students to page through the magazine and think about which stories had interesting characters that they want to bring to life. Review the parts of a comic book with students, such as the dialogue in bubbles, narration in boxes, “sound effects” on the page, and the actions and settings in the pictures. To help students make their characters interesting, model a two-column character chart with “Max and Kate.” Tell students they will fill out a character chart for the story their group chooses.

Character	What the Character Says	What the Character is Like	What the Character Does
Max			
Kate			

## READ FOR A PURPOSE

**INTRODUCE THE ACTIVITY: CREATE A COMIC BOOK** Students will work in groups to turn one of the stories into a comic book. Students will fill out their character charts first so they understand what the characters are like and what they do and say. Finally, they will make a comic book about the story. Each frame in the storyboard should show what the characters are doing and saying. The story should be told in order.

Allow students to choose one of the three stories from the issue. Assign students to each group, or allow them to select on their own.

- Group 1: “Max and Kate”
- Group 2: “My Hair Grew”
- Group 3: “Ready for Rain”

**RETURN TO THE TEXT:** Explain to students that before they can create their comic books, they must gather information about the characters, events, and setting to answer the Essential Question: How do authors bring characters to life? Distribute the Character Chart and Beginning/Middle/End graphic organizers on pages 14 and 15 to help students record details about their characters and the events. Provide the following guidance for each group:

- Group 1: “Max and Kate”

Look for things Max, Kate, and their parents find. Write down where the characters are, what each character does and says, and what events take place. Remember that your comic book should have a beginning, middle, and end.

- Group 2: “My Hair Grew”

Write down all the characters and what they do and say. Think about how you can show the events with action words and pictures. The comic book should include all the important events and have a beginning, middle, and end.

- Group 3: “Ready for Rain”

Make a list of all of the characters. Remember that characters can be objects or animals. Describe what each character does and says. List the events in order so there is a beginning, middle, and end. Be sure to think about how you can show what the characters are doing.

**APPLY: CREATE A COMIC BOOK** Now that students have reread the stories, they will plan their comic books. Distribute poster board and markers so students can create their comic books.

**Materials:** Poster board, markers or crayons

### STEP 1: PLAN

Guide each group in using their Character Chart and Beginning/Middle/End graphic organizers to plan their comic books. Instruct students to use the information from these organizers to fill in the Comic Book Outline graphic organizer.

- **Group 1: “Max and Kate”**

With your guidance, members of this group will write a comic book based on the story. They should follow the story chronologically. Tell students to create dialogue for each character: Max, Kate, Charlie, Mother, and Father. Note that although the mother does not have dialogue, they can create dialogue for her so she is part of the story. For each panel they should show what the characters are doing and saying. Remind students that part of the task is to bring the characters to life through words, actions, and visuals.

- **Group 2: “My Hair Grew”**

This group will focus on the story “My Hair Grew.” Make sure they understand each character and all the events. Remind them that even though the father doesn’t have a lot of dialogue in the story, he could have more in the comic book. They may also consider giving Sheila more dialogue to make the story more interesting.

- **Group 3: “Ready for Rain”**

Because this story is longer and features people, animals, and objects, students may find it a bit more challenging. Help students list all of the characters and what each character does because they will want to show these actions in their comic books. They can add sound effects like “crash” for the waves and “moo” for the cows.

### STEP 2: CREATE

Allow time for each group to use their Comic Book Outline graphic organizer to create the final draft of their comic on poster board. Assist students with creating any sketches or drawings, if necessary.

### STEP 3: PRESENT & DISPLAY

After students have finished their project, have them present their comic books to the class or another group. Then, hang the posters in the classroom so students can see them more closely.



## CHARACTER CHART

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

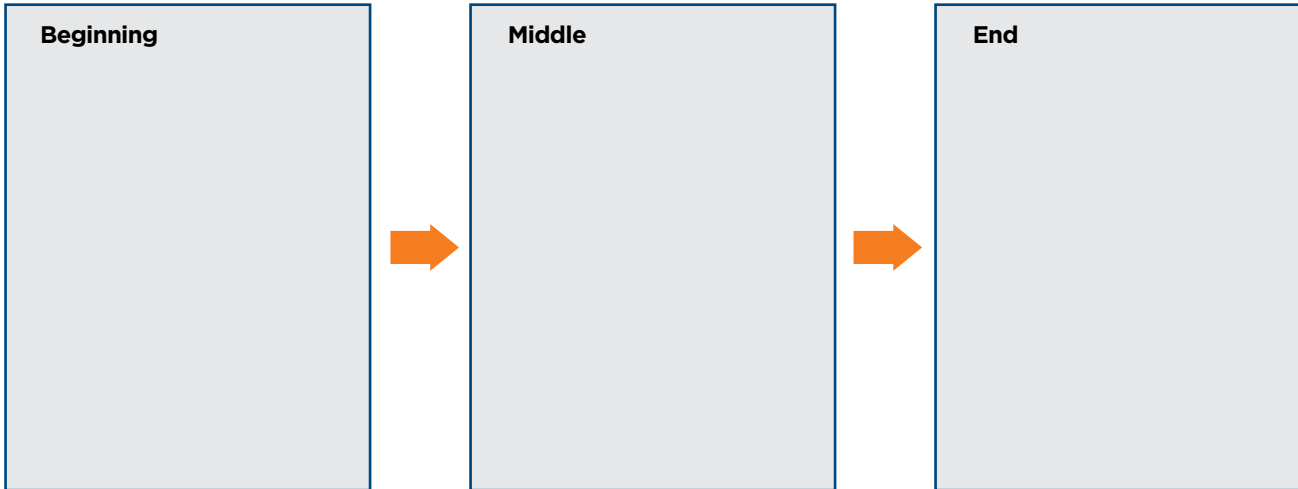
STORY:

Character	What the Character Says	What the Character is Like	What the Character Does



## BEGINNING/MIDDLE/END

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



# COMIC BOOK OUTLINE

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

In each box, draw a sketch of the scene and the characters in it. Then, insert text describing what they say or do.

<b>Scene 1</b>	<b>Scene 2</b>	<b>Scene 3</b>
<b>Scene 4</b>	<b>Scene 5</b>	<b>Scene 6</b>
<b>Scene 7</b>	<b>Scene 8</b>	<b>Scene 9</b>



## 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
---------------------	----------------------	------------------------

## 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.

<b>LIFE SCIENCE</b>	<b>PHYSICAL SCIENCE</b>	<b>EARTH SCIENCE</b>	<b>SPACE SYSTEMS</b>
<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>

