Teacher's Supplement

arts & sciences for

kids

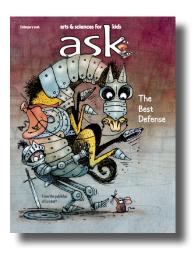
MAGAZINE ARTICLES

February 2016

| Animal Defense Academy |
|----------------------------------|
| Arthur's Amazing Armor |
| Dog Bully |
| They Made Me Do It and I'm Sorry |
| Grandfather Gandhi |

The Best Defense

| Teacher's Guide for <i>Ask February</i> 2016 |
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OVERVIEW

In this magazine, readers will learn about safety and the different ways people and animals defend themselves. Ask February 2016 includes

information about animal defenses and how people solve problems to create a safer world.

ESSENTIAL QUESTION:

What defenses do people and animals have to protect themselves from threats and why are these defenses important?

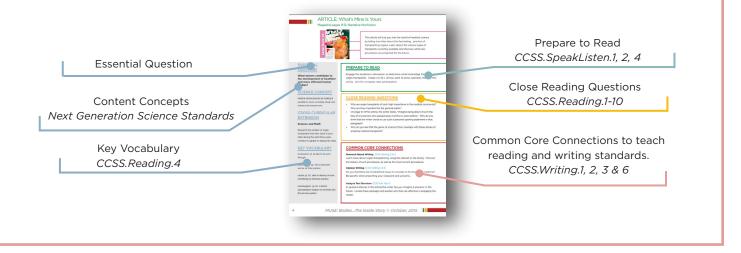


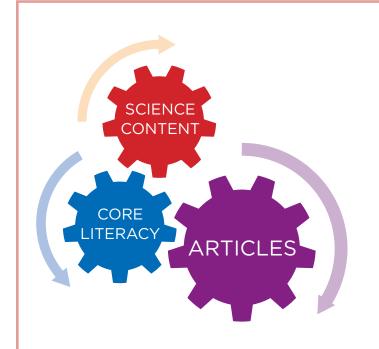
Using this Guide

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

READ MULTIPLE ARTICLES PAGES 4 - 8

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





TEACH A MINI-UNIT PAGES 10 - 12

Magazine articles can be easily grouped to make cross-text connections and comparisons. Our Common Core mini-unit guides students to read and discuss multiple articles and integrate ideas and information. (CCSS.Reading.9) Discussing multiple articles (CCSS.SpeakListen.1, 2, 4) prepares students to write texts to share and publish in a variety of ways. (CCSS. Writing.2)



READING

Core literacy concepts, such as the ones found in the Common Core State Standards, help students access social studies and science content. Integration of both literacy thinking and content study offers students a great way to become experts in reading informational text and literature for content knowledge. This guide provides questions to cover many core literacy concepts.

Draw Inferences (CCSS. InfoText.1) Describe Relationships (CCSS.InfoText.3) Analyze Text Structure (CCSS.InfoText.5) Interpret Visual Information (CCSS.InfoText.7) Summarize (CCSS.InfoText.2) Determine Word Meaning (CCSS.InfoText.4) Understand Author's Point of View (CCSS.InfoText.6) Explain Reasons and Evidence (CCSS.InfoText.8)

FOCUS STANDARD: CCSS. InfoText 9: Integrate Ideas and Information:

Have students read multiple articles on the same topic from this magazine to build knowledge, and make cross-text comparisons. See ideas on Cross-Text Connections on page 13 of this guide.

SPEAKING AND LISTENING

Use the articles in this magazine to spark meaningful discussions in person and online. Encourage deeper discussions where students can become topic experts. (CCSS.SpeakListen.1, 2, 4)

DISCUSSION OPTIONS-IN CLASS OR ONLINE

Article Clubs: Form small reading groups of students reading the same article. Have students discuss the content, share ideas, and critically evaluate the text.

Jigsaw Clubs: Form small reading groups of students reading *different* articles. Invite students to share information and resources with each other.

Inquiry Discussions: Pose and open-ended questions that engage students and prompt them to form an opinion and support it with reasons found directly in the text.

Whole Class: Launch with an essential question. Encourage students to find and share evidence from different articles to build a greater understanding of the question.

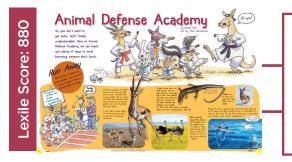
WRITING

Use the articles in this magazine to prompt **informative/explanatory writing** (*CCSS.Writing.2*). Have students use evidence from the texts to share information about social studies, language arts, or science content in the articles. See the **Mini-Unit** section of this guide (pgs 10 – 12) as well as the **Article Pages** (pgs 4 - 8) for ways to incorporate writing into your instruction.



ARTICLE: Animal Defense Academy

Magazine page 6, Expository Nonfiction



Watch out! Some animals make it clear for others to stay away by how they protect themselves. Other animals have more subtle ways of defending themselves. Find out how animals use their bodies and behaviors to keep safe.

ESSENTIAL QUESTION

What defenses do people and animals have to protect themselves from threats and why are these defenses important?

SCIENCE CONCEPT

Animals have adapted to survive through unique defense and protection mechanisms.

CROSS CURRICULAR EXTENSION

Art and Science

Create an imaginary animal that uses a combination of protective features of the animals presented in the article. Draw a picture or make a 3-D model of your animal. Describe the animal's defenses.

KEY VOCABULARY

carnivore (p. 6) an animal that eats meat

champion (p. 9) someone or something (such as a team or an animal) that has won a contest or competition, especially in sports

decoy (p. 7) something that that attracts someone's attention so they will not notice someone or something else

PREPARE TO READ

Ask students to share what animals they know to avoid getting too close to. Discuss why they know to stay away. Generate a list of the different defenses animals use.

CLOSE READING QUESTIONS

- How did the author organize the article to help you categorize and understand the information?
- What is the difference in animal defenses between those that are colorful and those that blend into their environment?
- What is the main idea of this article? Underline three supporting details.

COMMON CORE CONNECTIONS

Comparing Information CCSS Info Text 1, 2, 3

Create a two-column chart. List all of the animals discussed in the article in the first column, and the ways they defend themselves in the second. Compare and contrast this information in small group discussions.

Research-Based Writing CCSS Writing 2 & 6

Choose a different animal, not included in the article, and research to learn more about its life, threats, and defenses. Add your information to the chart created in the previous activity.

Explain Opinions CCSS Speaking & Listening 1 & 4

Choose an animal defense you would like to have and offer reasons for your choice.







ARTICLE: Arthur's Amazing Armor

Magazine page 12, Expository Nonfiction



Picture a knight in shining armor. How does this armor protect the knight? Did you know there are actually many different kinds of armor? Find out how people around the world have used local materials to create protective outfits.

ESSENTIAL QUESTION

What defenses do people and animals have to protect themselves from threats and why are these defenses important?

SCIENCE CONCEPT

Engineering and design are used together to create solutions to problems using available materials and resources.

CROSS-CURRICULAR EXTENSION

Social Studies

Create a timeline that shows the progression of different kinds of armor through time.

KEY VOCABULARY

ceramic (p. 13) made of clay that has been heated to a very high temperature so that it becomes hard

cushion (p. 12) to make (something, such as a fall or collision) less severe or painful; to soften or reduce the bad effect of (something)

rawhide (p. 13) he skin of a cow before it has been prepared or made into leather

rivet (p. 15) a special kind of metal bolt or pin that is used to hold pieces of metal together

PREPARE TO READ

Ask students to think about different kinds of armor and the purpose for wearing it. Discuss how people made armor and how it might be different in various parts of the world.

CLOSE READING QUESTIONS

- What characteristics of armor design did the author emphasize as important?
- What animal features do you find in armor? Cite examples described in the text.
- In what ways is the concept of armor used in contemporary products? Cite examples from the article. Then, draw on your own ideas.

COMMON CORE CONNECTIONS

Interpret Visual Information CCSS Info Text 7

This article includes illustrations to represent concepts. How do these pictures help you compare details about different kinds of armor?

Narrative Writing CCSS Writing 3

Write a narrative about an imagined ride in a self-driving car. Include details about the ride, how the car operates, and what it feels like to go somewhere without a driver.

Evaluate Ideas CCSS Reading 7

Make a list of all the different materials armor is made from in the article. Create a rating system for strength, flexibility, lightness, and durability. Discuss and rate each material based on your armor rating scale.







Magazine page 18, Cartoon





How can a dog be a bully? Find out what happens when there is bully behavior between children and a neighborhood dog.

ESSENTIAL QUESTION

What defenses do people and animals have to protect themselves from threats and why are these defenses important?

SCIENCE CONCEPT

People and animals use specific behaviors to defend themselves from real or imagined threats.

CROSS-CURRICULAR EXTENSION

Art

Create your own cartoon that shows a sequence of events where the character(s) feels threatened and how the situation is resolved without violence.

KEY VOCABULARY

tease (p. 19) to annoy or bother (an animal or person)

PREPARE TO READ

Ask children to share times when they may have been frightened by a dog. Talk about the best thing to do in that situation. Then, introduce the cartoon by stating, "Let's see what kind of choices these children make when they think a dog is being a bully."

CLOSE READING QUESTIONS

- What justification did the children give for teasing the dog?
- What is the author's message in this cartoon?
- Underline the cause and effect sequences in this story.

COMMON CORE CONNECTIONS

Draw Inferences CCSS Info Text 1

How does the adult feel about the children's behavior? Find evidence in the text and illustrations to explain why the author feels the way they do.

Interpret Visual Information CCSS Info Text 7

Study the cartoon illustrations. How do the drawings contribute to the information presented in the story? What new information can be learned by studying the facial expressions and body language of the characters?

Presentation of Knowledge and Ideas CCSS Speaking and Listening 4

In small groups, plan and present two short skits with characters facing a bully situation. The first skit should show what not to do, and the second what to do, to ensure the safety of each character.





ARTICLE: They Made Me Do It and I'm Sorry

Magazine page 20, Realistic Fiction



Have you ever done something just because every one else is? It is pretty common to get caught up with group behavior. In this story see what happens when two friends decide to act independently from others and follow their own beliefs.

ESSENTIAL QUESTION

What defenses do people and animals have to protect themselves from threats and why are these defenses important?

SOCIAL SCIENCE CONCEPT

Good citizens apply civic virtues such as respecting individuals' rights and cooperating with others.

CROSS-CURRICULAR EXTENSION

Science

Create a cause and effect chart to show the effect nonviolent actions have in making change.

KEY VOCABULARY

ignore (p. 20) to refuse to show that you hear or see (something or someone)

PREPARE TO READ

Ask students to share what it feels like to be ignored. Discuss how this can be a form of bullying. Now read to find out how a group of friends get on the wrong track and what can be done about it.

CLOSE READING QUESTIONS

- In what order did you read the sections of this article? Does the information from one section depend on the next?
- What is the main theme of this article? How do each of the sections relate to this theme?
- In what ways have people helped others follow them in their travels? Underline examples in the text.

COMMON CORE CONNECTIONS

Draw Inferences CCSS Info Text 1

What drives people to act as they do? Look through the story to identify the different influences that cause the main character to make choices. When is she most satisfied with her actions?

Describe Relationships CCSS Info Text 3

What are the connections or relationships between peer pressure and the social interactions described in the story? How do these relate to your experiences?

Narrative Writing CCSS Writing 3 & 6

Write a first person narrative fiction story about a similar situation where you need to divert the tactics of bullies and stand up for what you believe in.





ARTICLE: Grandfather Gandhi

Magazine page 22, Narrative Nonfiction



It's not easy to be a pacifist when you feel you are being treated unfairly. Find out how Gandhi's grandson struggles with nonviolence and how his grandfather helps him see how to practice nonviolence for peace.

ESSENTIAL QUESTION

What defenses do people and animals have to protect themselves from threats and why are these defenses important?

SCIENCE CONCEPT

Human behavior relies on emotions to react to different situations. People learn to control emotions to change outcomes.

CROSS-CURRICULAR EXTENSION

Social Studies

Role-play different responses to threatening situations. Ask students how their reactions to situations can affect the outcomes.

KEY VOCABULARY

fidget (p. 23) to move or act in a nervous or restless way

Idle (p. 24) trying to avoid work

Mahatma (p. 25) a person who is respected for being good, wise, and holy — used as a title of honor by Hindus

spectacles (p. 24) old-fashioned glasses

PREPARE TO READ

Introduce the students to Gandhi's strategies for peace. Explain that this is a story told by his grandson, who just like any child, struggles with a temper and how to handle difficult situations.

CLOSE READING QUESTIONS

- How can you tell this is a true story? Cite evidence from the text to support your answer.
- How do the illustrations contribute to story and add sensory detail? What specific knowledge do you gain from viewing the pictures?
- Find examples of how people worked together in the Sevagram community.

COMMON CORE CONNECTIONS

Explain Events Supported by Text Details CCSS Info Text 2 & 3

The author describes many different emotions he felt during his visit with his grandfather. List these feelings and the reasons he felt each emotion during his visit.

Research-Based Writing CCSS Writing 2 & 6

Learn more about Gandhi's influence on other nonviolent activists. Write an essay explaining this influence.

Key Ideas and Details CCSS Info Text 1 & 3

How does Gandhi help his grandson learn about conflict and peaceful outcomes? Find evidence in the story to support your answer.

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COMPARING TEXTS

CROSS-TEXT CONNECTIONS WITH MULTIPLE ARTICLES

COMPARE ARTICLES

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 the moral dilemmas the characters in "They Made Me Do It and I'm Sorry" (p. 20) and "Grandfather Gandhi" (p. 22) have about how to treat others and what solutions they come up with.
- Review the animal defenses described in "Animal Defense Academy" (p. 6). What kind of defenses do you see in the dog's behavior in "Dog Bully" (p. 18)?
- Using information from multiple articles, format a response to the essential question: What defenses do people and animals have to protect themselves from threats and why are these defenses important?
- Use multiple articles to explain how humans defend themselves. What kinds of choices do people make when they feel threatened?
- Find examples from multiple articles to help define the meaning of the word "defense." How can this word have different meanings depending on the specific circumstances?

EXPLORATORY LEARNING - FLEXIBLE MINI-UNIT DESIGN

The mini unit offers three levels of activities. The Engage section helps activate prior knowledge. Read and Compare Articles offers additional ways to use information from multiple articles that prepares students to integrate their ideas and knowledge in the Apply activity.

ENGAGE

READ AND COMPARE

APPLY

ENGAGE: This issue is about the different ways animals and people defend themselves. Prompt students to think of examples before or after reading the articles. Use the last column to include ways people defend themselves. After completing the chart, discuss the following questions:

- Which defenses require force or action?
- Which defenses can be categorized as avoidance or escape?
- Which defenses are the cleverest?

| Type of Animal | | | Human Beings |
|-------------------------|--|--|-----------------|
| The danger or threat | | | |
| What are the defenses? | | | |

EXAMPLES OF DEFENSE MECHANISMS

Share the essential question:

What defenses do people and animals have to protect themselves from threats and why are theses defenses important?

READ AND COMPARE ARTICLES: Begin with a focus article as a base for building content knowledge and model how to work through the text.

1) READ ALOUD: Use the article "Animal Defense Academy" (pgs 6-11) as a focus article, or choose a different article that works well for your teaching goals. Share the article summary on page 4 of this guide. Students can read their own copies of the article and use sticky notes to mark places they find interesting or have questions about.

2) DISCUSS THE ARTICLE: After reading, guide students to talk about the article. See the Article Pages for Close Reading Questions.

3) READ NEW ARTICLES: Help students choose additional articles to read based on their inquiry questions or what they're interested in. Refer to the Article Pages for summaries of each article in *Ask February 2016.*

4) COMPARE ARTICLES: After students have read multiple articles, guide them to make cross-text connections. Refer to page 9 in the guide for Cross-Text Comparisons to compare articles using prompts that help students integrate ideas and information.

CHOOSE A PURPOSE FOR READING

CLOSE READ: *CCSS Reading Info Text.1* Mark the text, noting important details and highlighting what interests, surprises, or confuses you.

UNDERSTAND MAIN IDEAS TO DEVELOP EXPERTISE: *CCSS Reading Info Text.2* Record the main ideas in the article. Note how these main ideas build on the main ideas from the focus article. How is your topic knowledge growing?

REVIEW GRAPHIC FEATURES: *CCSS Reading Info Text.7* Examine graphic features within this issue and describe how the images, charts, and photographs enhance your understanding of the content.



APPLY: DEFENSE DESIGNERS

Have students work in groups to design a method or product for protection. The following are suggestions for team projects. Students may come up with other ideas as well.



Alarm System

Design an alarm to alert people or animals of danger. Choose a purpose for the alarm and determine how it will work.



Bully Busters to the Rescue

Design a guide that provides directions for how to handle bullies and bullying behavior. Include strategies where everyone benefits from peaceful outcomes.



Swimming Defense

Identify some of the dangers of swimming and some defensive equipment or methods that help ensure swimmers' safety.



Sport Safety

Choose a sport or game that can cause injury. Design a protective piece of equipment or rules of behavior to make this activity safer.



Animal Defenders

Think of an animal that you feel does not have a very good defense mechanism in place. Design a way for this animal to defend itself more effectively.



NAME: _____

Mini-Unit Graphic Organizer: Defense Designer Organizer

Complete this graphic organizer to help plan your defense.

| Purpose of Your Defense Design |
|--|
| Description |
| Design Sketches |
| Share your plans. List feedback received and modify your design sketch. |
| Final Product Share photos, sketches, a video or written description with the class. |



NAME: _____

ANALYZE GRAPHIC FEATURES

| GRAPHIC FEATURE | PAGE LOCATION | HOW THIS FEATURE HELPED YOUR UNDERSTANDING |
|-----------------|------------------|---|
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NAME: _____

CONCEPT CHART

Show how reading multiple articles developed your understanding of the essential question or or your own inquiry question.

ESSENTIAL QUESTION OR INQUIRY QUESTION:

| ARTICLE 1: | ARTICLE 2: | ARTICLE 3: |
|------------|------------|------------|
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Glossary

carnivore an animal that eats meat

It also helps to have plenty of friends around to keep an eye out for prowling carnivores. (p. 6)

ceramic made of clay that has been heated to a very high temperature so that it becomes hard

Ceramics plates in between the layers make it strong enough to stop a bullet. (p. 13)

champion someone or something (such as a team or an animal) that has won a contest or competition especially in sports

Skunks are **champion** stinkers, and their stripes let you know who they are. (p. 9)

cushion to make (something, such as a fall or collision) less severe or painful: to soften or reduce the bad effect of (something)

Padding inside helps to **cushion** blows that might bruise or break bones. (p. 12)

decoy something that attracts someone's attention so they will not notice someone or something else

To get a head start on your escape, why not leave behind a **decoy**, like, say, a tail? (p.7)

fidget to move or act in a nervous or restless way

Everyone was still, but I was fidgety. (p. 23)

Idle to try to avoid work

Idleness was not allowed. (p. 24)

ignore to refuse to show that you hear or see (something or someone)

But then one day, everyone starts to **ignore** Eric. (p.20)

Mahatama a person who is respected for being good, wise, and holy — used as a title of honor by Hindus

I'd never live up to the Mahatma. (p. 25)

rawhide the skin of a cow before it has been prepared or made into leather

A **rawhide** leather vest or jacket could stop swords and arrows. (p. 13)

rivet a special kind of metal bolt or pin that is used

to hold pieces of metal together

It can take 100,000 rings to make one mail shirt, and each had to be **riveted** by hand. (p. 15)

spectacles old-fashioned glasses

Grandfather listened, and when I finished, he wiped his **spectacles**, put them back on, and looked me in the eye. (p. 24)

tease to annoy or bother (an animal)

Does teasing the dog make things better? (p. 19)



Online Resources

Animal Defense Academy

<u>http://channel.nationalgeographic.com/videos/top-5-animal-defense-tactics/</u>
Watch a National Geographic video about the top 5 animal defense tactics.

Arthur's Amazing Armor

<u>http://www.ducksters.com/history/middle_ages/knight_armor_and_weapons.phpGo</u>
View diagrams and learn more information about different types of armor.

Dog Bully

<u>https://www.aspca.org/pet-care/dog-care/common-dog-behavior- issues/aggression</u>
Study signs of an aggressive dog and the reasons behind this behavior.

They Made Me Do It and I'm Sorry

• <u>http://www.pacerkidsagainstbullying.org/kab/</u>

Learn more about the different roles in bullying scenarios.

Grandfather Gandhi

<u>http://www.turtlediary.com/biographies/world-leaders/mahatma-gandhi.html</u>
Read an e-flipbook about Gandhi's life and contributions.

