# **Teacher's Guide**





#### MAGAZINE ARTICLES

The Cammy Awards 6
Expository Nonfiction 1030L
Desert at Dusk
Photo Essay 1170L
Fennec Foxes: Fit for the Desert 8
Narrative Nonfiction 1010L
How Do Desert Plants Do It?
Photo Essay 780L
Hiking the High Desert
Adventure Story 420L

# **Desert** discoveries



# **Teacher's Guide for** *Click: Desert Discoveries*

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# **OVERVIEW**

In this magazine, readers will learn the unique characteristics and behaviors that help plants and animals survive in the desert. **Click: Desert** 

**Discoveries** includes information about animals that are super survivors, creatures that come out at night, and plants that can take the heat, as well as tips for desert hiking.

# **ESSENTIAL QUESTION:**

*How do animals and plants survive in the desert?* 



# 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).

# Skills and Standards Overview

Essential Question: How do animals and plants survive in the desert?

MAGAZINE ARTICLES	SCIENCE CONCEPTS	LITERACY SKILLS	CORRESPONDING CCSS ANCHOR STANDARDS
The Cammy Awards Expository Nonfiction	Animals have special traits that help them survive in their environment.	<ul> <li>Close Reading</li> <li>Identify Supporting Details</li> <li>Make Inferences</li> <li>Analyze Relationships</li> <li>Write Opinions</li> </ul>	Reading 1, 2, 3, 5 & 7 Writing 1
<b>Desert at Dusk</b> Photo Essay	Animals adapt their behavior to help them survive.	<ul> <li>Close Reading</li> <li>Ask and Answer</li> <li>Interpret Visual Information</li> <li>Identify Relationships</li> <li>Write Narrative Texts</li> </ul>	Reading 1, 3 & 7 Writing 3
Fennec Foxes: Fit for the Desert Narrative Nonfiction	Animal families work together to survive.	<ul> <li>Close Reading</li> <li>Analyze Relationships</li> <li>Make Inferences</li> <li>Compare Texts</li> <li>Write Explanatory Texts</li> </ul>	Reading 1, 3 & 9 Writing 2
How Do Desert Plants Do It? Photo Essay	Plants have special traits that help them survive in their environment.	<ul> <li>Close Reading</li> <li>Identify Main Ideas</li> <li>Draw Conclusions</li> <li>Interpret Visual Information</li> <li>Collaborate</li> </ul>	Reading 1, 2 & 7 Speaking & Listening 1
<b>Hiking the High Desert</b> Adventure Story	Some animals that once lived on Earth are extinct.	<ul> <li>Close Reading</li> <li>Identify Sensory Details</li> <li>Analyze Plot</li> <li>Summarize</li> <li>Collaborate</li> </ul>	Reading 1, 2, 3, 5 & 7 Speaking & Listening 1

Comparing Texts: CCSS Reading 9

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



# ARTICLE: The Cammy Awards

Magazine pages 8-11, Expository Nonfiction



Life in the desert isn't easy. Learn about some interesting ways desert animals stay cool and safe and get the water they need.

# ESSENTIAL QUESTION

How do animals and plants survive in the desert?

# CORE CONTENT

**Life Science** Animals have special traits that help them survive in their environment.

### CROSS-CURRICULAR EXTENSION

**Science** Draw a diagram of one of the animals from the article to show how its body helps it survive in the desert.

### **KEY VOCABULARY**

survive (p. 8) stay alive

harsh (p. 8) difficult to experience

reflect (p. 9) to cause something
to bounce away in another direction

## PREPARE TO READ

Ask students what they know about the desert—what does it look and feel like? Then ask why it might be difficult for animals to live there. After students answer, read aloud the first sentence of the article. Then tell students to listen for information about how desert animals survive as you read the article aloud.

## **CLOSE READING AND TEXT ANALYSIS**

#### **Key Ideas**

- Number the three sections of this article that tell about the different award winners. CCSS Reading 5
- Circle the pictures of animals that use fur to keep cool. CCSS Reading 7
- Why did the kangaroo rat and the sandgrouse win the Cammy Awards? Highlight text that supports your answer. *CCSS Reading 1*

#### **Craft and Structure**

- Identify Supporting Details The main idea of this article is "desert animals have special traits that help them survive." Underline five details that support this idea. *CCSS Reading 2*
- Make Inferences Why does the camel deserve to have the Cammy Award named after it? Why isn't the award named after a different animal? CCSS Reading 1
- Analyze Relationships Compare the way the lizard and the camel protect themselves from hot blowing sand. How do their feet help them? How do their eyes, ears, and noses keep them safe? Use the Animal Traits graphic organizer on page 15 to compare them. *CCSS Reading 3*

## WRITING

**Writing Opinions** If you lived in the desert, which of the animals in this article would you want to be? Write 2-3 sentences to explain your choice.



# ARTICLE: Desert at Dusk

Magazine pages 12-15, Photo Essay



When the sun begins to set, most humans are ready to settle down, have dinner, and go to sleep. For many desert animals, this is when life gets busy.

# ESSENTIAL QUESTION

How do animals and plants survive in the desert?

# CORE CONTENT

**Life Science** Animals adapt their behavior to help them survive.

#### CROSS-CURRICULAR EXTENSION

**Literature** Go to your local library and check out *The Desert Is Theirs* by Byrd Baylor. Read this award-winning picture book poem, which describes animal life in the desert.

#### **KEY VOCABULARY**

*dusk (p. 12)* the time when day changes into night and the sky gets darker

*bore (p. 14)* to make a hole in something

## PREPARE TO READ

Discuss why many desert animals wait until nighttime to come out. If necessary, point out that temperatures are usually cooler at night than during the day. Read aloud the introduction on page 12. After students complete the activity, turn to pages 14-15 and have students point to the photo of each animal as you read about it.

## **CLOSE READING AND TEXT ANALYSIS**

#### Key Ideas

- Highlight the name of each animal mentioned. CCSS Reading 1
- Circle animals that build nests near or in cacti. CCSS Reading 1

#### **Craft and Structure**

- Ask and Answer With a partner, take turns asking and answering questions about the animals in the article. Use the words who, what, when, where, and why to make up questions. Look for information in the article to answer the questions. *CCSS Reading 1*
- Interpret Visual Information Compare the illustration on pages 14-15 with the photos all around it. How are the photos similar to the illustration? How are they different? Why do you think the author decided to use both? *CCSS Reading 7*
- Identify Relationships Read through animal descriptions to find pairs of animals that are the same in some way. They might have similar markings, live in similar places, or eat similar foods. Work with a partner to list three animal pairs and tell what each pair has in common. *CCSS Reading 3*

### WRITING

**Write Narrative Texts** Finish this story: Once upon a time, the desert animals had a meeting to decide who should be the next queen or king of the desert. There was a lot of arguing and bragging at the meeting. "I should be queen," said the tarantula. "I have more legs than any of you."





# ARTICLE: Fennec Foxes: Fit for the Desert

Magazine pages 19-23, Narrative Nonfiction



How is your family like a fennec fox family? Read to find out.

#### ESSENTIAL QUESTION

How do animals and plants survive in the desert?

# CORE CONTENT

**Life Science** Animal families work together to survive.

### CROSS-CURRICULAR EXTENSION

**Art** Reread the description of Zerda's underground home on page 22. Then draw a picture of it showing all the foxes inside.

### **KEY VOCABULARY**

*gully (p. 19)* a long, narrow, cut in the ground that water moves through when it rains

*blood vessels (p. 20)* small tubes that carry blood to different parts of a human's or animal's body

## PREPARE TO READ

Ask students how they help out at home—do they feed a pet, clean up toys, or set the table? Then discuss how other family members take care of each other—by cooking, earning money, taking care of younger siblings, etc. Explain that this article tells about a family of foxes and how they help each other.

## **CLOSE READING AND TEXT ANALYSIS**

#### Key Ideas

- Highlight details in the first paragraph that tell you it is almost nighttime. CCSS Reading 1
- Underline three ways the foxes stay cool in the desert. CCSS Reading 1

#### **Craft and Structure**

- Analyze Relationships List all of the members of Zerda's family. Then write sentences that tell how Zerda's family members help each other survive. CCSS Reading 3
- **Make Inferences** Compare a fox family and a human family. How are they alike? How are they different? Record your ideas in the Comparing Families graphic organizer on page 16. *CCSS Reading 3*
- **Compare Texts** Read the information in the boxes on pages 20-23. First, underline the word that tells what the boxed information is mainly about. Use the photo to help you figure this out. Then, on the same page, underline the information in the main text that tells about the same topic. Do the boxes give you the same information on the topic or new information? *CCSS Reading 9*

### WRITING

**Write Explanatory Texts** How does the fennec fox's body help it survive in the desert? How does its behavior help it survive? Write sentences that answer these questions.

# ARTICLE: How Do Desert Plants Do It?

Magazine pages 24-26, Expository Nonfiction



Have you ever seen or felt a prickly cactus or a juicy aloe? These are two of the amazing plants that can survive in the desert.

# ESSENTIAL QUESTION

How do animals and plants survive in the desert?

#### CORE CONTENT CONCEPT

**Life Science** Plants have special traits that help them survive in their environment.

### CROSS-CURRICULAR EXTENSION

**Science** Find out how you can grow succulent plants in your home or classroom. Look for a book or website, or ask a plant expert at your local garden center.

## **KEY VOCABULARY**

*droop (p. 24)* to bend or hang down

# PREPARE TO READ

Point out the title and read aloud the introduction to the article. Then have students predict what they will learn from this article. Finally, read the article aloud as students follow along.

## **CLOSE READING AND TEXT ANALYSIS**

#### Key Ideas

- Circle three pictures of plants that are covered on the outside with something that protects them. *CCSS Reading 1*
- Underline two ways desert plants act after a heavy rain. CCSS Reading 1
- Highlight two ways plants protect themselves from animals. CCSS Reading 1

#### **Craft and Structure**

- Identify Main Ideas What is this article mostly about? With a partner, reread the title and the subheads. Write the main idea of the article in the Desert Plants graphic organizer on page 17. CCSS Reading 2
- **Draw Conclusions** What is a succulent? Use text and picture clues on page 24 to describe the characteristics of a succulent. Then circle all the pictures of succulents. *CCSS Reading 1 & 7*
- Interpret Visual Information What ideas from the text are also shown in the photos? Choose two photos to focus on. For each photo, underline the ideas in the text that it shows. What do the photos help you understand? CCSS Reading 7

## SPEAKING AND LISTENING

**Collaborate** Work in a group to answer the question in the title: How do desert plants do it? Group members should take turns using what they learned from the article to give answers. Be sure to listen while others are speaking.





# ARTICLE: Hiking the High Desert

Magazine pages 27-33, Adventure Story



Hiking in the desert is fun—there are many things to discover but you need to be prepared. This article will take you on a hike in the high desert of New Mexico.

# ESSENTIAL QUESTION

How do animals and plants survive in the desert?

# CORE CONTENT

**Life Science** Some animals that once lived on Earth are extinct.

#### CROSS-CURRICULAR EXTENSION

Science/Social Studies Research the high desert of New Mexico to learn more about two of its first inhabitants: dinosaurs and the Zuni People.

### **KEY VOCABULARY**

*mesa (p. 28)* a hill that has a flat top and steep sides, found in the southwestern U.S.

scramble (p. 33) to climb something quickly by using your hands

## PREPARE TO READ

Tell students to imagine they are getting ready for a hike in the desert. Discuss what they would bring with them to stay safe. Then ask what plants and animals they might see on the hike.

## **CLOSE READING AND TEXT ANALYSIS**

#### Key Ideas

- Why did Carlie and her mom decide to take their friends hiking in the desert? Highlight text details that support your answer. *CCSS Reading 1*
- Circle the picture that shows how Dan felt about the taste of juniper berries. CCSS Reading 7

#### **Craft and Structure**

- Identify Sensory Details Some details in this story can help you see, hear, taste, smell, and feel what's happening. Work with a partner to underline one detail for each of your five senses. Write the sense next to the detail. CCSS Reading 5
- **Analyze Plot** Describe five events that happen in this story. Work in a small group to make a list. *CCSS Reading 3*
- **Summarize** This story is fiction, or made-up, but it includes some interesting facts about animals, people, and the desert. With a partner, identify these facts. Then, summarize what you found and compare your findings with another group. Did you find all the facts? *CCSS Reading 2*

### SPEAKING AND LISTENING

**Collaborate** Work in a group to take turns telling about a trip you have taken. Include details about why you went and what you saw and did. After each member speaks, other members should ask questions about his or her trip.



# **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).* 

- Use multiple articles to find details that describe the desert. Look for information about daytime and nighttime temperatures, rainfall, and the dangers of the desert. Then make a poster with pictures and facts about the desert.
- Make a three-column chart with the headings "Birds," "Reptiles," and "Animals." Look through "The Cammy Awards," "Desert at Dusk," "Fennec Foxes: Fit for the Desert," and "Hiking the High Desert" to fill in your chart. If you find a creature that does not fit in one of the columns, write the name below the chart. Then team up with classmates to compare charts.
- Look at the award categories in "The Cammy Awards." Then make up awards for the desert plants in "How Do Desert Plants Do It?" Draw pictures of the awards.
- Make a list of your favorite animals and plants from the different articles in the magazine. Write a fact about each plant and animal on your list. Then share your favorites with a classmate.
- Make a three-column chart with the headings "body," "behavior," and "both." Look through "Desert at Dusk," "Fennec Foxes: Fit for the Desert," and "Hiking the High Desert" for details and write them in your chart. Which column do humans belong in?

# **EXPLORATORY LEARNING - FLEXIBLE MINI-UNIT DESIGN**

#### ENGAGE

**MINI-UNIT** 

READ FOR A PURPOSE

#### APPLY

**ENGAGE:** Engage students in the topic of deserts and the animals and plants that live in them. First review the Essential Question by asking students, "How do animals and plants survive in the desert?" Help students review what they learned from the magazine articles to fill in a chart like the one below.

Desert Environment	Animal and/or Plant	Animal and/or Plant Characteristic(s) For Survival
Very hot days	Camel	Long legs help the camel's body stay away from hot sand.
Cold nights		
Few sources of water		
Sandy		
Windy		

#### **READ FOR A PURPOSE**

**INTRODUCE THE ACTIVITY: Invent a Desert Animal** Explain to students that they are each going to invent a desert animal. Explain that they will choose some of the different features of the animals they read about and put them together in new ways to create a whole new animal.

**RETURN TO THE TEXT:** Explain to students that before they can invent their animals, they need to gather information about desert animals and the characteristics that help them survive in that environment. Hand out the Read for a Purpose graphic organizer. Display the chart below and work with students to go through "The Cammy Awards" and "Fennec Foxes: Fit for the Desert" to add details to their handouts. The list of details does not need to be exhaustive—it should contain just enough to give students some interesting choices to make when they invent their animals.

Parts that protect animals from the heat	Parts that protect animals from sand	Parts that help animals save food and water
• Thick fur	•Toes with fringes	• Hump
• Long legs	<ul> <li>Shovel-shaped nose</li> </ul>	• Feathers
• Fur that changes color	• Ear flaps	• A body that makes
• Bushy tail	• Big ears	water from lood
	• Nostrils that close	
	<ul> <li>Long eyelashes</li> </ul>	
	• Foot pads	
	• Big feet	

# MINI-UNIT (cont.)

**APPLY: INVENT A DESERT ANIMAL** Now that students have gathered information from the magazine articles, they are ready to create their desert dwellers. Students should work alone or in pairs to complete this activity.

#### **Materials**

- My Desert Animal handout on page 13 (1 copy per student)
- Crayons, markers, colored pencils
- Writing pencils

**Step 2: Gather Ideas** Distribute copies of My Desert Animal (p. 14). Have students choose 2-4 different body parts they will add to their animals and write these on the handout. Then have students draw a sketch of their animal, name it, and summarize interesting information about it.

**Step 4: Write** Encourage students to make up crazy names for their animals—for example, the bushy-tailed camel grouse or the big-eared humpback squirrel. Then have students make up details about their animal, such as what it eats, when it hunts, or where it lives. Students should write these details in the space provided. **Step 1: Build Background** Remind students that they are going to invent desert animals. Explain that they will use their imagination and the information they gathered from the magazine to help them. Then display the chart you created with students during the Read for a Purpose activity on page 11. Read the chart aloud as students follow along.

**Step 3: Draw Animals** Have students draw their animals in the space provided on the handout. Remind them to incorporate the body parts they listed. Encourage students to be creative and make their animals wild and colorful.

**Step 5: Share** Have students take turns presenting their animals to the class. Then display the animals on a wall or board in the classroom.

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

## **READ FOR A PURPOSE**

Parts that protect animals from the heat	Parts that protect animals from sand	Parts that help animals save food and water



NAME:			_	
	NA	Μ	E:	

## **MY DESERT ANIMAL**

1. Body parts that help my animal survive in the desert

2. Sketch of animal

3. My animal's name

4. Interesting information about my animal (what makes it similar to and different from other animals?)



NAME:	
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# **ANIMAL TRAITS**

**Analyze Relationships** Compare the way the lizard and the camel protect themselves from hot blowing sand. How do their feet help them? How do their eyes, ears, and noses keep them safe?

	Feet	Eyes	Ears	Nose
Camel				
Lizard				





**Make Inferences** Compare a fox family and a human family. How are they alike? How are they different? Write your ideas in the diagram.



## **DESERT PLANTS**

**Identify Main Ideas** What is this article mostly about? With a partner, reread the title and the subheads. Write the main idea of the article in the chart.

Main Idea

**Identify Supporting Details** Fill in three details from the article that support the main idea.

ng Detail Supp	oorting Detail	Supporting Detail

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## Appendix 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**

Read closely to determine what a text says explicitly.	Reading 1	
Make logical inferences 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	
Summarize key supporting details and ideas.	Reading 2	
Analyze how <b>individuals, events, and ideas develop and interact</b> 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 <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</b> , <b>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

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 <b>arguments</b> to support claims, using valid reasoning and relevant	Writing 1	
and sufficient evidence.		
Write informative/explanatory texts to examine and convey complex	Writing 2	
ideas and information clearly and accurately.		
Write <b>narratives</b> to develop real or imagined experiences or events.	Writing 3	
Draw evidence from literary or informational texts to support analysis,	Writing 9	
reflection, and research.		
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 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 <b>policies</b> intended to address social issues.	

#### **ECONOMICS**

Evaluate the benefits and costs of individual economic choices.	
Analyze <b>economic incentives,</b> 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.	
<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</b>	
individual and government actions affect the production of goods and services.	
Analyze economic patterns, 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	
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 <b>examples of historical change</b>	
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
- ٠ Constructing explanations (for science) and designing solutions (for engineering)
- ٠ Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

SPACE SYSTEMS

Planets

Moon

Sun

Solar System

## 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

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

Weather

EARTH SCIENCE

- Climate
- Rocks & Soil
- Erosion and Weathering
- Landforms
- Water
- Oceans
- History of Earth

Earthquakes. and Tsunamis

- Volcanoes.