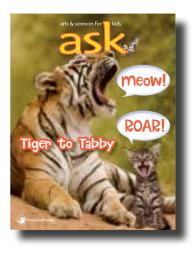
Teacher's Guide



Teacher's Guide for Ask: Tiger to Tabby

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OVERVIEW

In this magazine, readers will learn about some of the members of the cat family.

Ask: Tiger to Tabby includes information about the history of

domestic cats, variations in the way cats look, cats as hunters, a scientist in India who is trying to save tigers from extinction, and the body language of cats.

ESSENTIAL QUESTION:

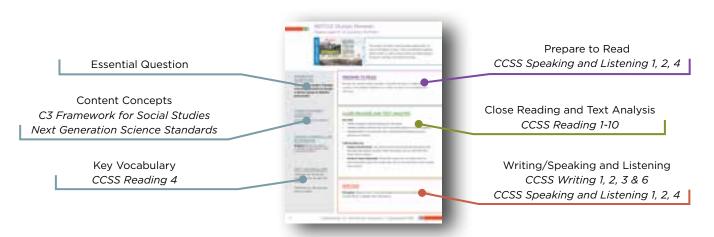
What are the characteristics of wild cats and domestic cats?

Using This Guide

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).



III Skills and Standards Overview

Essential Question: What are the characteristics of wild cats and domestic cats?

MAGAZINE ARTICLES	CORE CONTENT CONCEPT	LITERACY SKILLS	CORRESPONDING CCSS ANCHOR STANDARDS
From Wild to Mild Expository Nonfiction	Many characteristics of organisms are inherited from their parents. Other characteristics result from individuals' interactions with the environment.	Close ReadingAnalyze Text FeaturesCompare TextsPresent a Timeline	Reading 1, 2, 3, 5 & 9 Speaking & Listening 4
Tiger Tabby's Family Photos Photo Essay	Many characteristics of organisms are inherited from their parents. Other characteristics result from individuals' interactions with the environment.	 Close Reading Analyze Tone Analyze Visual Information Research and Write an Essay 	Reading 1, 3, 4 & 7 Writing 2
Born to Hunt Expository Nonfiction	Animals have both internal and external structures that serve various functions in growth, survival, and behavior.	Close ReadingAnalyze Text FeaturesAnalyze Text StructurePresent a Poster	Reading 1, 2, 3, 5 & 7 Speaking & Listening 4
Saving the Tigers Expository Nonfiction	Changes in an organism's habitat are sometimes beneficial to it and sometimes harmful.	Close ReadingAnalyze Text StructureAnalyze Author's PurposePresent an Interview	Reading 1, 5 & 6 Speaking & Listening 1
How to Speak Cat Expository Nonfiction	Some responses to information are instinctive—that is, animals' brains are organized so that they do not have to think about how to respond to certain stimuli.	Close ReadingAnalyze Text FeaturesInterpret Visual InformationWrite a Cat Story	Reading 1, 2, 5 & 7 Writing 3

 $\textbf{Comparing Texts:} \ \textit{Reading 9} \\$

Mini-Unit: Reading 1; Writing 2; Speaking & Listening 1 & 4



ARTICLE: From Wild to Mild

Magazine pages 6 - 12, Expository Nonfiction



This article describes the nature and characteristics of cats and explains how their relationship to humans has changed over time.

ESSENTIAL QUESTION

What are the characteristics of wild cats and domestic cats?

CORE CONTENT CONCEPT

Science Many characteristics of organisms are inherited from their parents. Other characteristics result from individuals' interactions with the environment.

CROSS-CURRICULAR EXTENSION

Art Use the library and internet to find examples of sculptures and paintings that praise cats. Then create your own work of art praising cats. Share your work with the class.

KEY VOCABULARY

domestic (p. 6) living with people, tame

stealth (p. 7) a secret, quiet, and clever way of moving or behaving

scavengers (p. 9) animals that feed on garbage and dead animals and plants

pampered (p. 10) treated very well

invasive (p. 11) tending to spread

PREPARE TO READ

Help students compare tigers and domestic, or house, cats. Draw a Venn diagram on the board and use it to record students' ideas. Then tell students that they will learn about the history of domestic cats in this article.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- How are cats different from dogs? Cite details from the text to support your response. CCSS Reading 1
- Summarize the characteristics that felids share. Support your response with details from the article. CCSS Reading 2
- Compare the way ancient Egyptians and Europeans in the Middle Ages felt about cats. Use details from the text to support your response. CCSS Reading 3

Craft and Structure

- Analyze Text Features The headings in this article help readers understand
 the ideas in each section. Work with a partner to write the main idea of each
 section. Then compare your main ideas with classmates. CCSS Reading 5
- Compare Texts Read the text box on page 11 titled "Super, Natural." How
 does the information in the text box connect to the information in the main
 article? Answer this question for the text box on page 12, too. CCSS Reading 9

SPEAKING AND LISTENING

Present a Timeline Use information from the article to create a timeline that shows the history of the domestic cat. For each event on your timeline, write the time period or year and a short explanation. Conduct research in books and online to add 3-5 more facts to your timeline. Include illustrations by drawing pictures or finding them online. Present your finished timeline to your class.



ARTICLE: Tiger Tabby's Family Photos

Magazine pages 13 - 15, Photo Essay



There are many different types of cat breeds, and cats vary greatly in the way they look.

ESSENTIAL QUESTION

What are the characteristics of wild cats and domestic cats?

CORE CONTENT CONCEPT

Science Many characteristics of organisms are inherited from their parents. Other characteristics result from individuals' interactions with the environment.

CROSS-CURRICULAR EXTENSION

Social Studies Visit a local animal shelter to find out how they help cats. See if you can volunteer or donate items the shelter needs. Share your experiences with the class.

KEY VOCABULARY

distinctive (p. 14) different in a way that is easy to notice

startled (p. 14) suddenly, but not seriously, surprised or frightened

locks (p. 15) hair

PREPARE TO READ

Invite volunteers to share information about their pet cats. Ask them to identify the breed and describe the fur pattern and any outstanding physical features. Explain that this article describes some physical characteristics of cats.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- What is selective breeding? Why do people use this method of breeding? Find details in the article to support your answers. CCSS Reading 1
- Group the different cats on pages 14-15 based on their physical features.
 Support your answer with details from the text and photos. CCSS Reading 3
- What physical trait do all tabby cats have in common? Cite details from the text to support your response. CCSS Reading 1

Craft and Structure

- Analyze Tone How would you describe the author's tone, or attitude, toward cats—amused, impressed, annoyed, indifferent? Which words and details reveal the tone? CCSS Reading 4
- **Analyze Visual Information** Study the photos on pages 14-15. What ideas in the photos are described in the captions? What key ideas about tabby cats are conveyed through the photos and text on these pages? *CCSS Reading 7*

WRITING

Research and Write an Essay According to the article, there are about 30 different breeds of cats. Research a breed of cat not highlighted in the article, such as the Himalayan, Maine Coon, or Ragdoll. Write a short essay about your cat using facts and details from your research.



ARTICLE: Born to Hunt

Magazine pages 16-19, Expository Nonfiction



All cats have bodies made for stalking and attacking prey. Learn about the internal and external body parts that make cats highly effective hunters.

ESSENTIAL QUESTION

What are the characteristics of wild cats and domestic cats?

CORE CONTENT CONCEPT

Science Animals have both internal and external structures that serve various functions in growth, survival, and behavior.

CROSS-CURRICULAR EXTENSION

Science Have you ever heard the expression "a cat always lands on its feet"? Conduct research to find out if cats really do land on their feet. If so, learn how they do this. Explain what you learn to the class.

KEY VOCABULARY

flexible (p. 16) capable of bending or being bent

stealthy (p. 16) quiet and secret in order to avoid being noticed

retract (p. 17) to pull something back into something larger that usually covers it

intruders (p. 18) people who are not welcome or wanted in a place

PREPARE TO READ

Help students brainstorm a list of a cat's external body parts and list them on the board. Then discuss how each body part might help a cat hunt prey. Explain that the next article describes how the different parts of a cat's body—both external and internal—help it hunt.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- How do a cat's claws and muscles work together when it runs? Use details from the text and picture to support your answer. CCSS Reading 3
- Which parts of a cat's head help it to locate prey? Support your response with details from the text. CCSS Reading 1
- What is the main idea about cats in this article? Cite details from the text and illustrations to support your response. CCSS Reading 2

Craft and Structure

- Analyze Text Features How are the words in bold print connected to the illustrations? How are they connected to the words around them? Work with a partner to discuss ideas. CCSS Reading 5
- Interpret Visual Information How does the information about a cat's tendon connect to the information about the claw? Why do you think the author included the information about the tendon? CCSS Reading 7

SPEAKING AND LISTENING

Present a Poster Report Conduct library and online research to learn about big cats in North America. How big are they? Where do they live? What impact do humans have on their habitats? Use these and your own questions to guide your research. Create a poster to show what you learned. Present your poster to the class.



ARTICLE: Saving the Tigers

Magazine pages 20 - 25, Expository Nonfiction



Ullas Karanth is a zoologist and tiger expert who has dedicated his life to saving tigers in his native India.

ESSENTIAL QUESTION

What are the characteristics of wild cats and domestic cats?

CORE CONTENT CONCEPT

Science Changes in an organism's habitat are sometimes beneficial to it and sometimes harmful.

CROSS-CURRICULAR EXTENSION

Science Look at the World Wildlife Federation website to find out what you can do to help tigers survive. While you are on the site, learn more about forest guards in India and send a note of thanks for their hard work.

KEY VOCABULARY

reserves (p. 21) an area where animals and plants are protected and that has few buildings or homes

livestock (p. 23) farm animals, such as cows, horses, and pigs, that are kept, raised, and used by people

conservationists (p. 23) people who work to protect animals, plants, and natural resources or to prevent the loss or waste of natural resources

PREPARE TO READ

Take a poll: Which has more tigers—zoos or the wild? Tell students that more tigers live in zoos than in the wild. Ask them why they think this is. Invite volunteers to share their ideas. Explain that the next article discusses why tigers are disappearing and how people are trying to help them.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- Why do people continue to kill tigers even though it is illegal? Cite information from the article to support your response. CCSS Reading 1
- How are tigers losing their homes? Support your response with details from the text. CCSS Reading 1
- Why does Ullas feel that tigers should be protected? Use details from the article to support your response. CCSS Reading 3

Craft and Structure

- Analyze Text Structure What problem does Ullas highlight in this article? What
 are the causes of this problem? What are the solutions? Record your responses
 in the Problem-Solution graphic organizer (p. 14). CCSS Reading 5
- Analyze Author's Purpose Authors write to persuade, entertain, inform, or express an opinion. Why did this author write about tigers in India? Which details in the article helped you determine the purpose? CCSS Reading 6

SPEAKING AND LISTENING

Present an Interview Imagine you are going to interview Ullas Karanth. Work with a partner to write four questions for Ullas that can be answered with the information in this article. For example, one question might be, "What inspired you to try to save tigers?" Then write the answers Ullas might give. Practice performing the interview. Then present the interview to the class.



ARTICLE: How to Speak Cat

Magazine pages 26 - 27, Expository Nonfiction



Read this article to learn what cats are trying to tell you.

ESSENTIAL QUESTION

What are the characteristics of wild cats and domestic cats?

CORE CONTENT CONCEPT

Science Some responses to information are instinctive—that is, animals' brains are organized so that they do not have to think about how to respond to certain stimuli.

CROSS-CURRICULAR EXTENSION

Language Arts There are lots of good novels that have cats as characters—for example, *The Hotel Cat* by Esther Averill and *Catlantis* by Anna Starobinets. Ask your librarian to help you find others.

KEY VOCABULARY

entwine (p. 26) to twist together or around

instinct (p. 22) a way of behaving, thinking, or feeling that is not learned

betray (p. 26) to show something, such as a feeling or desire, without wanting or trying to

PREPARE TO READ

Ask students if they talk to their pets and if they think the pets understand what they are saying. Then ask if their pets ever communicate with them. Invite volunteers to share their experiences. Then explain that the next article is about how cats communicate.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- What is the main idea of this article? Cite two or three examples from the text that support this main idea. CCSS Reading 2
- What is a cat trying to tell you when it looks at you with its tail in the air?
 Support your response with details from the text. CCSS Reading 1
- What do cats do to keep someone or something away? Provide details from the text to support your answer. CCSS Reading 1

Craft and Structure

- Analyze Text Features Read the boldface headings throughout this
 article. Why do you think the writer included them? How do they help you
 understand the article? Discuss your ideas with a partner. CCSS Reading 5
- Interpret Visual Information Study the cat illustrations in this article. How
 do these illustrations connect to the text? What do the illustrations help you
 understand? CCSS Reading 7

WRITING

Write a Cat Story Imagine that you are a cat. Use the first-person point of view to write a story about a memorable experience. Include information from the article in your story. For example, you might write, "The first thing I do when I come in the house is rub my head against the couch. I need to remind the humans that it's mine." Create an illustration to go with your story and then share it with the class.



COMPARING TEXTS

CROSS-TEXT CONNECTIONS

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

- Use the information in "How to Speak Cat" to figure out what cats are saying in the different articles in this magazine. Find photos of cats communicating in the ways described in "How to Speak Cat." Then get together with a partner and discuss what you noticed.
- Cats are territorial. In other words, they try to keep others away from an area that they use or control. Look for information in "Wild to Mild" and "How to Speak Cat" about the territorial behavior of cats. Write a paragraph to describe this behavior.
- Make a booklet called "What I Learned about Cats." Create different sections in your booklet, such as Physical Features, Beliefs and Superstitions, Behavior, and Diet. Fill in the sections with information from the magazine. Add pictures and any facts and details you find interesting.
- Create a list of "cat verbs." Look through the articles to find and list words that describe the way cats move and act. Then get together with a few classmates to play cat charades. Take turns acting out a verb while the others guess what you are doing.
- Create a T-chart with the headings "Wild Cats" and "Pet Cats." Look through the magazine articles to find the names of cats you could keep as pets and the names of wild cats. Write names in the correct columns.

EXPLORATORY LEARNING - FLEXIBLE MINI-UNIT DESIGN

This mini-unit offers students an opportunity for an in-depth look at cats. Students will review the many topics and ideas mentioned in the magazine. Then they will gather information from the magazine about one topic. Finally, they will work in groups to create presentations about their topics.

ENGAGE

READ FOR A PURPOSE

APPLY

ENGAGE: Engage students in the topic of cats by first reviewing the Essential Question: What are the characteristics of wild cats and domestic cats? Next, help students brainstorm topics and ideas from the magazine, going back to the articles when necessary. Record responses in an alphabet chart like the one below. (Sample ideas and topics are shown.)

Α	В	С	D	E
adaptable American curl		cutting teeth cougars	domestic	endangered
F	G	Н	ı	J
felids forests flexible ears	grasslands	hunters	India	jungles jaguars
K	L	М	N	0
	lions			
Р	Q	R	S	Т
predators	quiet purrs	razor claws retractable claws rough tongue	soft fur Siamese sharp eyes	tabby tigers
U	V	w	X	Y
Ullas Karanth		wild		
Z				
zoos				

MINI-UNIT (cont.)

READ FOR A PURPOSE

INTRODUCE THE ACTIVITY: Cat Presentations Tell students that they will be working in groups to present information on topics related to cats. Continue by explaining that they will work individually to research their topics using magazine articles and then work in groups to create and deliver presentations on the topics. Explain that after each group delivers their presentation, audience members should ask questions and make comments.

Now, divide the class into groups of 3-5 students. Assign each group one of the topics below, or create your own topics based on the magazine articles.

- Bodies
- Behavior
- Belief and Superstitions
- History of Domestic Cats
- Compare Cats and Dogs
- Compare Wild Cats and Domestic Cats

RETURN TO THE TEXT: Explain to students that before they can develop their presentations, they need to look through the magazine texts to gather facts and details about their topics. Distribute a copy of the Research Notes chart (p. 13) to each student and have them use it to record magazine information related to their group's topic. Then have them write a list of 3-5 questions that they can answer with the information they found. Explain that they will use these questions to help them create their presentations.

MINI-UNIT (cont.)

APPLY:

CAT PRESENTATIONS Now that groups have gathered information from the magazine and written questions, they are ready to develop their presentations.

STEP 1: Build Background

Explain that group members need to work together to decide how they will present their topics to the class. Remind groups that their presentations need to do the following:

- answer 3-5 questions.
- include a poster.
- include facts and information from the magazines.

Offer to meet with individual groups as necessary.

MATERIALS

- completed Research Notes charts
- art supplies as needed
- paper or poster board
- glue
- scissors

STEP 2: Plan and Create

Have groups work together to plan their presentations. Suggest they appoint a note-taker to record presentation ideas. Tell groups to:

- 1. review all the questions they came up with and choose 3-5 questions to answer in their presentations
- 2. decide what their poster will show
- 3. decide how they will share tasks

When groups are ready, have them gather supplies and begin creating posters and developing their presentations.

STEP 3: Review and Rehearse

Tell groups to go over their work to make sure it is accurate and clear as well as creative. Remind groups to come up with a title for their presentation. Allow time for groups to rehearse their presentations.

STEP 4: Present

Have groups take turns delivering their presentations to the class. Remind students that audience members should listen quietly and then ask questions and talk about what they learned after the presentations.

NAME:	 		

RESEARCH NOTES

Notes
Questions
Guestions

|--|

PROBLEM SOLUTION

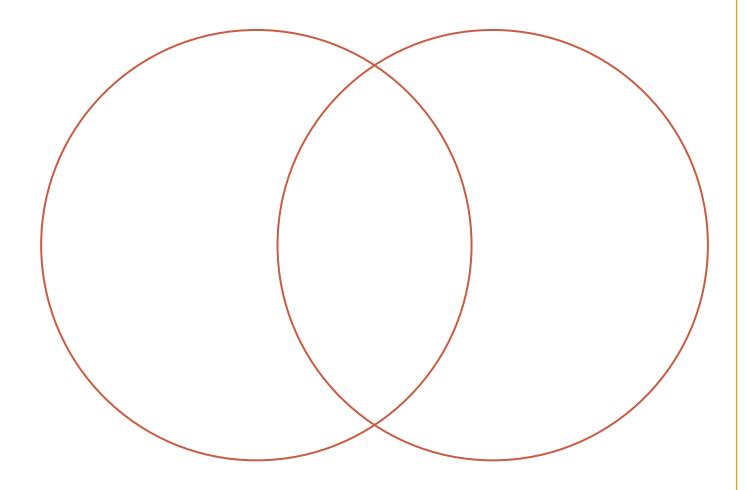
What caused the problem?

What is the problem?

What are the solutions to the problem?



VENN DIAGRAM





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

CCSS ANCHOR CORRESPONDING

SKILLS AND CONCEPTS	STANDARD	STANDARD
KEY IDEAS AND DETAILS		
Read closely to determine what a text says explicitly.	Reading 1	
Make logical inferences to determine what the text communicates implicitly.	Reading 1	
Cite specific textual evidence to support conclusions drawn from the text.	Reading 1	
Determine central ideas or themes of a text and analyze their development.	Reading 2	
Summarize key supporting details and ideas.	Reading 2	
Analyze how individuals, events, and ideas develop and interact over the course of a text.	Reading 3	
CRAFT AND STRUCTURE		
Interpret words and phrases as they are used in a text.	Reading 4	
Determine technical, connotative, and figurative meanings.	Reading 4	
Analyze how specific word choices shape meaning or tone.	Reading 4	
Analyze the structure of texts (sequence, cause/effect, compare/contrast, problem/solution)	Reading 5	
Recognize the genre , key elements, and characteristics of literary texts.	Reading 5	
Assess how point of view or purpose shapes the content and style of a text.	Reading 6	
Analyze how an author's style and tone affects meaning.	Reading 6	
INTEGRATION OF KNOWLEDGE AND IDEAS		
Integrate and evaluate content presented in diverse media and formats.	Reading 7	
Identify and evaluate the argument and claims in a text.	Reading 8	
Analyze how two or more texts address similar themes or topics.	Reading 9	
WRITING		*
Write arguments to support claims, using valid reasoning and relevant and sufficient evidence.	Writing 1	
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately.	Writing 2	
Write narratives to develop real or imagined experiences or events.	Writing 3	
Draw evidence from literary or informational texts to support analysis, reflection, and research.	Writing 9	
Conduct short as well as more sustained research projects.	Writing 10	



CORE INSTRUCTIONAL CONCEPTS: SOCIAL STUDIES

SOCIAL STODILS	
C3 INQUIRY ARC DIMENSION 2: APPLYING DISCIPLINARY CONCEPTS AND TOOLS	STATE OR DISTRICT STANDARD
CIVICS	
Analyze the origins, functions, and structure of different governments and the origins and	
purposes of laws and key constitutional provisions.	
Summarize core civic virtues and democratic principles.	
Evaluate policies intended to address social issues.	
ECONOMICS	
Evaluate the benefits and costs of individual economic choices.	
Analyze economic incentives, including those that cause people and businesses to specialize and trade.	
Explain the importance of resources (i.e. labor, human capital, physical capital, natural resources) in methods of economic production.	
Explain the functions of money in a market economy.	
Explain the importance of competition in a market economy.	
Apply economic concepts (i.e. interest rate, inflation, supply and demand) and theories of how individual and government actions affect the production of goods and services.	
Analyze economic patterns, including activity and interactions between and within nations.	
GEOGRAPHY	·
Construct and use maps and other graphic representations (i.e. images, photographs, etc.) of different places.	
Explain cultural influences on the way people live and modify and adapt to their environments.	
Analyze places, including their physical, cultural and environmental characteristics and how they change over time.	
Analyze movement of people, goods, and ideas.	
Analyze regions, including how they relate to one another and the world as a whole from a political, economic, historical, and geographic perspective.	
HISTORY	
Interpret historical context to understand relationships among historical events or	
developments.	
Evaluate historical events and developments to identify them as examples of historical change and/or continuity.	
Analyze perspectives, including factors that influence why and how individuals and groups	
develop different ones.	
Evaluate historical sources, including their reliability, relevancy, utility, and limitations.	
Analyze causes and effects, 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

- Structure and Function of Living Things
- Life Cycles and Stages
- Reproduction & Inherited Traits
- Animals
- Plants

PHYSICAL SCIENCE

- Forces and Interactions
- Energy
- Light
- Sound
- Electricity/ Magnetism
- Matter
- Waves
- Heat
- Chemistry
- Information Processing

EARTH SCIENCE

- WeatherClimate
- Rocks & Soil
- Erosion and Weathering
- Landforms
- Water
- Oceans
- History of Earth
- Plate Tectonics
- Volcanoes, Earthquakes, and Tsunamis

SPACE SYSTEMS

- Solar System
- Planets
- Moon
- Sun

