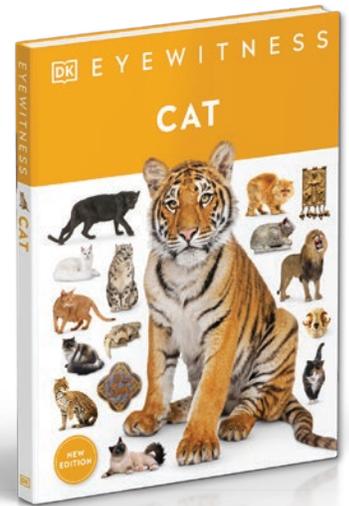
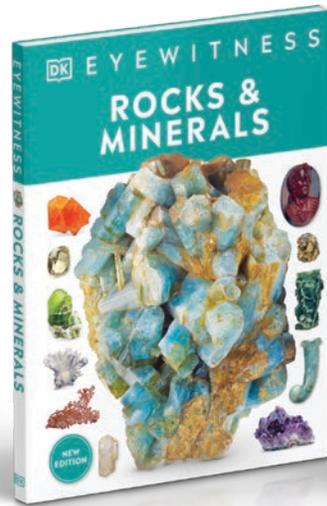
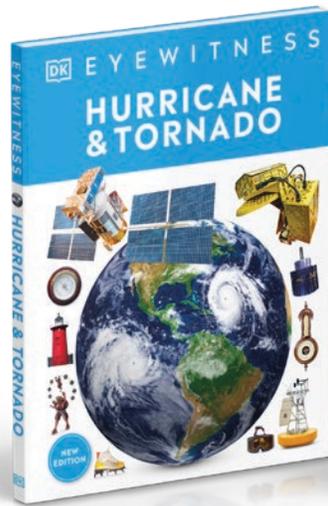
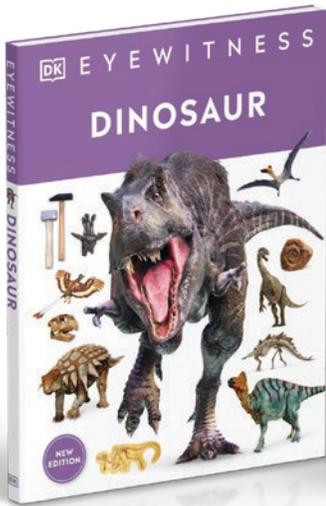


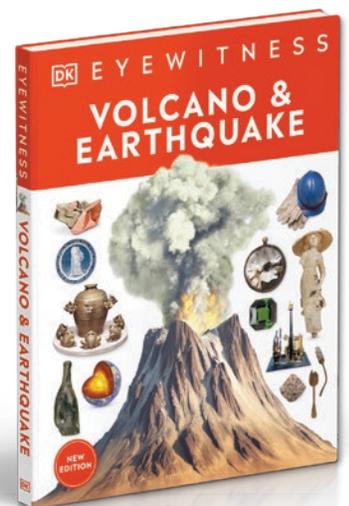
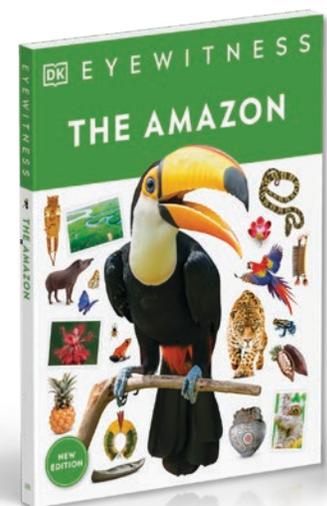
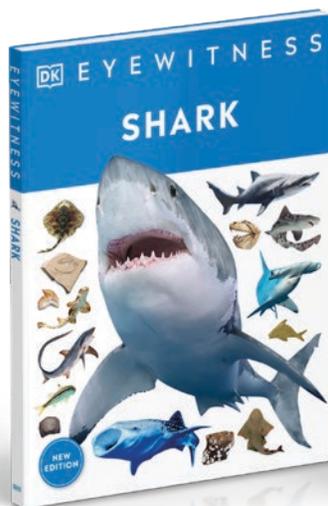
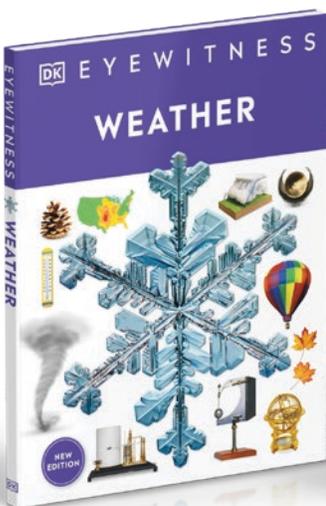


EYEWITNESS



ELEMENTARY SCHOOL SCIENCE

EDUCATOR'S GUIDE





NOTE TO EDUCATORS

DK has devoted itself to creating nonfiction books that are not only accessible for children but interesting to them as well. Their children's books make learning fun by including colorful illustrations and photographs, using kid-friendly language, and offering a wide range of topics to be explored. Nonfiction texts are not always easy to implement in classrooms, but DK has found that particular balance of education and entertainment that leaves children wanting to know more.

DK has spent the last few years talking with teachers, parents, librarians, literacy experts, booksellers, and kids ages 8–12 to find out what's needed in a modern history and social sciences classroom. Each book in the **DK Eyewitness** collection has engaging text, informational sidebars, and more, including:

- content written by a team of experienced authors
- careful vetting and approval by respected literacy and subject experts
- beautiful full-color photographs and illustrations
- domain-specific vocabulary to enhance language and literacy development



ELEMENTARY SCHOOL RELEVANCY

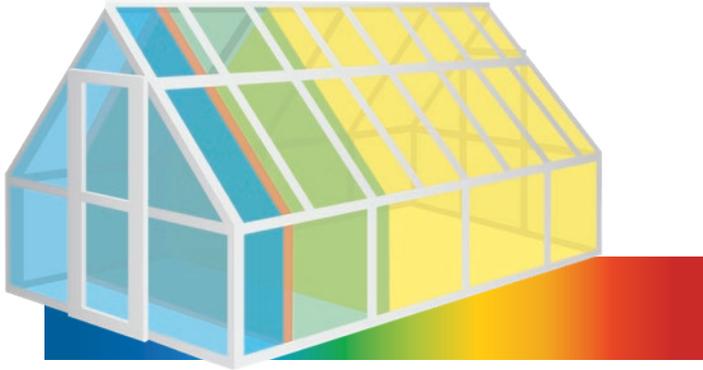
Science is all around us. It is part of our daily life, and we experience it every day. Students in grades K–5 can engage in many science lessons and activities using the DK *Eyewitness* collection. These books cover many science topics in the elementary classroom, such as weather, natural disasters, climate change, ocean, rocks and minerals, and animals. These books include an abundance of information, including nonfiction text and graphic features, that engages elementary learners while enhancing student learning and scientific thinking.

DK's *Eyewitness* collection includes nonfiction text and graphic features such as headings; big, bold print; beautiful, full-colored illustrations and photos with captions; maps; diagrams; charts; glossary; and fun facts. This is all very important for elementary students, our youngest learners when consuming nonfiction text.

This elementary guide provides suggested lessons, activities, ideas for group work, projects, homework, and other suggestions to use this science collection of books when teaching science in your elementary classroom. The lesson ideas and suggested activities tie with the Next Generation Science Standards (NGSS) and the Common Core State Standards (CCSS), along with performance expectations in grades K–2 and 3–5, accessible online here:

www.corestandards.org www.nextgenscience.org

Teachers can use the lesson plans here to model lesson plans for other books in the collection. Enjoy using the DK *Eyewitness* collection in your classroom to enhance your science lessons and activities in the elementary classroom.



LESSON PLAN 1: SCIENCE (GRADES K-2)

This is a suggested science lesson plan to be used with the title *Weather*, but you may use it as a reference to create your own questions for other nonfiction books in the DK collection.

OBJECTIVE: Students will learn and identify different weather types.

Before Reading

Create a KWL (Know, Want-to-know, Learned) chart beginning with these 2 questions:

- What do you know about weather?
(Use background knowledge.)
- What do you want to know about weather?
(Ask questions.)

Tell students that we will later fill in the chart with what we learned about weather.

Reading

Now, allow the students to read through a particular book. Once all students have had the opportunity to examine the book, discuss the post-reading questions below in a conversational and open-ended, inquiry-based style.

Note: This could span several weeks depending on how much free time the students have and how many copies are available in the classroom.

Suggested Activity

As a whole group during your daily morning meeting, share and discuss observations of the local weather conditions. Introduce and define weather terms: weather, temperature, precipitation, types of precipitation (rain, snow, frost, ice, sleet, hail), sunny, cloudy, foggy, windy, etc. Write these words and definitions on sentence strips or index cards and put them in a pocket chart to refer to each day.

CCSS.ELA.LITERACY.RI.K.4, CCSS.ELA.LITERACY.RI.1.4, CCSS.ELA.LITERACY.RI.2.4

Record daily weather patterns on a class calendar or chart paper. Students draw the weather each day in their science notebooks, labeling their pictures with the weather terms. Through observation and discussion, describe patterns over time. Students record patterns in their science notebooks. Students make predictions based on the patterns they observe (K-ESS-1).

You're the Meteorologist: Pick a student (or group of students) each day to give a daily weather report. Students will report the weather from their classroom using their weather observations, notes, and drawings.

CCSS.ELA-LITERACY.SL.K.4, CCSS.ELA-LITERACY.SL.1.4, CCSS.ELA-LITERACY.SL.2.4

CCSS.ELA-LITERACY.SL.K.5, CCSS.ELA-LITERACY.SL.1.5, CCSS.ELA-LITERACY.SL.2.5

CCSS.ELA-LITERACY.SL.K.6, CCSS.ELA-LITERACY.SL.1.6, CCSS.ELA-LITERACY.SL.2.6

Extension

What questions would you use to obtain more information about the purpose of weather forecasting to prepare for, and respond to, severe weather? (K-ESS3-2) Make a list of questions from students.

DISCUSSION QUESTIONS

- What weather patterns have you noticed over time?
- What weather predictions can you make based on the patterns we noticed?

LESSON PLAN 2: SCIENCE
(GRADES K-2)

This is a suggested science lesson plan to be used with the title *Weather*, but you may use it as a reference to create your own questions for other nonfiction books in the DK collection.

OBJECTIVE: Students will learn and identify different cloud types.

DISCUSSION QUESTIONS

- What do you know about clouds?
- What kinds of clouds have you seen?
- What kinds of clouds do you see on sunny days?
- What kinds of clouds do you see on rainy days or snowy days?
- What do clouds tell us about the weather?
- How do you think clouds form?

Reading

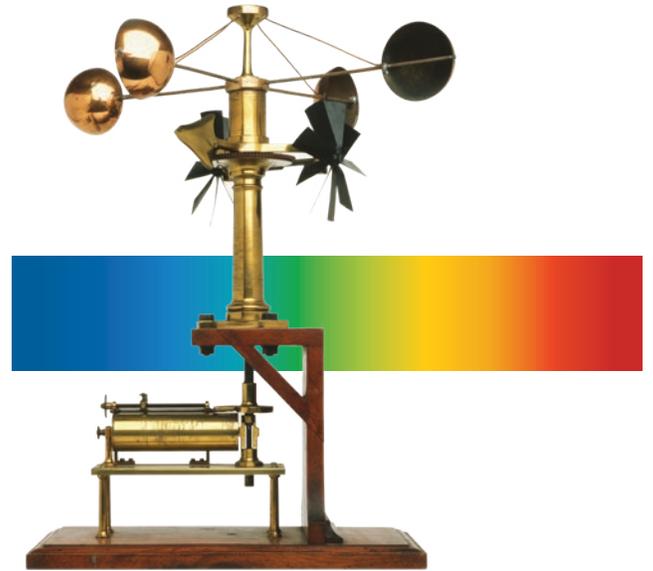
Now, allow the students to read through a particular book. They could read through *Weather*, pages 24–29, 50–53, and look at the photos of cloud types and associate them with types of weather.

Once all students have had the opportunity to examine the book, discuss the post-reading questions below in a conversational and open-ended, inquiry-based style.

CCSS.ELA-LITERACY.RI.K.1, CCSS.ELA-LITERACY.RI.1.1, CCSS.ELA-LITERACY.RI.2.1

CCSS.ELA-LITERACY.RI.K.2, CCSS.ELA-LITERACY.RI.1.2, CCSS.ELA-LITERACY.RI.2.2

Note: *This could span several weeks depending on how much free time the students have and how many copies are available in the classroom.*



Hands-on Project

Students create different types of cloud types using construction paper and cotton balls.

Students use cotton balls to create different cloud types by manipulating the cotton balls to represent each kind of cloud. Students use a glue stick to fasten the cotton to an 8.5 x 11" piece of construction paper. Provide labels or allow students to write the cloud type on their paper.

- Layered stratus
- Puffy cumulus
- Feathery cirrus
- Flying saucers (lenticular)

Group Work

Divide students into groups of four. Using the materials, one group creates layered stratus clouds, another creates puffy cumulus clouds, and so on. Give each group a specific cloud type. Give students a larger piece of paper (11 x 15") to work together to manipulate the cotton into cloud types. Add labels.

EDUCATOR'S GUIDE

LESSON PLAN 2: SCIENCE (CONT'D.)

Post-Reading Questions

After students have completed the book, engage them with these post-reading prompts.

- What were some discoveries you made that you didn't know about before reading this book?
- Did looking at this book make you want to do deeper research on anything in particular?
- Identify a key idea from the book. Locate where in the book this idea is developed.

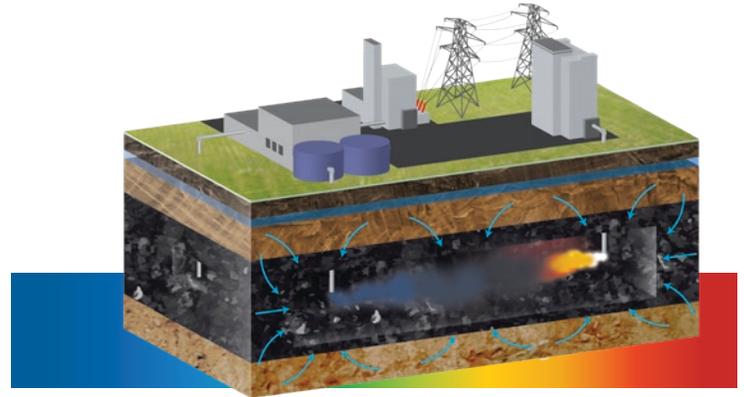
CCSS.ELA-LITERACY.RI.K.1, CCSS.ELA-LITERACY.RI.1.1, CCSS.ELA-LITERACY.RI.2.1

CCSS.ELA-LITERACY.RI.K.2, CCSS.ELA-LITERACY.RI.1.2, CCSS.ELA-LITERACY.RI.2.2

Group Project / Multimedia Presentation

Use the book to identify an important event. Create a presentation that focuses on these key points:

- Why was this event so important? (Why is weather so important?)
- What were the results of this event? (How does weather affect people, places, and animals?)
- How are the results still significant now?



LESSON PLAN 3: SCIENCE (GRADES 3-5)

This is a suggested science lesson plan to be used with the titles *Natural Disasters*, *Hurricane & Tornado*, *Volcano & Earthquake*, and *Weather*, but you may use them as a reference to create your own questions for other nonfiction books in the DK collection.

OBJECTIVE: Students read and learn about different kinds of natural disasters (hurricanes, tornadoes, earthquakes, volcanoes, tsunamis, floods, typhoons, landslides) and share their research about a natural disaster of choice through an oral, written, or digital presentation.

CCSS.ELA.LITERACY.W.3.2, CCSS.ELA.LITERACY.W.4.2, CCSS.ELA.LITERACY.W.5.2

CCSS.ELA-LITERACY.SL.3.4, CCSS.ELA-LITERACY.SL.4.4, CCSS.ELA-LITERACY.SL.5.4

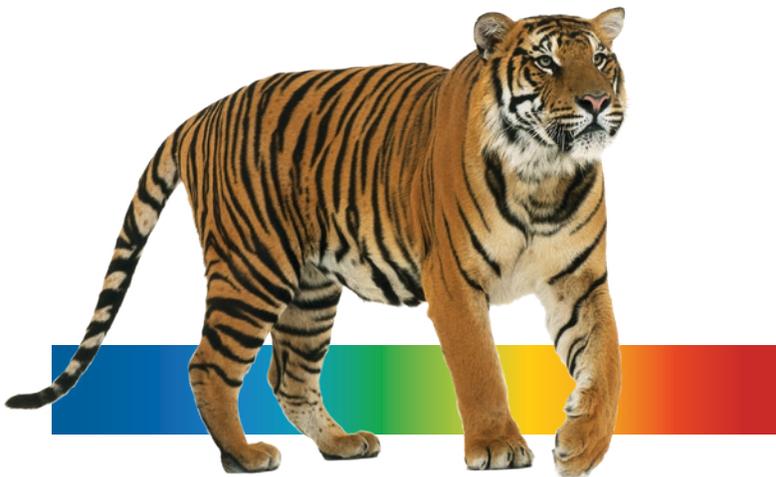
Reading

Now, allow the students to read through a particular book. They could read *Natural Disasters* pages 44–47, 68–69. Once all students have had the opportunity to examine the book, discuss the post-reading questions below in a conversational and open-ended, inquiry-based style.

CCSS.ELA-LITERACY.RI.3.1, CCSS.ELA-LITERACY.RI.4.1, CCSS.ELA-LITERACY.RI.5.1

CCSS.ELA-LITERACY.RI.3.2, CCSS.ELA-LITERACY.RI.4.2, CCSS.ELA-LITERACY.RI.5.2

CCSS.ELA-LITERACY.RI.3.3, CCSS.ELA-LITERACY.RI.4.3, CCSS.ELA-LITERACY.RI.5.3



EDUCATOR'S GUIDE

LESSON PLAN 3: SCIENCE (CONT'D.)

Note: This could span several weeks depending on how much free time the students have and how many copies are available in the classroom.

Post-Reading Questions

After students have completed the book, engage them with these post-reading prompts.

- What were some discoveries you made that you didn't know about before reading these books?
- Did looking at these books make you want to do deeper research on anything in particular?
- Identify a key idea from the book. Locate where in the book this idea is developed.

CCSS.ELA-LITERACY.RI.3.2, CCSS.ELA-LITERACY.RI.4.2, CCSS.ELA-LITERACY.RI.5.2

Write a short description of one event covered in the book. Use some of the terms from the glossary to compose a paragraph of text.

CCSS.ELA-LITERACY.RI.3.2, CCSS.ELA-LITERACY.RI.4.2, CCSS.ELA-LITERACY.RI.5.2

Writing Activity

Students choose one natural disaster to research and record their answers to these questions in a notebook:

- What is the natural disaster?
- How does this natural disaster happen?
- Why does this disaster happen?
- Where does this natural disaster occur?
- When does this natural disaster occur?
- Who or what does this disaster affect? (people, places, animals)

CCSS.ELA-LITERACY.W.3.2, CCSS.ELA-LITERACY.W.4.2, CCSS.ELA-LITERACY.W.5.2

CCSS.ELA-LITERACY.W.3.7, CCSS.ELA-LITERACY.W.4.7, CCSS.ELA-LITERACY.W.5.7



You're the News Reporter: Students act as news reporters and use their research to give a news report about a natural disaster heading toward their area. Record students.

CCSS.ELA-LITERACY.SL.3.4, CCSS.ELA-LITERACY.SL.4.4, CCSS.ELA-LITERACY.SL.5.4

Newsroom: Create a Google Slide with thumbnail covers of each natural disaster with a link to each student's work. This is a great way to showcase student work for parents and students.

Extension: Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard (3-ESS3-1).

Suggested Activity

OBJECTIVES:

- Students represent data in tables and graphical displays to describe typical weather conditions expected during a particular season (3-ESS2-1)
 - Students will obtain and combine information to describe climates in different regions of the world (3-ESS2-2)
 - Explore how climate change affects, people, places, plants, and animals
1. Refer to page 16 in DK's *Weather* book and provide some other weather maps for students to study about typical weather conditions and climates in different regions around the world or during a particular season. Ex. Hurricane season (where, when, and how often?)

LESSON PLAN 3: SCIENCE (CONT'D.)

- Students study weather conditions during a particular season and record data in tables, later representing the data in a graph. Ex. Record precipitation during the winter and keep a running log. Students present findings of patterns and compare and contrast weather patterns from previous years.
- Students explore how climate change leads to extreme weather and natural disasters, like volcanic eruptions and wildfires.

Writing Activity

Write a book report about the unit you read. Make sure to include terms from the glossary in your report. Make sure the report answers the following questions:

- What was the unit about?
- What places does the book discuss?
- What did you learn about the topic?
- How does weather affect people, places, and animals?

CCSS.ELA-LITERACY.W.3.1, 3.2, CCSS.ELA-LITERACY.W.4.2, CCSS.ELA-LITERACY.W.5.2

Group Project / Multimedia Presentation

Use the book to identify an important event. Create a presentation that focuses on these key points:

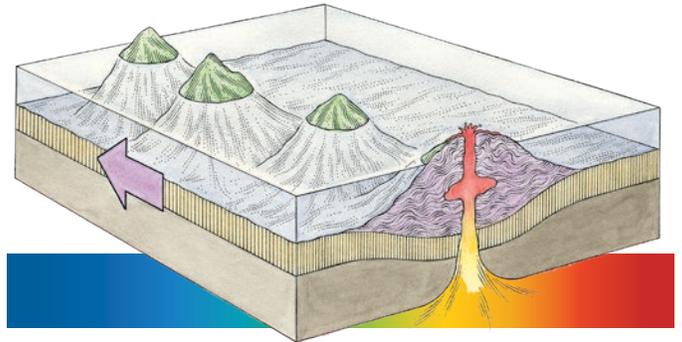
- Why is weather so important?
- How does weather affect people, places, and animals?
- Where, when, why, and how do natural disasters occur?

CCSS.ELA-LITERACY.W.3.3, 3.7 CCSS.ELA-LITERACY.W.4.6, CCSS.ELA-LITERACY.W.5.6

Homework Activities

Encourage students to take their learning further. The homework suggestions can be optional or be put into a homework choice board for students.

- Write a short weather report of the current temperature and weather conditions.



- Observe and then draw the clouds you see in the sky. Label your drawing with the cloud type.
- Using any science title in the DK collection, write or draw 3 things you learned from the book.
- Using any science topic in the DK collection, write down 3 questions you still have about the topic and want to know more about.
- Choose 3 words from the glossary and draw a sketch to demonstrate the word's meaning.
- Find some rocks in your backyard and identify them. Draw and label the rocks, take photos, and/or bring them into class to share your findings.



OTHER IDEAS FOR THE CLASSROOM

Engage auditory, visual, and bodily kinesthetic learners:

- Play recordings of sounds typically heard in the environment to help students imagine what the animals experience
- Display photos of relevant regions on projectors or SmartBoards
- Watch videos of weather reports and news reports of natural disasters
- Create a home weather station



OTHER IDEAS FOR THE CLASSROOM

- Read aloud the *I Survived* series by Lauren Tarshis and have these books in your classroom library for students to read independently
- Make observations to determine the effect of sunlight on the Earth's surface (K-PS3-1)
- Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area (K-PS3-2)
- Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in landscape over time (4-ESS1-1). Use with *DK Eyewitness Rocks & Minerals*
- Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment (5-ESS3-1). Use with *DK Eyewitness Climate Change*
- Use a model to describe how animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways (4-LS1-2). Use with *DK Eyewitness* titles *Ocean, The Amazon, Cat, Fish, Shark*
- Construct an argument that plants and animals have an internal and external structure that function to support survival, growth, behavior, and reproduction (4-LS1-1). Use with *DK Eyewitness* titles *Ocean, The Amazon, Cat, Fish, Shark*
- Support an argument that plants get the materials they need for growth chiefly from air and water (5-LS1-1). Use with *DK Eyewitness* titles *Ocean, The Amazon, Cat, Fish, Shark*

SUBJECT AND TOPIC COVERAGE

Here are some subject and topic groupings that could work for your class:

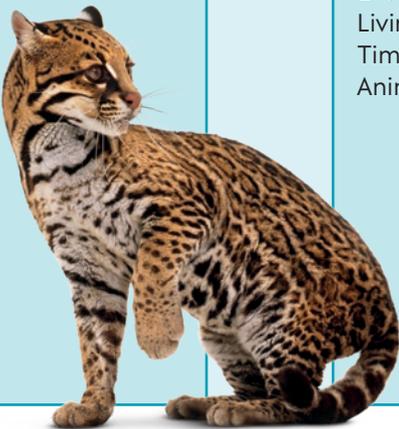
SUBJECT / TOPIC	EYEWITNESS TITLE
Ancient civilizations	<i>Ancient Egypt, Ancient Rome, Wonders of the World</i>
Animals	<i>Cat, Dinosaur, Fish, Shark</i>
Biodiversity	<i>Climate Change, Fish, Ocean, Shark, The Amazon</i>
Climate	<i>Climate Change, Hurricane & Tornado, Natural Disasters, Ocean, The Amazon, Volcano & Earthquake, Weather</i>
Ecosystems / Nature / Environmental change	<i>Climate Change, Hurricane & Tornado, Natural Disasters, Ocean, Rocks & Minerals, The Amazon, Volcano & Earthquake</i>
Forces acting on structures and mechanisms	<i>Natural Disasters, Titanic, Train, Weather, Wonders of the World</i>
Geography	<i>Ancient Egypt, Ancient Rome, Wonders of the World</i>
Geology	<i>Rocks & Minerals, Volcano & Earthquake</i>

SUBJECT AND TOPIC COVERAGE (CONT'D.)

SUBJECT / TOPIC	EYEWITNESS TITLE
Habitats	<i>Fish, Ocean, Shark, The Amazon</i>
History	<i>American Revolution, Ancient Egypt, Ancient Rome, Civil War, Climate Change, Dinosaur, Natural Disasters, Titanic, Volcano & Earthquake, World War II</i>
Modernization / Industrial Revolution	<i>Train, Titanic</i>
Sea life	<i>Fish, Ocean, Sharks</i>
The amazing world around us	<i>Ocean, The Amazon, Wonders of the World</i>
Transportation	<i>Titanic, Train</i>
War	<i>American Revolution, Civil War, World War II</i>
Weather	<i>Climate Change, Hurricane & Tornado, Natural Disasters, Ocean, Volcano & Earthquake, Weather</i>

GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
<i>Dinosaur</i>	K-5	Science, Earth resources, Earth through time, Earth science, Change and continuity, Reading informational texts, Evolution, habitats, Living things, Timelines, Reptiles, Animal adaptations	History, Characteristics/ needs of living things, Career focus on archaeology, Nonfiction text features, Art, Descriptive writing, Literacy, Geography, Science	<p>Extension for advanced readers after studying how animals adapt to environment.</p> <p>Evolution over time, noticing and wondering</p> <p>Rock, mineral, fossil exploration</p> <p>Timelines, compare and contrast (portrayal in fictional media)</p> <p>Could use a variety of mediums to show features of different dinosaurs, then descriptive writing to illustrate these features</p> <p>Classifying dinosaurs in different pre-historic time periods (timelines), fossils</p> <p>Studying nonfiction texts and sources/ research, evolution</p> <p>Virtual field trips</p>



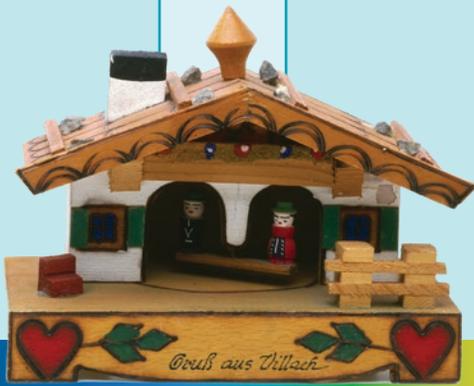
GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
<i>Rocks & Minerals</i>	K-5	Natural resources unit, Science, Geology, Matter, Earth science, Soils, Rocks and minerals, Space, Sustainability, Reading informational texts	Geography, Nonfiction text features, Descriptive writing, Literacy, Sorting rocks	Use as a reference when studying different features of rocks/minerals. Extension for students ready to learn names of rock types Weathering experiment Exploring matter Renewable vs nonrenewable resources Reading and understanding diagrams Record observations using shape, color, and texture vocabulary Identifying and classifying rocks and minerals
<i>Hurricane & Tornado</i>	K-5	Connections to Earth's resources, Science, Weather, Forces causing movement, Air and water in the environment, Forces acting on structures, Reading informational texts	Reading and writing for problem/ solution and cause/ effect, Math, Alternative forms of measurement, Engineering and design, Measurement, Literacy, Natural disasters, Weather patterns	Paired text/cross text practice with the <i>Volcano & Earthquake</i> or <i>Natural Disasters</i> books Hurricane speed simulation Morning meetings, discussing weather patterns Reading charts, scales, and maps, understanding rating scales Students must design a home that would survive a hurricane and describe its features Research natural disaster project Watch videos of storms



GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
<i>Weather</i>	K-5	Social studies, History, Preview cloud types and weather, How things are different in the past and today, Energy, Earth studies, Weather, Forces causing movement, Forces acting on structures, Air and water in the environment, Science, Reading informational texts	Biographies, Patterns, Geography, Math, Understanding cycles, Alternative forms of measurement, Math (reading graphs), Literacy	<p>Read the <i>I Survived</i> series by Lauren Tarshis</p> <p>Books about weather</p> <p>Reading and writing for compare and contrast (past and present)</p> <p>Weather tracking</p> <p>Morning meetings, discussing weather patterns</p> <p>Nonfiction features, creating/reading diagrams</p> <p>Use graphs and tables of weather data to describe and predict typical weather during a season</p> <p>Study of weather and types of weather, weather cycle, study the weather in different places around the world</p> <p>Watch videos</p>
<i>Volcano & Earthquake</i>	K-5	Science, Earth formations, Weather systems, Soils, Rocks and minerals, Space, Sustainability, Reading informational texts	Literacy, Natural disasters, Before and after sequences, Geology, History, Nonfiction text features, Math (measurement, reading graphs)	<p>Research natural disaster project</p> <p>Read <i>Ranger in Time</i> series by Kate Messner</p> <p>Volcanic predictions based on knowledge</p> <p>Morning meetings, discussing weather patterns</p> <p>Cause and effect, reading/creating diagrams, classifying</p> <p>Students sort and categorize earthquakes based on readings on seismograph</p>



GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
Cat	K-5	Characteristics/needs of living things, Science, Growth and changes in animals, Reading informational texts, Plants and animals	Literacy, Math, Nonfiction text features, Sorting and classifying, Expository writing, Compare and contrast writing with different types of cats	<ul style="list-style-type: none"> Identify and classify different kinds of cats and their characteristics Measuring different types Body part identification, mammals Compare and contrast activities, understanding/creating diagrams and labels Distinguish between facts and opinions related to cats, Compare and contrast different types of cats Use for research clubs reading/writing in ELA
Shark	K-5	Plants and animals, Science, Ocean life, Characteristics and needs of living things, Growth and changes in animals, Reading informational texts	Literacy, Nonfiction text features, Sorting and classifying, Expository writing, Compare and contrast	<ul style="list-style-type: none"> Identify and classify different kinds of sharks and their characteristics Compare and contrast different sharks Use for research clubs in ELA Animal adaptations and habitat presentations Compare and contrast activities, understanding/creating diagrams and labels Write about a shark's physical and behavioral adaptations Draw a diagram of a shark
Train	K-5	History, Social studies, Technology advances, Economics, Motion, Force, Vehicles, Structures and mechanisms, Science, Reading informational texts	Compare and contrast writing (trains of the past and today), Math, Historical significance (Trans Canadian Railway), STEAM, Expository writing, Literacy, Maps	<ul style="list-style-type: none"> Enrichment and extension when studying past/present and human change to environment. Calculate speeds Science of motion, vehicle comparisons Create model of train that displays a problem/solution relationship How a train was built, timeline of trains then and now Write a diary entry about a train ride or experience



GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/USE
<i>Fish</i>	K-5	Science, Plants and animals, Characteristics/needs of living things, Animals, Sea life, Biodiversity, Growth and changes in animals, Reading informational texts	Geography, Sustainability and stewardship, Climate change, Nonfiction text features, Sorting and classifying, Art, Literacy, Research clubs in ELA, Writing about animals	Resource for examples of animal adaptations Categorize fish into locations Compare and contrast different fish Body part identification Compare and contrast activities, understanding/creating diagrams and labels Use lines, shapes, and patterns to show physical adaptations of fish Identify and classify different kinds of fish and their characteristics Venn diagram of fish
<i>Ocean</i>	2-5	Animal habitats/adaptation, Natural resources, Science, Biodiversity, Sustainability, Environmental stewardship, Reading informational texts	Geology, Nonfiction text features, Persuasive writing, Literacy, Map skills	Use for research clubs on animals (advanced readers) Exploring matter Building background knowledge, diagram exploration, nonfiction feature hunt Write editorial about need to protect our oceans Study of ocean animals and their habitat Virtual field trip or aquarium field trip
<i>The Amazon</i>	2-5	Science, Earth's resources, Plants and animals, Geography, Habitat studies, Climates, Biodiversity, Climate change, Sustainability, Environmental stewardship	Science, Geography, Economics, Climate change, Nonfiction text features, Literacy, Research clubs in ELA on certain animals	Animal habitats Weather patterns Human impact on environment, change over time, human and environmental interaction Identify and classify animals, plants, insects, climate, and the characteristics of the Amazon (collaborative research project)



GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
<i>Wonders of the World</i>	2-5	Science, Earth's resources, Rocks and minerals, Landforms, Social studies, History, Climate, Earth science, Early societies, Historical impact, Forces and structures, Humans and the environment, Reading informational texts	Maps, Geography, History, Nonfiction text features, Opinion writing, literacy	<p>Countries' differences virtual field trip (use as extension for students interested in learning more about geology)</p> <p>Weather patterns, geography</p> <p>Timelines, criteria for judgment (ranking wonders by criteria)</p> <p>Each student selects one Wonder of the World, and engage in debate for most deserving of top spot</p> <p>Research project—choose one to research and create a presentation</p>
<i>Climate Change</i>	3-5	Natural resources, Energy, Science, Geography, Social studies, Weather, Environmental/Habitat studies, Biodiversity, Sustainability, Environmental stewardship, Reading informational texts, Nonfiction book clubs	Reading for problem/solution and cause/effect, Writing text-based essays, Math, Social studies/current events, Political/government processes, Nonfiction text features, Math connections (graphs, temperature), Persuasive writing, Literacy, Science, Map skills	<p>Research club on how humans change the environment or renewable energy sources.</p> <p>Graph activity, measuring, writing letters about impact</p> <p>Morning meetings, discussing weather patterns</p> <p>Building background knowledge, diagram exploration, nonfiction feature hunt</p> <p>Renewable and nonrenewable energy source persuasive writing</p> <p>Study climate change and the effects of global warming</p> <p>Studying nonfiction texts and sources/research</p> <p>Record temperatures once a month</p>



GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
<i>World War II</i>	3-5	History, Change and conflict, Reading informational texts, Social studies, Language arts	Geography, Social issues, Remembrance Day, Cause and consequence, Nonfiction text features, Literacy, History, Map skills	Research, nonfiction feature hunts Study of history, causes and effects of war Virtual field trips
<i>Ancient Egypt</i>	3-5	History, Early societies, Changing family and community traditions, Social studies	Geography, Mapping, Nonfiction text features, Literacy, History	Make available to advanced readers with a special interest in this topic Comparing cultures Reading and understanding diagrams, Compare and contrast present and past communities and families Study of ancient Egypt-life, culture, pharaohs, artifacts, pyramids, afterlife, the Nile and its resources (research project)
<i>Titanic</i>	3-5	History, Historical significance, Forces acting on structures, Science	Science, Nonfiction text features, Literacy, History	A great resource for students with a special interest in this topic Chemical weathering experiments Inferential thinking while reading Study the <i>Titanic</i> , its history, and artifacts
<i>American Revolution</i>	3-5	History, Social studies, Reading informational texts	Biographies, Geography, Cause and effect, STEAM, Literacy, History	Paired texts for historical fiction Read <i>I Survived</i> series by Lauren Tarshis or <i>Ranger in Time</i> series by Kate Messner Use technology to create interactive timeline of war Study the causes of the revolution



GRADE ALIGNMENT, CURRICULAR LINKS, AND SUGGESTED ACTIVITIES (CONT'D.)

TITLE	GRADE	CURRICULAR LINKS	CROSS-CURRICULAR LINKS	SUGGESTED ACTIVITY/ USE
<i>Ancient Rome</i>	3-5	History, Social studies, Early Societies, Changing family and community traditions	Literacy, Geography, Social sciences, Mapping, Nonfiction text features	<p>Study of ancient Rome, life, culture, art, sculptures, the Colosseum (research project)</p> <p>Make available for advanced readers with an interest in this area</p> <p>Comparing ancient cities with current cities</p> <p>Reading and understanding diagrams, compare and contrast present and past communities and families</p>
<i>Natural Disasters</i>	3-5	Science, Rocks and minerals, How humans change the environment, History, Weather forces causing movement, Air and water in the environment, Forces acting on structures	Science, Making connections to global events, Literacy, History (before and after)	<p>Extension/enrichment for students who want to learn more about igneous rocks or human impacts on environment</p> <p>Morning meetings, discussing weather patterns</p> <p>Natural disaster project—choose one to research and create a presentation, compare and contrast natural disasters, or collaborative research project</p> <p>Make safety posters or ads</p>
<i>Civil War</i>	3-5	History, Social studies, Reading informational texts	Geography, Black History Month, Cause and effect, Creative writing, Literacy, Geography, North and South maps	<p>Map locations of the Civil War</p> <p>Comparing modern times to history</p> <p>Each student takes on role of figure in the Civil War, develops speech, letter, etc. to showcase perspective and emotions during that time</p> <p>Causes and effects of the Civil War, history, and important people</p> <p>Read <i>I Survived</i> series by Lauren Tarshis or <i>Dear America</i> series</p>

