Pocket Genius Series

EDUCATORS' GUIDE—ALIGNED WITH THE COMMON CORE STATE STANDARDS

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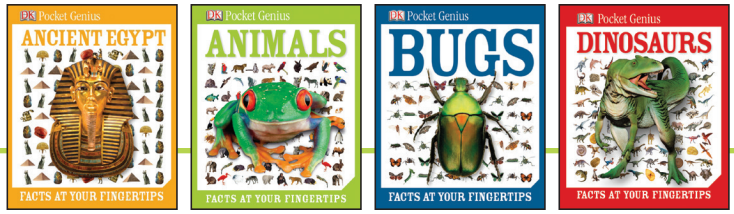
SUPPORTS THE COMMON CORE STATE STANDARDS

FACTS AT YOUR FINGERTIPS

Introduction

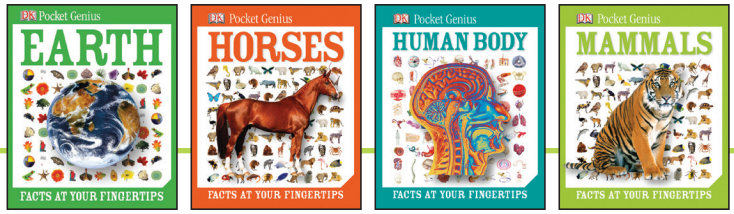


The highly appealing Pocket Genius books grab students' attention with their crisp color photographs and fascinating facts. They're pocket encyclopedias on captivating subjects from sharks and space to horses and the human body. Students find them handy for quick reference, but also to spark ideas for research and writing on topics that fit into specific curriculum areas, like ancient Egypt. Taking a survey approach, each book starts with an overview and then divides the subject into three or more main topics, with an introduction to each topic. Within each topic are many subtopics, which are covered briefly with eye-catching photos and quick explanations. Valuable visual aids such as diagrams and maps lay out concepts and add information. Some of the Pocket Genius books resemble field guides, with brief catalog entries that contain similar information such as scientific and common names, size, habitat, and distribution.

The books in this engaging series share the same sharp visuals, distinctive format, and helpful text features. Nonfiction series books like these provide benefits similar to those of fiction series: If a student enjoys one of the books in the series, there's a good chance that he or she will want to pick up another, building enthusiasm for reading that's often shared with fellow students.

The Common Core State Standards require increased use of nonfiction as students progress through the grades. The Pocket Genius books fulfill this need with their many curriculum-related topics. This DK guide for educators aligns the series and specific books to the Common Core State Standards for reading informational text, writing, and listening and speaking. The first section addresses the series as a whole and shows how any of the books can be used with a particular standard. The second section focuses on each book, with a description and a detailed explanation of an activity for using the book in conjunction with a specific standard. For each book, there's a tie-in to technology, which the standards emphasize, and a graphic organizer to help students comprehend the material. Because the books are so similar, any activity, graphic organizer, or technology tie-in suggested for one of the books is likely to work well for the others.

Series Standards



Reading Informational Text:
Vocabulary including Technical Words (Anchor Standard 4)
All the books introduce relevant "technical" vocabulary and include a useful glossary at the back. As they read, students can make note of unfamiliar words, try to understand them from the context and pictures, and check the glossary for confirmation or further understanding.

Activity Suggestion: After reading, students can select one or two words from the glossary, find them in the text, and try to explain the concepts to another student, a small group, or the whole class, using visuals if helpful.

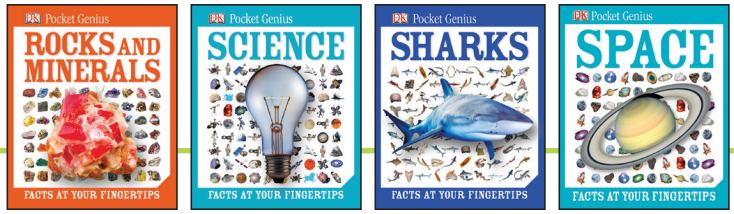
Reading Informational Text:
Text Structure (Anchor Standard 5)
The Pocket Genius books are "survey" books that are largely descriptive, introducing a topic and providing information on subtopics. Survey books are excellent jumping-off points to further reading and research. In discussing the structure, it's instructive to compare the Pocket Genius books to books with other structures—such as chronological, cause and effect, and compare and contrast—so students can see the differences. Highlight the fact that books like those in the Pocket Genius series, which have an "enumerative" or "listing" structure, are usually read differently than fiction or narrative nonfiction. Rather than being read from cover to cover, they can be dipped into and are especially good for browsing or for finding facts quickly.

Reading Informational Text:
Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently (Standard 5.7)
All of the Pocket Genius books have a table of contents, which is a good place to start in a group discussion about the topics in the book, or to use to locate information quickly. Each book also has an index and a glossary, both of which are instrumental in finding facts and answers.

Activity Suggestion: After reviewing these text features with students, have go on a scavenger hunt in which they search through the Pocket Genius series books to find a variety of fascinating facts, using the table of contents, glossary, and index.

Reading Informational Text:
Visual and Multimedia Elements (Anchor Standard 7)
The Common Core State Standards recognize that our world is increasingly visual in how we acquire and respond to knowledge. The Pocket Genius books reflect this shift by integrating photographs, drawings, graphs, charts, tables, maps, and other visual aids. All of the books lend themselves to discussions about which information comes from the text, which from the visual elements, and which from both. The series gives students experience in reading graphic presentations of information.

Series Standards



Activity Suggestion: To demonstrate how much information is presented in the visuals and how much in the text, have students design a basic matrix—a graphic organizer that consists of rows and columns. In this case, have students use three columns labeled "Information," "Visuals," and "Text." Under "Information," they will write facts or ideas from an entry or double-page spread in the book. Then they'll put a checkmark under "Visuals" if the information is conveyed through pictures or other visual elements, and a checkmark under "Text" if the words convey the information. Many pieces of information will have two checkmarks, which illustrates how the two aspects of the book reinforce each other.

Writing and Listening/Speaking Standards:
The Common Core requires research and expository writing, calling for students to branch out from personal narratives to writing that examines and conveys ideas. Students are to develop a "topic with facts, definitions, concrete details, quotations, or other information and examples" (Standards 4.2, 5.2). The Pocket Genius books supply the kind of facts, definitions, and concrete details students need, making them excellent sources for simple writing assignments. The survey nature of the Pocket Genius books make them effective springboards for research projects, because they highlight many intriguing topics for students to pursue.

The high appeal subjects of the Pocket Genius books make them ideal for discussion and speaking projects. Students are innately interested in so many of the topics—sharks, dinosaurs, horses, bugs, the human body—that they enjoy participating in discussing them. The books offer many ideas for speaking topics that will interest not just the speakers but the listeners.

Activity Suggestion: When looking for topics, have the students read the Pocket Genius books, jotting down areas that interest them. They can start their research with the information in the Pocket Genius book, then branch out to other texts and online sources.

Technology Tie-ins:
The Common Core State Standards encourage students to "use technology and digital media strategically and capably." Because the Pocket Genius topics are timely and connected to the concrete world, they offer many opportunities for technology tie-ins. Age appropriate websites extend such topics as animals, space, ancient Egypt, and the human body. For some of the topics, you'll also find related videos on educational and government websites that can be used in classrooms.

Pocket Genius: Ancient Egypt

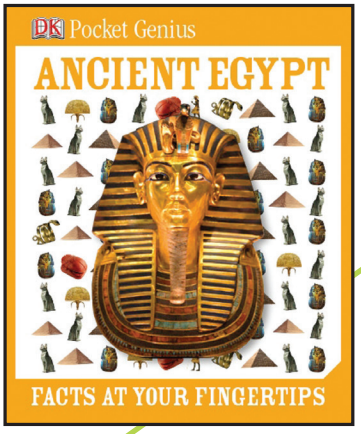
Description:
Pocket Genius: Ancient Egypt provides detailed information on many aspects of ancient Egyptian culture that fits into curriculum units on the ancient world. It starts with an overview, including a timeline, and then introduces pharaohs and other key individuals. Next it covers burials and tombs, religion and the various gods, and aspects of daily life from food to clothing to music. Each page features at least one image and many facts. Special features show hieroglyphics, a family tree of the gods, and a cross-section of a pyramid.

Standard Alignments:
Reading Literature Standard 7.9: Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.

Activity and Discussion Suggestion:
Many curriculum units about ancient Egypt include novels for class study, independent reading, or a teacher read-aloud. Choose a novel related to ancient Egypt to read aloud or have students choose a book for independent reading. As they listen or read, have them jot down various elements that come up in the story, such as names of gods or pharaohs, places, and customs. As they go along, have the students look up some of the terms in *Pocket Genius: Ancient Egypt* and compare the fictional version with the informational one. They can create a four-column chart with the shared element listed in the first column. The next column would give the use of it in the novel and the page number. The third column would give information from the guide and the page number. In the final column, students can compare the different approaches. At the end, convene a group discussion on use of historical information in fiction and have the students share what they found.

Graphic Organizer:
Create a template or have your students create their own graphic organizer as described above. Students can adapt the format to suit their needs, possibly dividing the final column into two with one for similarities and one for differences between the fiction and nonfiction treatments of a specific topic. Creating their own graphic organizer or creating one as a group is a good exercise in analyzing what information they want in the chart and what they want to do with it.

Technology Tie-in:
Visit the Odyssey website associated with the Michael C. Carlos Museum of Emory University, Memorial Art Gallery of the University of Rochester, and Dallas Museum of Art at **http://carlos.emory.edu/ODYSSEY/EGYPT/homepg.html**. It provides images and information divided into sections focused on: people, mythology, daily life, death and burial, writing, and archaeology. Students can hear how special terms and names are pronounced and play simple games.



ISBN: 9780756698133

Pocket Genius: Animals

Description:
Featuring an eye-catching frog on the cover, this attractive book will appeal to a wide range of students with its crisp, colorful photographs and fascinating facts. It opens with two pages that show a colorful chart of the animal kingdom, followed by a chart and description of animal species. The first large section covers mammals, followed by birds, reptiles, amphibians, fish, and invertebrates. Small profiles of each animal are placed next to a human body, hand, or finger to convey a good sense of the animal's size. A label indicates which animals are endangered species.

Standard Alignments:
Reading Anchor Standard 5: Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

Pocket Genius: Animals and the other Pocket Genius books are perfect for introducing the concept and structure of a "survey" book: an informational text that introduces a broad topic and then explores subtopics. Survey books have text structure known as "enumerative" or "listing," and they can be chronological or simply be a collection of subtopics.

Activity and Discussion Suggestions:
- Have students go through the book, skimming the sections and reading those that catch their interest. Then have them go back and look carefully at the book's organization. As a group, discuss the idea of a survey book and brainstorm the purposes it serves. For example, a survey book is unusually good for looking up information by using the index or skimming the headings for topics. (Note: This kind of book does not have to be read from beginning to end, but can be "dipped into" since most of the double-page spreads work independently of one another.)

- Have students find books in the school or classroom libraries that have different structures, such as chronological or cause-and-effect, and compare them. This is a valuable lesson in the different uses of informational texts. Have students also compare this kind of organization to the fiction they read, which must be read from beginning to end to make sense.

- Have students create a small stapleless book using folded paper. They can apply the survey concept by choosing a broad subject and having each page of the small book be about a subtopic. The topics can draw from this or other Pocket Genius guides, or their own knowledge of another topic such as a sport or geographical area.

Graphic Organizer:
Before creating the book, have students brainstorm ideas using a web graphic organizer. This consists of a center circle with the main topic. Lines connect it to other circles with subtopics. Have them write down as many ideas in the web as they want, and then choose six or seven for the small book. The Cluster/Word Web 3 at Eduplace is a graphic organizer template with six idea bubbles: **http://www.eduplace.com/graphicorganizer**.

Technology Tie-in:
The interactive stapleless book template at NCTE's ReadWriteThink is easy to use and creates an eight-page book. It prints out on an 8.5 x 11" sheet of paper, which students fold to make a book. For a non-interactive website that explains how to fold such a book, go to **http://library.thinkquest.org/J001156/makingbooks/minibook**.

ISBN: 9780756692841

Pocket Genius: Bugs

Description:
We all encounter bugs in our everyday lives, which give them an immediate connection to the reader. But this guide depicts far more insects and other bugs than we see around our homes. Most of the double-page spreads introduce five or six species with crisp color photographs; brief descriptions; quick facts including size, diet, habitat, and distribution; and a scale drawing comparing the insect to a human thumb or hand to give a sense of size. Appendices offer some amazing facts, followed by a glossary and index.

Standard Alignments:
Reading Informational Text Standard 5.7: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

The Pocket Genius guides are excellent resources for quickly finding information on an insect or related animal. The index points users to specific animals by using common names, but also highlights broader categories like arthropods and crustaceans, and topics like reproduction, hunting, and life cycle. Use this guide to compare the effectiveness of different resources for locating answers to questions quickly.

Activity and Discussion Suggestion:
Have students create a quiz game in a *Jeopardy!* format by formulating questions and answers using the guide. After students have read the introductions to the guide and to the different sections, have a discussion about what kinds of questions would be good for a quiz. For example, they could ask the meaning of words found in the glossary or the locations of a certain insect around the world, given in the distribution section in each entry. Since the *Jeopardy!* format calls for categories, the discussion should also cover broad categories that would work well together. The online site Jeopardy Labs provides a simple interactive template for creating a game with five categories and five answers under each category. Students could work in groups to come up with twenty-five questions and answers, or divide into pairs to do five questions and answers. After the quizzes are created, have students gather books and identify possible online resources or search engines. Students can play in teams, trying to find the answer before the competing teams do. After playing, have students discuss the best ways to locate answers quickly. Also, have them consider the reliability of resources, comparing print sources and websites.

Graphic Organizer:
Have students create a table for collecting the questions that includes columns for the question, the answer, and the page number where it is found in the guide. They may want to come up with more questions than necessary, and then choose the ones most suited to a quiz format.

Technology Tie-in:
Jeopardy Labs (**https://jeopardylabs.com**) is a free website that is easy to use. It is set up so it can be played by one to twelve teams at once. Like the television show, it has a chart with five categories and five slots under each with increasing point values from 100 to 500. Each slot gives an answer and the participants must supply the question. The correct question is then provided. Once created, the quiz can be downloaded.

ISBN: 9780756698140

Pocket Genius: Dinosaurs

Description:
This book provides numerous intriguing facts about and colorful images of dinosaurs, a perennially appealing topic for children. It opens with a timeline across four pages, followed by a "family tree" of dinosaurs, and then a discussion of fossils. The main section gives details on dozens of dinosaurs including pronunciations of their names. Smaller sections cover dinosaur "neighbors," small and large land animals that also lived during the Mesozoic Era, such as sea reptiles and flying reptiles. Many of the pictures use colored digital sculptures of creatures, giving them a three-dimensional look.

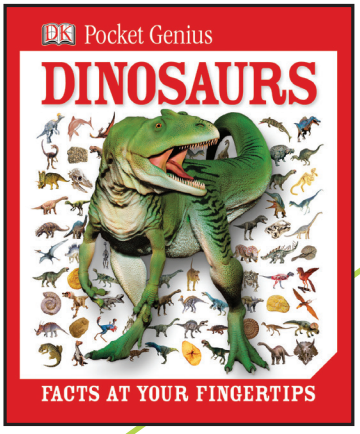
Standard Alignments:
Reading Anchor Standard 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Activity and Discussion Suggestions:
- Create a large timeline as a class, drawing on the periods shown on the timeline on pages 6-7: Triassic, Jurassic, and Cretaceous. Discuss as a group the function of a timeline as a way of organizing information chronologically. How are timelines helpful? What other topics lend themselves to timelines? Could timelines be used with fiction as well as nonfiction?

- Have students spend some time skimming the guide, reading more closely when they find a topic of interest. Have them choose one or several dinosaurs discussed to research in the guide or also in other print resources or on the Internet. They should take special note of when it existed. Students can create a picture accompanied by information on the dinosaurs to add to the timeline, and present the information, including pronunciation, to the class.

Graphic Organizer:
Timelines are a type of graphic organizer that arranges information chronologically, using words and visual content. *Pocket Genius: Dinosaurs* includes a timeline on pages 4-7 that shows the historical periods in which dinosaurs lived and the periods that preceded them. Free timeline tools on the Internet include **www.dipity.com** and **www.xtimeline.com**.

Technology Tie-in:
One website for quick additional research on dinosaurs is The Dino Dictionary at **www.dinodictionary.com**. It provides facts on a wide range of dinosaurs, which is searchable in an A-Z list. Each entry includes a pronunciation to listen to, the scientific name and its English translation, and details about order and size. Extra notes add different facts about topics like appearance and how they were discovered.



ISBN: 9780756693152

Pocket Genius: Earth

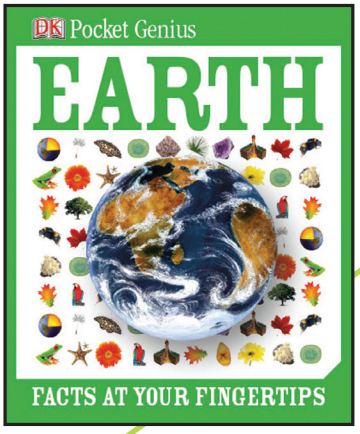
Description:
A wealth of information fills this handy guide, which starts with a geological timeline and is then followed by a cut-away of the earth to show its layers. The bulk of the book is divided into four sections: "Land," "Ocean," "Atmosphere," and "Climate." The largest section, "Land," breaks down into many biomes such as grasslands, mountains, tundra, polar regions, rain forests, and more. Within each biome, specific land features are described; for example, the mountain biome covers the Alps, Rockies, Pyrenees, Himalayas, and more. Photographs add information while the back matter offers more facts about the earth and a useful glossary.

Standard Alignments:
Writing Anchor Standard 7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

Activity and Discussion Suggestion:
Use this survey book to generate ideas for students to conduct short research projects and write a newspaper article as if for the travel section of a newspaper. They can work individually or in small groups, focusing on a biome or a specific example of one. Have the students spend time with *Pocket Genius: Earth*, reading through sections and focusing on topics that appeal to them. As they go along, have them jot down possible topics to research. Once they've chosen a topic, have them formulate questions they'd like answered, either in small groups or with the whole class. For the article, the Pocket Genius will offer sufficient information for a broad topic like deserts, but for more specific topics like the Sahara, have students supplement information in the guide with other print or Internet research. They can create the article modeled on newspapers, possibly using the Printing Press interactive tool at NCTE's ReadWriteThink. Have the students think about what they'd like to know if they were traveling to such a region: location, size, weather, terrain, flora and fauna, and more. Have them decorate the articles with drawings or photographs, and display them in such a way that students can see each other's work.

Graphic Organizer:
Have students consider what kind of graphic organizer might be most helpful in taking notes and then planning the travel article. Have them look through the excellent array of graphic organizers at New York's Greece Central School District website (**http://www.greece.k12.ny.us/academics.cfm?subpage=478**) and find one that suits their project, or choose one as a class after considering several.

Technology Tie-in:
Find NCTE's Printing Press interactive tool at ReadWriteThink (**http://www.readwritethink.org/classroom-resources/student-interactives/printing-press-30036.html**). It offers a choice of three formats: newspaper article, brochure, or flyer/sign/poster.



ISBN: 9780756698157

Pocket Genius: Horses

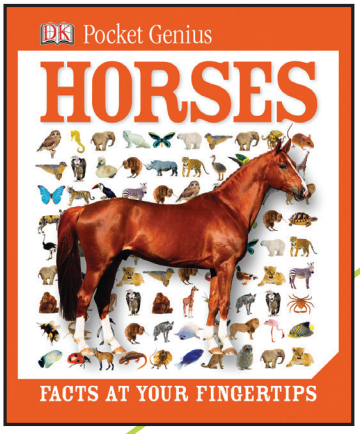
Description:
Horses have been a part of people's lives historically in so many different ways: on farms and ranches, in cities pulling carts and carriages, in racing and equestrian events, in circuses, and in the wild. This appealing guide is filled with photographs and facts about horses, organized by ponies, light horses, heavy horses, and other types. More than 130 horses and ponies are profiled with photos, short descriptions, and information about size, origin, and colors. Each profile also includes a small black and white drawing that shows the scale of a six-foot-tall human figure next to that particular horse.

Standard Alignments:
Reading Anchor Standard 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Activity and Discussion Suggestion:
Use this guide to have students consider how much information can be gleaned from photographs and drawings. In addition, show the class a video about horses from PBS, which offers free viewing of videos including "Horse and Rider," about the relationship of humans and horses; several on wild horses; "Horses of the West"; and several about the Lipizzaner stallions that perform in Austria. Have students first familiarize themselves with the guide, reading the introduction to the book and to each of the major sections. Have them spend some time looking at the profiles with special attention to what the visual aspects add. Then watch one of the videos together. Lead a discussion in which students compare the usefulness of (1) reading a text about horses without pictures, (2) just looking at photographs without text, (3) reading a book with text and photographs, and (4) watching a video. Create a Venn diagram as a class or individually, comparing using a book and viewing a video on the same subject.

Graphic Organizer:
Students can design their own Venn diagram with simple intersecting circles. Venn diagrams can also be found on the Internet, including a downloadable one at National Geographic Education (**http://education.nationalgeographic.com/education/media/venn-diagram/?ar_a=1**) and an interactive one at NCTE's ReadWriteThink (**http://www.readwritethink.org/files/resources/interactives/venn_diagrams/**).

Technology Tie-in:
Find the videos and other information on horses from PBS's *Nature* program at this website, **http://video.pbs.org/video/1215194821/**. PBS also offers a lesson plan on horses in conjunction with their *Nature* video, "Horse and Rider." While aimed at 9-12 grades, it can be adapted for younger grades or used for its links and downloadable resources.



ISBN: 9781465408815

Pocket Genius: Human Body

Description:
This highly appealing guide to the human body, a subject with intrinsic interest, opens with an overview, then looks at the body by different systems from skin and skeleton to blood, respiratory, digestive, and more. Excellent visuals add to the information through labeled photographs or illustrations on every page and diagrams on most double-page spreads. Students can see inside the human body to dozens of examples of how it works.

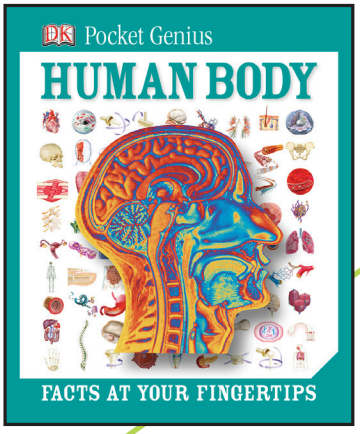
Standard Alignments:
Reading Anchor Standard 4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

This guide introduces numerous technical terms, most of them explained in context and many connected to diagrams of body parts or functions. Some of them are reinforced with definitions in the glossary at the back. The text also uses comparisons and analogies effectively to make concepts easier to understand. For example, on page 16 it says "The human brain is about the size of a cauliflower." On page 60 the text refers to "a fist-sized heart," and on page 96 the text says "Spread out, the lining of the inside of the small intestine would cover a tennis court."

Activity and Discussion Suggestion:
Have students choose a section of the book to read or assign them a section. As they read, students should write down new language and make a special note of figurative language or comparisons. They should be ready to define the new terms and give examples of figurative language and comparisons. Discuss as a group how the students gleaned meaning from context and from visual clues. Have students share the figurative language and comparisons, and discuss how an analogy like "Weight for weight, bone is five times stronger than steel" (page 28) helps readers understand new information.

Graphic Organizer:
Have students use a simple graphic organizer for the new vocabulary they encounter. Columns can include new words, information gleaned from the text, information from visual clues, their understanding of a new word, and its definition from the glossary, if it's included there.

Technology Tie-in:
The National Library of Medicine has a website for the Visible Human Project (**http://www.nlm.nih.gov/research/visible**). The project has digitized sections of the body to teach key concepts in human anatomy. Some are animated and move as they are viewed. Some images have a clickable interface to highlight different parts.



ISBN: 9781465408822

Pocket Genius: Mammals

Description:
The tiger on the cover and the bear on the title page will pull readers into this eye-catching guide on a popular subject. The introduction addresses what a mammal is, the evolution of mammals, and their habitats. It also gives a tree chart of the twenty-nine orders of mammals, divided into three categories: egg-laying, pouched, and placental. These divisions provide the main sections of the guide as well, with by far the largest number falling into placental mammals. The double-page spreads feature crisp color photographs of several related mammals with the scientific and common names, a short description, and a list of facts including size, diet, habitat, and geographic distribution. A small inset gives a sense of the animal's size compared to a six-foot-tall human, a human hand, or a thumb. Endangered species are labeled.

Standard Alignments:
Speaking and Listening Anchor Standard 4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

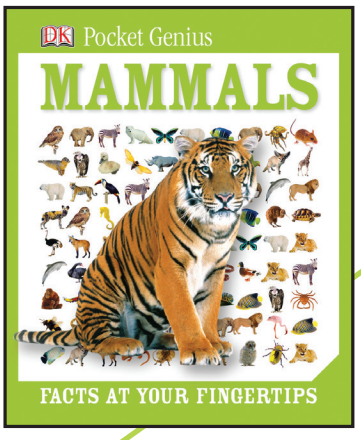
Activity and Discussion Suggestions:

- Students will give short presentations on a mammal that captures their interest. Have them start their research by reading the book's introduction and the introductions to the three main sections. Then have them browse the guide, stopping to read about animals that interest them. As they go along, have them write down ideas of possible mammals to learn more about. At the same time, they should write down questions they would ask to learn more about any animal. The oral reports should emphasize facts specific to each mammal to avoid duplication with other reports in the class.

- One useful Internet jumping-off point for further research is the University of Michigan's Animal Diversity Web. It provides information on thousands of species. However, be sure to have students read the "About Us" page at the website, which explains that college students contribute the information. Discuss the issue of reliability and the need to confirm facts they find either in *Pocket Genius: Mammals* or elsewhere. This can lead to a fruitful discussion on use of sources, the need to evaluate websites, and the possible differences between print and Internet resources.

Graphic Organizer:
To help them gather information for the report, have students use a Cornell note-taking graphic organizer that helps them record their main points with details, evidence, and where they found their information. One version can be found at this Johns Hopkins University/Maryland Public Television website along with other basic graphic organizers that can be downloaded as PDFs or Word documents: **http://www.thinkport.org/technology/template.tp**.

Technology Tie-in:
The Animal Diversity Web at the University of Michigan provides an extensive database for researching animals: **http://animaldiversity.ummz.umich.edu/**. The interface is easy to use and brings up a wealth of information on thousands of individual animal species. The results may include text, pictures, photographs, recordings, and movies, depending on the species. As noted above, the entries are submitted by college students.



ISBN: 9781465408846

Pocket Genius: Rocks and Minerals

Description:
Rocks and minerals are everywhere, yet we often pay little attention to them. This fascinating guide introduces nearly 200 rocks and minerals with color photographs and distinctive facts. It begins with how rocks and minerals are formed, then gives tips on collecting them. The main body of the text is divided into a section on rocks and a longer one on minerals. Each has an introduction about how they are formed and how to identify them, followed by short profiles of specific rocks and minerals. The book wraps up with a copy of the periodic table of elements, a glossary, and an index.

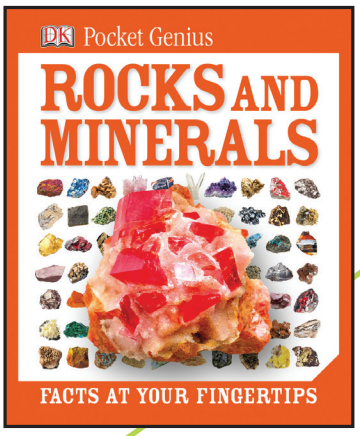
Standard Alignments:
Reading Anchor Standard 5: Assess how point of view or purpose shapes the content and style of a text.

What is the purpose of a guide like those in the Pocket Genius series, and specifically *Pocket Genius: Rocks and Minerals*? How do books like this compare in terms of purpose with other kinds of nonfiction such as chronological narratives about history or science? Have students spend time with this guide and some of the others in the series.

Activity and Discussion Suggestion:
Each student should look at several of the guides with the above questions in mind. Then distribute some other types of nonfiction texts, including narratives, how-to books, and nature field guides. Have students jot down notes as they consider what the authors are trying to do in the different books. Some possibilities are to inform, persuade, and/or entertain. Have students consider pages 10-13 in *Pocket Genius: Rocks and Minerals*, which give advice on rock collecting. After students have perused a number of different kinds of books, have a discussion on the uses of books, starting with *Pocket Genius: Rocks and Minerals* and comparing it to field guides, which have some strong similarities, and then comparing it to a variety of other nonfiction. Discuss how understanding the author's purpose helps a reader approach a text, noting that an author may have more than one purpose. Finally, have students consider the different kinds of books they use and the reasons they use them.

Graphic Organizer:
A simple chart with three columns will help students ground their observations in details. The first column is for the book title, the second for the book's purpose, and the third for evidence of that purpose, including page numbers. A book can have more than one entry if it has more than one purpose.

Technology Tie-in:
The Smithsonian encourages young people to collect rocks and minerals as well as stamps, coins, and other items at its educational website, **http://www.smithsonianeducation.org/students/smithsonian_kids_collecting/main.html**. It presents reasons to collect and explains how to begin. Under the "Rocks and Minerals" tab, it highlights some of the outstanding items in the museum's collection such as the Hope Diamond and the Allende Meteorite. It explains how to care for and display a rock collection and suggests useful websites and books.



ISBN: 9780756692858

Pocket Genius: Science

Description:
Fireworks. Radioactivity. Animal migration. Hot air balloons. This handy guide covers a lot of ground, looking at chemistry, physics, and biology with everyday examples and more unusual ones. It uses numerous diagrams to present information from how a battery works to how planes fly. At the end are more fascinating facts, the periodic table of elements, a glossary, and an index.

Standard Alignments:
Reading Anchor Standard 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Activity and Discussion Suggestions:

- Introduce the idea of diagrams and how they are used to present information using visual elements and words. Have students discuss where they see diagrams in their daily lives, such as a subway map or instructions for appliances. They may already be familiar with specific diagrams like Venn diagrams, tables, bar and pie charts, and flow charts. Students should read the introduction to the book and the different sections, then browse to find areas of interest to them. Have each student pick out a diagram to consider closely. They should take notes on everything about the diagram. Does it show one object with labels, or a process? Does it use lines or arrows? Does it incorporate a photograph or drawings? Have the students draw a larger version of the diagram and share it with others in a small group, explaining the diagram's function.

- An additional exercise on this topic would be to have students create their own diagrams in a tool like Prezi or simply in a word processing program using the drawing tools. They could base it on a diagram in the book or on another subject from school or their lives.

Graphic Organizer:
Diagrams are essentially ways of organizing information. The online presentation software Prezi (**http://prezi.com/prezi-for-education/**), which is free for educators, has specific diagram tools. Have students start with a blank Prezi rather than a template. The tools include frames, arrows, and lines that could be used to create a diagram. Or students could use the specific diagram tools found under the "Insert" tab. There are many choices including linear diagrams, circular ones, and Venn diagrams.

Technology Tie-in:
One of the most widely known informational graphics in science is the periodic table of elements, found in one of the appendices of this guide. The Royal Chemistry Society, based in London, has extensive information about the table including its history and the history of each element. This interactive website allows users to click on each element to learn more through text, podcasts, and videos: **http://www.rsc.org/periodic-table**.

ISBN: 9781465408839

Pocket Genius: Sharks

Description:
Sharks fascinate many students, who know them as the subject of scary movies and the name of evil characters in comics and cartoons. This Pocket Genius guide features hundreds of photographs of different types of sharks from the well-known great white shark to the sawfish sharks with long, saw-like snouts. Find profiles of more than 150 sharks and related fish called rays, each with an illustration, description, size, habitat, and distribution. Appendices offer intriguing facts including the biggest and smallest sharks, followed by a glossary and index.

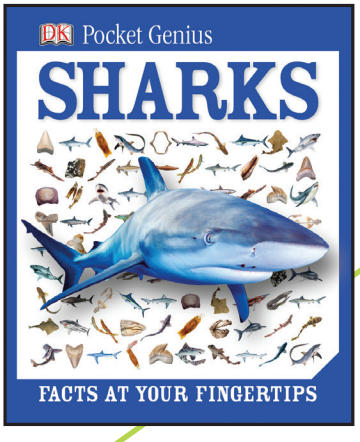
Standard Alignments:
Reading Anchor Standard 4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

One aspect that stands out in using this guide is the many colorful common names of sharks; Pacific angel shark, sand devil, birdbeak dogfish, silky shark, cookiecutter shark, and many more are given along with their Latin Scientific names.

Activity and Discussion Suggestion:
After introducing students to the guide and having them become familiar with it, assign each student or pair of students a range of pages to examine closely. They should write down some of the scientific and common names of different sharks and rays and choose one or more to research briefly at **www.fishbase.org**, which has an extensive database. When students insert the common name of the fish, the results include a map and photographs plus basic scientific information including a translation of the scientific name. Have them click on the "common names" link to see a chart headed by the scientific name, followed by different common names around the world for the same fish. Have them report back to the class with basic information and what they've learned about the fish's names, including the translation of the Latin name and their thoughts about the possible origin of the common names such as appearance, habitat, or other features. Discuss that common names vary around the world, making it important for scientists to develop and use a shared scientific name for each species.

Graphic Organizer:
Have the class create a word wall with the scientific and common names of different sharks, possibly illustrated. This kind of display organizes information for the whole class on a subject under study. While often used for vocabulary words or words found in a novel, a word wall is also useful for science and social studies units. Another graphic organizer to use with this exercise is a simple table with three or four columns: one for the scientific name, one for its translation, a third for the common names, and possibly a fourth for locations where common names are used.

Technology Tie-in:
In addition to **www.fishbase.org**, use the Monterey Bay Aquarium website, which offers extensive information aimed at students on sharks and other fish. This specific page, **http://www.montereybayaquarium.org/lc/teachers_place/activity_worldofsharks.asp**, includes a lesson plan about shark names under the "What's in a Name?" link.



ISBN: 9780756692865

Pocket Genius: Space

Description:
Excellent color photographs combine with diagrams, charts, and a timeline to give visual information that complements the brief text entries and lists of facts in this Pocket Genius guide. It focuses on the solar system, stars, nebulae, and galaxies. Specific entries give details on planets, moons, stars, comets, and more. The guide also looks at how space is studied and explored. Thirty pages describe the space program and space vehicles, with scale drawings to indicate the size of the vehicles.

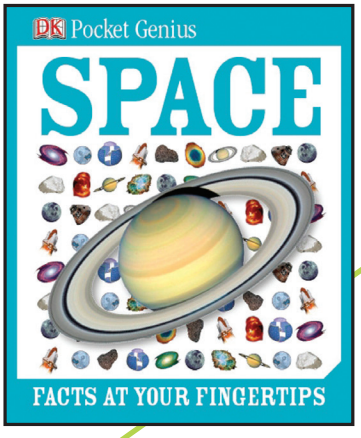
Standard Alignments:
Speaking and Listening Anchor Standard 5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Use this guide as a jumping off point for students to prepare and present a report on one aspect of space, using digital media and visual displays. The topic lends itself to this format because of the wealth of information and imagery about all aspects of space easily available online at NASA's website.

Activity and Discussion Suggestion:
Have students begin by reading the first twenty-five pages, then familiarizing themselves with the other sections to find a topic of interest. They could choose a specific star or planet, telescope or space vehicle, or one of the hundreds of other aspects of space covered in the guide. Have them search for their specific topic at the NASA website, whose powerful search engine allows users to put in a term such as Ganymede (a moon of Saturn) and sort results by general, videos, images, news releases, and podcasts. Students will need to choose a focus for their presentation. Possibilities are to cover the topic generally, if it's a narrow one, or to pick a specific approach such as most recent news, history, technical aspects, and so on. They will find images for most topics, which are available copyright free for educational use. Have students use the graphic organizers suggested below to prepare their talk. Then have them all share their presentations with the class.

Graphic Organizer:
The University of Maryland Extension Service publishes an excellent free guide for public speaking aimed at children and teens in 4-H, but it's helpful for classrooms as well. Pages 10, 22, and 23 of the speaking guide provide different graphic organizers for giving speeches, and page 24 has sample note cards. The guide also has good overall advice for presenting.

Technology Tie-in:
NASA's website (**www.nasa.gov**) is a treat for anyone interested in space. It has sections for the public, educators, and students. The area for educators is divided into grades K-4, 5-8, and 9-12. Besides searching by specific keyword, students can browse the Education Image Galleries for more general topics. The search engine is powerful and easy to use, and the results are unusually suited to student research. NASA also has an app for smartphones and tablets at **http://www.nasa.gov/centers/ames/iphone**.



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