

# Free Online Resources for Developing Reading Comprehension, Background Knowledge, and Vocabulary in Grades K-12

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## **Other Publications by the Author**

*Reading Comprehension Boosters: 100 Lessons for Building Higher-Level Literacy.* San Francisco: Jossey-Bass, 2010.

*Reading Success for All Students: Using Formative Assessment to Guide Instruction and Intervention.* San Francisco: Jossey-Bass, 2012.

*Assessing and Correcting Reading and Writing Difficulties, 6th Ed.* Pearson, 2018.

*Creating Literacy Instruction for All Students, 10th Ed.* Pearson, 2020.

*Foundational Literacy Booster: 50 Lessons for Reading Multisyllabic Words, 2020.*

Available at [buldingliteracy.org](http://buldingliteracy.org).

*140+ Rhymes and Songs for Building Foundational Skills, 2020.* Available at [buldingliteracy.org](http://buldingliteracy.org).

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## **Chapter 1: Introduction**

### **Widespread Availability of High-Quality Resources**

With widespread school closings because of the Corona virus, there is a crying need for resources that can be used by teachers conducting distant learning lessons and parents and other caregivers trying to assist their children. Fortunately, there is a vast wealth of resources at our fingertips. In addition to programs that include full sets of materials and lesson plans, there are databases of thousands of high-quality, high-interest articles at every level from K through high school and thousands of ebooks, both informational and fictional. In addition to print materials, there are thousands of videos available at no charge. My favorite resources are *Newsela*, *Smithsonian TTribune*, CommonLit, ReadWorks, and EBSCOHost. Both *Newsela* and *Smithsonian TTribune* offer current event articles and hundreds of archived articles on multiple reading levels along with teaching resources. CommonLit, and ReadWorks are nonprofits that provide carefully planned programs that include a wide range of materials and extensive teacher resources. But the champion of all resources is EBSCOHost. EBSCOHost is a vast database that includes thousands of articles from more than three dozen high-quality children's and young people' periodicals along with access to videos, illustrations, maps, reference materials, and books. These and other resources are explored more fully in the upcoming pages. Updates to these resources and additional resources can be found at the author's website <[buildingliteracy.org](http://buildingliteracy.org)>.

### **Establishing a Starting Point**

Students get the most out of their reading when there is a match between the student's reading ability and the difficulty level of the text. If reading on their own, students do

best when they know 98 to 99% of the words (Gambrell, Wilson, & Gantt, 1981; Nation, 2001). If provided with preparation, they can read texts in which as few as 95% of the words are known. The match should be flexible. If students have a keen interest in a subject, they may be able to handle more challenging texts. They might also be able to handle more challenging text if extensive preparation and scaffolding are provided (Shanahan, 2014). If they are reading electronic texts, such features as read-aloud, text-to-speech, and a click-on or rollover glossary with pronunciation capability can help make difficult text accessible.

### **Estimating Students' Reading Level**

To match students with the appropriate level of material, it is necessary to determine their reading level. Reading levels are typically estimated by administering a test, such as an informal reading inventory or running record, that contains a range of levels and seeing at what level the student can read without assistance (knows 98-99% of the words) and at what level the students needs some assistance (knows 95 to 97% of the words) and has adequate comprehension. The student's teacher can generally supply information on the child's reading level. If students are placed at the appropriate level but they are having difficulty with material at that level, make adjustments. Move them down if the materials seem too hard and move them up if the materials seem too easy.

### **Assessing Difficulty Level of Texts**

Estimating the difficulty level of texts is a three-part process: Quantitative, Qualitative, and Reader-Task Considerations. Quantitative factors typically measure sentence length

and word length, word frequency, number of syllables in a word, or a how well the word is known by a sample of students. Quantitative factors are measured by a formula. The two most frequently used formulas are the Lexile Framework by Metametrics and ATOS by Renaissance Learning. ATOS provides grade-level estimates. A 2.5 indicates that the material is at a mid second-grade level. The Lexile Framework yields a Lexile score that ranges from below 0 to above 2000. Although the ATOS score is easier to understand, Lexiles are used more frequently. Table 1.1 shows approximate grade-level equivalents for Lexile scores.

Lexiles and Their Approximate Equivalent Grade Levels

Grade	Approximate Average Lexile
1	150
2	320
3	515
4	630
5	740
6	830
7	900
8	950
9	1010
10	1050
11-12	1075

Adapted from MetaMetrics (2014). Lexile-to-Grade Correspondence. Available online at <https://www.lexile.com/about-lexile/grade-equivalent/grade-equivalent-chart/>

Fortunately, most of the resources explored in this text provide an estimated readability in terms of grade levels or Lexile units or both. As noted, these levels are estimates. Formulas only measure objective factors such as sentence length and word length or frequency. They don't measure such essential subjective factors as interest level, difficult of concepts, or familiarity with the topic, or reader task considerations, such as the purpose for reading the text. You need to analyze texts in terms of these factors and use that analysis together with the objective levels in order to determine if the material is appropriate for your student(s).

### **Getting Started**

The resources you select and how you use them will depend upon the needs of your student(s), the goals of your program, and your teaching situation. If you just want to foster reading for enjoyment and fulfillment, you might want to use one of the databases of children's books, such as Overdrive. If you want to build skills, you might want to use databases that include comprehension and vocabulary teaching, such as TumbleBooks or ReadWorks. If you want students to keep up with current events, you might use a periodical from EBSCOHost or use the digital periodicals *Newsela* and *Smithsonian TTribune*.

### **Choosing a Platform**

As a college professor teaching blended reading courses, I used a platform known as Blackboard. As a grandparent, I have used Facetime and Google Classroom. If you find the technical demands of a platform to be burdensome, you might start off by using

Facetime or Skype and e-mailing reading material and exercises or having them available in print that is large enough for the students to see on their devices. Begin where you are comfortable and proceed from there.

## **Chapter 2: Databases: Exceptional But Overlooked Resources**

The ability to use databases is an essential 21<sup>st</sup> Century skill. Databases are collections of articles, books, periodicals, transcripts, primary sources, illustrations, and/or videos and range from those that are very large and feature thousands of sources and cover a wide range of topics to those that are smaller and cover specialized topics, such as health or US history. An informal survey of public libraries across the country indicates that databases for students are widely available at no charge to cardholders. For instance, the Queens (New York) Library features 45 databases, more than half of which are appropriate for students. Databases are also available in school libraries, and, in some instances, in individual classrooms.

Databases have the potential to level the learning field. They are a rich resource of informational text for learners at all levels. The most extensive databases and those most likely to be available in public libraries are general reference databases.

### **General Reference Databases**

General reference databases offer access to dozens of children's magazines and other resources. Materials can be read on the reader's device, can be downloaded, emailed, and shared on social media. There are seven major general reference databases. Chances are that your state, local, or school library subscribes or provides access to one or more of these databases. The most powerful of all the resources reviewed in this text is the EBSCOHost database. The other general databases are similar to EBSCOHost.



**EBSCOhost** (EBSCO). Provides access to Lexiled articles in dozens of children’s magazines, including such high-quality periodicals as *Ranger Rick*, *National Geographic Kids*, *Time for Kids*, *Sports Illustrated for Kids*, and *Scholastic News*. *Scholastic Scope*, *National Geographic Extreme Explorer*, and *Know Your World Extra* (*Know Your World Extra* ceased publication but back issues are available) are designed for struggling readers. Included, too, are periodicals such as *Time* and *People* that are typically read by adults. Also offered are encyclopedias and chapters from informational books. Text-to-speech and translation capability are also included. Learning aids feature note taking, sharing, citation help, and the ability to group articles. Instructional videos showing how to use the search tools are also available. Major periodicals offered by EBSCO are listed in Table 2.1. Most of these periodicals are also available in the other general reference databases.

Table 2.1  
Major Informational Periodicals for PreK to High School

Title	Interest Level	Lexile Levels	Format	Content	Publisher/Scaffolds
AppleSeeds	Grades 3-5	700s-800s	HTML	Social studies, science	Cricket
Ask	Ages 7-10	800s-1000s	HTML	Arts & science	Cricket h
Boys Life	Grades 3- HS	900s- 1100s	PDF	Outdoor activities, sports, & Scout events	Boy Scouts in, h, il
Calliope	Ages 9-14	800s- 1200s	PDF	World history, fiction, poetry	Cricket il
Choices	Grades 7- 12	900s- 1000s	PDF	Teen health, nutrition	Scholastic in, h, il, gr, int
Click	Ages 3-6		HTML	Nature, science, the arts	Cricket h
Cobblestone	Ages 9-14	900s- 1000s	PDF	American history	Cricket in, h, il, g
Faces	Ages 9-14	900s- 1100s	HTML	Geography, history, world culture	Cricket In, g
Highlights for Children	Ages 6-12	350-900	PDF	Fiction, puzzles, activities, science, animals, biographies	Highlights in, h, il, int
Jack & Jill	Ages 6-12	800s- 900s	PDF	Fiction, puzzles, activities, health & animal facts	U. S. Kids in, h, il, int
Junior Scholastic	Grades 6-8	700- 1000s	PDF	News, history, science	Scholastic in, h, il, gr, int

		some articles at 2 levels			
Know Your World Extra	Grades 4-8		PDF	Dramas about real people & events & fictional dramas, vocabulary	Ceased publication in 2012. in, g
Ladybug	Grades P-1	400s-500s+	HTML	Stories, poems, activities, articles	Cricket il
Let's Find Out	Grade K		PDF	Science, current events, emergent literacy	Scholastic in, il, gr
My Big World	Grade Prek		PDF	Science, current events, emergent literacy	Scholastic in, il, gr
National Geographic Kids	Ages 8-12	800-1000+	HTML	Nature, science, places	National Geographic h
National Geographic Little Kids	Ages 3-6	1-2	HTML	Nature, science, places	National Geographic h
National Geographic Explorer: Scout (K), Voyager (1), Pioneer (2), Trailblazer (3), Pathfinder(4), Adventurer (5-6)	Grades K, 1, 2, 3, 4, 5-6		HTML	Nature, science, places	National Geographic in, h, g
National Geographic Extreme Explorer	Grades 6-8	500s-600s	HTML	Science, social studies for struggling readers grades 6-8, vocabulary exercises	National Geographic in, h, g
Odyssey	Ages 9-14	900s-1200s	HTML	Space, astronomy	Cricket h, int
Ranger Rick	Ages 7-12	700s-800s	HTML	Wildlife, nature	National Wildlife Federation in
Scholastic Action	Grades 6-12	400-900 articles at 3 levels	PDF	Below level readers, science, social studies, reading	Scholastic in, h, il, gr, g, qu,
Scholastic News Edition 1	Grade 1	200s-400s	PDF	News, science, social studies, vocabulary	Scholastic in, h, il, gr, g, qu,
Scholastic News Edition 2	Grade 2	500s-600s	PDF	News, science, social studies, vocabulary	Scholastic in, h, il, gr, g, qu,
Scholastic News Edition 3	Grade 3	600s-700s	PDF	News, science, social studies, vocabulary	Scholastic in, h, il, gr, g, qu,
Scholastic News Edition 4	Grade 4	800s-1000s	PDF	News, science, social studies, vocabulary	Scholastic in, h, il, gr, g, qu,
Scholastic News 5/6	Grades 5-6	900s-1000s	PDF	News, science, social studies, vocabulary	Scholastic in, h, il, g
Science News for Students	Ages 9-14	1000s-1100s	HTML	Science, vocabulary	Society for Science & the Public in, h, g
Scholastic Scope	Grades 6-8	800-1200	PDF	Current issues, topics of interest to teens, vocabulary	Scholastic in, h, il, gr
Science Spin	Grades K-1		PDF	Science, monthly supplement to Scholastic News	Scholastic in, h, il, gr, q
Science Spin	Grade 2		PDF	Science, monthly supplement to Scholastic News	Scholastic in, h, il, gr, q
Science Spin	Grades 3-6		PDF	Science, monthly	Scholastic

				supplement to Scholastic News	in, h, il, gr, q
Science World	Grades 6-10	1000s-1100s	PDF	Science	Scholastic h, il, Gr, q, t
Spider	Ages 6-9	700s-800s	HTML	Stories, poems, articles	Cricket in, h, il
Sports Illustrated For Kids	Ages 9-12	900s-1000s	HTML	Sports	Time Inc. in
Storyworks	Grades 4-6	600-950	PDF	Fiction & informational	Scholastic in, il
Storyworks Jr.	Grades 2- 3	400-800	PDF	Fiction & informational	Scholastic in, il
SuperScience	Grades 3-6	800-900	PDF	Life, earth, physical science, vocabulary	Scholastic in, h, il, gr, g, int
Time for Kids K-1	Grades K-1		Not found in any database.	News, science, social studies, vocabulary	Time Inc. in, h, g, q
Time for Kids 2	Grade 2		Not found in any database.	News, science, social studies, vocabulary	Time Inc. in, h, g, q
Time for Kids 3-4	Grades 3-4	600s	HTML	News, current events, science, vocabulary, comprehension questions	Time Inc in, h, g, q
Time for Kids 5-6	Grades 5-6	700s-800s	HTML	News, current events, science, vocabulary, comprehension questions	Time Inc. in, h, g, q
Weekly Reader	Grades P-6		PDF	Science, social studies, & features	Ceased publication in 2012. in, il, h, g, gr, q
Zoobooks	Ages 6-12	800s-900s	PDF	Detailed, well-illustrated information about animals	Zoobooks h, il, gr

G- glossary; gr-graphics, including maps, charts, diagrams; h- heads; il- illustrations; in- introduction; int-interaction, such as making a plan; qu-quiz. Above does not include suggestions or activities contained in teacher's guides or on the publications' websites. HTML versions lack visuals that print versions may have, so graphic scaffolds are not noted for periodicals in HTML.

One limitation of EBSCOhost is that sources are apparently not preselected by an editorial staff. This means that sources that are not germane to the topic being searched may be listed, or sources may be too difficult. Articles from academic journals, for instance, may be listed. An unnecessarily large list of sources may be produced. However, searches can be limited according to a number of criteria including Lexile level. Unlike the other general reference databases, EBSCOhost does not include websites in its listings, which also limits its research value. However, EBSCOhost offers access to a wider range of periodicals than the other general databases do.

**Grolier Online (GO)** (Scholastic) Designed for elementary and secondary students, provides access to encyclopedia articles, magazines, newspapers, maps, photos, drawings, film clips, and vetted websites. Articles from encyclopedias and magazines are Lexiled. Magazine articles are in HTML and so lack illustrations. Reading aids include access to dictionaries, a read-aloud tool, and also provides access to an atlas. Separate interfaces are available for elementary, middle, and high school. The elementary version includes optional access to the *New Book of Knowledge*, *Amazing Animals of the World*, and *America the Beautiful*. The Middle school version provides optional access to *Grolier Multimedia Encyclopedia*, *Lands and Peoples*, *America the Beautiful*, and the *New Book of Popular Science*. The high school version provides optional access to *Encyclopedia Americana*, *The New Book of Popular Science*, *Lands and Peoples*. All three versions offer access to *La Nueva Enciclopedia Cumbre*, a resource for Spanish-speaking students. Subscribers select the options that they wish to access.

**eLibrary® Elementary** (ProQuest) Designed for grades K-6, provides full text of Lexiled articles from more than 40 children's magazines, along with access to newspapers, books, transcripts, maps, images, and educator-approved websites. Research aids are also provided. Search results can be sorted by relevance, date, size, Lexile score, title, or publication. With ProQuest eLibrary, users can customize reading exercises. Teachers can specify the article or other text that they wish students to read and then create quiz questions that assess their understanding.

**eLibrary** (ProQuest) Designed for upper elementary through high school, provides access to newspapers, magazines, pictures, video and audio clips, animations, maps, transcripts, educator-approved websites, and books. Articles are Lexiled. Users can take notes, keep a list of items selected, and tag items so that they will display when the user clicks on their tag. Has translation and speech-to-print for some materials and a citation tool. Teachers can create a Book Cart in which they can provide preparatory information along with guide questions and quizzes.

**eLibrary Curriculum Edition** (ProQuest) Designed for K-12, provides access to 2,500 full-text magazines along with access to newspapers, reference books, transcripts, more than 7 million photographs, infographics, maps, and educator-approved websites and audio/video clips. Research aids are also available.

**Kids InfoBits** (Cengage Gale). Designed for K-5, provides access to Lexiled articles in age-appropriate magazines and educator-approved websites. Also includes a dictionary, *Blackbirch Encyclopedia of Science and Invention*, *Blackbirch Kid's Visual Reference of the United States*, *Blackbirch Kid's Visual Reference of the World*, *Columbia Encyclopedia*, *First Facts about American Heroes*, *First Facts about the States*, *First Facts about U.S. History*, maps, flags, seals, charts and graphs. Has a translation feature and text-to-speech for some materials, citation tool, and social media sharing feature.

**SIRS Discoverer** (ProQuest) Designed for grades 1-8, provides access to a wide range of periodicals, nonfiction books, websites, and references, all editorially selected. Lexile

scores and editorially-assigned reading levels are provided. Special databases within SIRS Discoverer include “Animal Facts,” “Nonfiction Books,” “Country Facts,” “Science Fair Explorer,” “Spotlight of the Month,” and “Pro/Con Leading Issues.” In “Pro/Con Leading Issues,” topics, such as “Cell Phone Use In Schools” and “Global Warming” are presented from pro and con viewpoints. Article read-alouds, language translations, automatically generated citations, and a critical thinking skills tutor are also available.

### **Encyclopedia-Based Databases**

Traditional encyclopedias have morphed into databases. The foundation of encyclopedia databases is the thousands of articles they contain. However, they also feature a host of multimedia resources and also provide access to websites and magazine articles. When introducing databases, encyclopedia versions can be a good place to start. Although their resources aren’t as extensive as general reference databases, they can be easier to use.

Encyclopedia databases may be offered by your local or school library or may be obtained for school or individual classroom use. Subscription fees for individual classroom use are generally modest. Key encyclopedia-based databases are *Britannica School*, *Encyclopedia Americana*, *Grolier Multimedia Encyclopedia*, *World Book Kids*, *World Book Student*, *World Book Discoverer*, and *World Book Kids eLearn*. These databases charge fees, but many are available at local or school libraries.

**Britannica School** (Britannica) Appropriate for grades pre-K to 12, has materials on three levels; elementary, middle, and high school. Features articles from the

encyclopedia, magazines, ebooks, photos, videos, editor recommended websites, primary sources, atlas, *Merriam Webster Dictionary* in English and Spanish, and how-to articles on research. The *Merriam Webster Dictionary* is accessed by double clicking on the target word in an article. English definitions and Spanish translations of the target word are provided along with a spoken English pronunciation. Students can save, cite, and organize content. Lesson builder and other resources are available for the teacher.

**Grolier Multimedia Encyclopedia** (Scholastic) Designed for middle school students, includes encyclopedia articles, news, timelines, quizzes and games, and research starters. Has more than 2,000 illustrated articles on American history and more than 10,000 biographies. It also includes an atlas and dictionary. Has highlighted text-to-speech.

**World Book Kids** (World Book) Designed for pre-K to 5, features thousands of easy-to-read articles, videos, interactive maps, games, puzzles, and activities related to articles. Contains eight major subject categories: Arts, History and Government, People, Places, Plants and Animals, Science and Mathematics, Sports and Hobbies, and World Religions. A translation feature enables students to have the articles read in Spanish or French. Research tools feature the ability to email, print, download, translate, cite, or have an article read-aloud Also includes a section for teachers.

**World Book Student** (World Book) Designed for students in grades 3-8, provides access to more than 40,000 encyclopedia articles and high-quality illustrations, and video and audio clips. Lexile measures are provided for most articles. Special features like “Behind

the Headlines” explain the day's top stories and contain links to related articles. The “Biography Center” houses more than 10,000 biographies. Has a built-in dictionary, atlas, and read aloud. Capability. “How To Do Research” explains key research skills.

**World Book Discoverer** (World Book) Designed for struggling readers, has a number of features to enhance learning. A Visual Dictionary—in English, Spanish, and French—provides labeled images. Articles can be translated into 31 languages. Has a read-aloud feature. Readers can double-click on words to have them defined.

**World Book Kids eLearn** (World Book) Features articles, illustrations, images, and dozens of videos in Arabic. Includes access to *World Book Student*, the English language version for elementary and middle school students. Has read aloud.

### **Specialized Databases**

These databases charge fees, but many are available at local or school libraries.

**ABC-CLIO** (ABC-CLIO) Designed for middle and high school, has individual databases on general areas in history and geography. Provides access to more than 200,000 primary and secondary sources. Provides key questions on historical issues, presents different viewpoints, and leads students to argue a position and provide supportive evidence. Has tutorials, writing templates, and lesson plans.



**Abdo Digital** (Abdo) Designed for grades 3-8, has databases on states, presidents, baseball, and football based on the publisher's extensive book series. Has a glossary link and a keyword search. Grade 4 reading level.

**Abdo Zoom Animals** Designed for young readers in K to 2, Abdo Zoom Animals presents 160 animals. Animals can be searched by name, location, (students click on map), habitat, or type. Information is provided in categories: About (general information) Body, Habitat, Food, and Life Cycle. Has Cool Facts, Stats, Range map. Spanish version (Animales) is available. Features follow-up activities including a word search using words drawn from the article and teacher resources, with two resources each for kindergarten, grade one, and grade two. Has a video for each subject. Also has a citation tool. Has text-to-speech and roll-over glossary. Texts can be printed as pdfs.

**Abdo Zoom Biography** In the biography database, which has 160 entries, students can search by name, birth date, or category (Athletes, Artists and Entertainers, World Leaders Scientists and Innovators, and Women and Minorities. Names are illustrated with a photo of the subject. Information is provided in categories: Intro, Early Life, Leader, History Maker, Legacy. Has Cool Facts, Quick Stats, and Key Dates, Range map Features follow-up activities including a word search using words drawn from the article and teacher resources, with two resources each for kindergarten, grade one, and grade two. Has a video for each subject. Also has a citation tool. Has text to speech and roll over glossary. Texts can be printed as pdfs. Text is brief and written on an estimated 2-3 level. Because of the restrictions of writing for a young audience, some complex concepts do not seemed to be explain fully enough.

**Abdo Zoom Steam** Presents more than 100 topics STEAM (Science, Technology, Engineering, Art, and Math) topics. Students can search by name of topic or can look through any of five categories: Machines and Inventions, How Our World works, Our Bodies and Health Outer Space, The World Around Us. Text is accompanied by illustrations and videos. The text explanation of sound is accompanied by a video showing a bell being struck. Also includes sample lessons for a number of the topics.

**Amazing Animals** (Scholastic) Designed for elementary school students, includes facts and photos for more than 1,200 animals. Has read aloud. Also part of *Grolier Online*.

**America the Beautiful** (Scholastic) Designed for elementary and middle school students, presents articles on US cities, states, and Presidents. Has read aloud. Also part of *Grolier Online*.

**A to Z the USA** (World Trade Press) Appropriate for grades 3-8+, provides extensive up-to-date information about the states, District of Columbia, and the territories. Also has photos, maps, flags and crossword puzzles.

**Biographies for Beginners Online** (FactCite, Lincoln Library) Written on a third-grade level, features 600 profiles, with 15 new ones added each year. Can be searched by name, keyword, or category. Has appendices, glossaries, and timelines.

**Capstone PebbleGo Databases for K to 3.** (Capstone) Pebble Go provides informational articles in the following six databases: Animals, Animales (Spanish), Science, Biographies, Social Studies, and Dinosaurs. Pebble Go has leveled text, a read-aloud with text highlighting feature, a glossary with definitions and pronunciations, and video or audio clips for most articles and games. PebbleGo provides student guidance for selecting articles, composing reports, and citing sources. Also has teacher resources.

**Capstone PebbleGo Next Databases for Grades 3-5** (Capstone) Has two databases. PebbleGo Next States & American Indians features articles for all 50 states, Washington, D.C., and Puerto Rico, and a wide range of articles about American Indians. PebbleGo Next Science contains an extensive array of science articles. Articles in both databases are enhanced with videos and graphics and have a read-aloud with text highlighting feature. Downloadable questions are available.

**Cavendish Square Digital** (Cavendish Square) Appropriate for grades 3-8+, has 62 social studies, science, and general knowledge databases. Areas covered include Ancient Civilizations, Explorers, Dinosaurs, Birds, Mammals, Inventions, Health, and States. Extensive collection of photos, charts, diagrams, and timelines. Includes read-aloud with highlighting, translation into dozens of languages, citation help, outlines, and lists of additional sources. Excellent vehicle for developing background knowledge and research skills. Estimated 4-8+ reading level. Interest and reading levels vary with topic.

**Country Reports (Country Reports)** Appropriate for grades 3-12, provides cultural, historical, and statistical information. Contains articles, maps, national symbols, videos, and links to websites. Has English, French, German, and Spanish versions and a translator for dozens of languages. Has a currency converter and tools for creating maps, graphs, and charts. Offers more than 35,000 pages of content on the countries of the world. Provides information on customs and cultures, photos, history, geography, national symbols, economy, population demographics, government, and current events for each country. Also has information on each state in the U.S.

**Culturegrams Kids States Edition (ProQuest)** Designed for upper elementary students, reports on 187 countries all 50 states. Contains information on Climate, Geography, Resources and Economy, History, Population, Government, Famous People, Native Americans, State Symbols, Pro Sports Teams, Recipes, and Interesting Facts. Has maps, distance calculator, and “Current Time,” a time zone map that shows the current time. Reports can be printed or emailed. Also has a read-aloud feature that highlights text as it is being read and a citation tool. Has data tables and tools for creating graphs and tables. Provides the following data, which can be used to make data tables: area, population, economy, education, poverty level, and statehood order based on when entered the Union. Data can be used to compare states. For instance, states can be listed in order by size or percentage of children living below the poverty level.

**Culturegrams Kids World Edition (ProQuest)** Designed for upper elementary students, reports on nearly 200 countries. Includes information on Land and Climate, Population,

Language, Religion, History, Government, Economy, Transportation, Games and Sports, Holidays, Food, Schools, Life as a Kid, Famous People, Flag, National Anthem, and Interesting Facts about the country. The feature known as “Life As a Kid” explains what life is like for a young person, including an interview with a young person. Articles are accompanied by illustrations, timelines, slideshows, and maps. Has photo, video, and slide show galleries and instruction and tools for creating tables and graphs. Also has a distance calculator and a currency converter. Has a read-aloud feature that highlights text as it is being read. Resources for teachers are available.

**FactCite** (Lincoln Library) Designed for grades 3-12, provides access to more than 30,000 articles and thousands of images. Special collections include “Sports Champions,” “Greek & Roman Mythology,” “American History,” “U.S. and World Biography,” “Biography for Beginners,” “Shapers of Society,” “Science,” “Literature,” “The Arts,” “Countries of the World,” “The States,” “Planets,” “Elements,” “Plants & Animals,” and “The Constitution.” Has topical indexes and online quizzes.

**Journey Back in Time** (Journey Back in Time) Appropriate for grades 3-12, features tens of thousands of selected newspaper articles, rare books, videos, illustrations, photos, maps, and documents spanning 400 years of American history. Also has a “Dictionary of Historical Resources,” video clips, games, and teacher resources. The “Dictionary of Historical Resources” defines a target word and gives examples of its usage in original materials.

**Lands and Peoples** (Scholastic) Designed for middle and high school students, features articles on countries, cultures, and current events. It also includes an atlas and almanac.

Also part of *Grolier Online*. Has highlighted text-to-speech.

**La Nueva Enciclopedia Cumbre** (Scholastic) Appropriate for grades 3-12, this Spanish language encyclopedia is written from a Latin American perspective. Also part of *Grolier Online*.

**National Geographic** <<http://kids.nationalgeographic.com>> Appropriate for grades 3-6+, has informational articles accompanied by photos and, for some articles, video clips. Students can search by keyword or by category. Categories include Mammals, Birds, Amphibians, Fish, Reptiles, Insects, Invertebrates, Dinosurs, U. S. , World, Space, National Parks, Pets, and other categories. National Geographic also has games, video clips, photos, and a “Weird but True” feature, which presents strange facts. The site has advertising for its periodicals, but there is no charge for using this database.

**The New Book of Knowledge** (Scholastic) Created for middle grade students, includes literary selections, a timeline, projects and experiments, news, and homework help. Has highlighted text-to-speech Also part of *Grolier Online*.

**The New Book of Popular Science** (Scholastic) Designed for middle and high school students, presents articles in the areas of science, technology, and medicine. Has highlighted text-to-speech. Also part of *Grolier Online*.

**ScienceFlix (Scholastic)** Designed for students in grades 4 to 9, features articles at three levels: 4-5, 6-7, and 8-9 approximately. Has videos and an image library with explanatory captions. Also has articles in greater depth, links to websites, projects, and interactive quizzes, which include selecting the best summary and arranging items in order. A “Science News” section contains recent articles and an archive. Offers a number of aides to the reader. The students can choose to have the text read-aloud and use a dictionary to look up words. The digital look-up features five dictionaries, including an English-to-Spanish dictionary, a Spanish-to-English dictionary, and two thesauruses. Spanish speaking students can look up a word in English and/or in an English-Spanish dictionary. Dictionaries have a read-aloud feature. Key concepts in the text have links to detailed information. For instance, clicking on the word *robot*, the student is taken to an article about robots. Reading guides are also provided. Follow-up activities include lab projects, thought questions, a quiz, and description of careers related to the topic. Also includes a citation tool. RL5-8. However, the read-aloud and dictionary make the text accessible to students reading somewhat below that level.

**Opposing Viewpoints in Context** (Gale Cengage) Appropriate for students in grades 6-12, contains a range of perspectives on many important issues, with more than 13,000 pro/con viewpoints. Includes a variety of resource types: reference, news, primary sources, and multimedia.

### **Availability of Databases**

Check your state, local, and school library to find out what databases are available. In Connecticut, where I live, the state library offers access to EBSCOHost. My local library offers access to more than 50 databases, with a dozen of these being appropriate for elementary and middle school students. Databases are listed under “Databases” but may be listed under “Children’s Resources,” “Research,” or another category.

### **Using Databases**

With their wealth of resources, databases can be overwhelming. If possible, start off with simpler databases, such as “Amazing Animals,” “America the Beautiful,” “National Geographic,” or an encyclopedia database. Provide students with an overview description of the database, how it can help them become better readers and writers, but can also be a source of interesting information. Highlight some of the interesting topics in the database. For “Amazing Animals,” for instance, show some especially interesting animals. If the database you are demonstrating has film clips and activities, show these. Also discuss the database’s capabilities. Show how text-to-speech, click-on dictionary, translation, or other features can be used.

When introducing a complex database, such as a general reference database, provide an overview of all the database’s components so that students see its power. Over time, focus on discrete elements.

### **Steps in Using a Database**

Databases, especially the general reference ones, are complex. However, the complexity can be reduced by breaking down the skills needed to use a database into a series of steps



and introducing the database one step at a time. Here are some activities designed to introduce students to the basics of using a general reference database.

- Provide an overview. Explain what a database is. Show the database's resources: magazine articles, illustrations, video clips, etc. Show students how they can access the database. In many instances, state libraries provide databases, but local libraries also provide access. In Connecticut, for example, databases can be accessed at <http://researchitct.org/>
- Provide an overview of the database's tools: read-aloud, translation, dictionary, citation, print, email, etc. Demonstrate and explain that read-aloud and translation tools may only work on HTML versions, which display the printed material, but don't usually show any visuals. Have students try out the tools on a sample article.
- Explain a subject search. Have students use the subject search to select an interesting animal or person. If the interface provides a topic tree, guide students as they drill down to an interesting person or animal.
- Have students assess their results and select two or three results that provide useful information about their topic. Initially, students may assess results in terms of whether they supply information that they looking for. As they grow in skill, they can assess the results in terms of whether the source is believable, fair, and up-to-date.
- Explain a keyword search. Show results for several sample searches: *pollution*, *dinosaurs*, *baseball*. Show how you can limit the results by adding other words: *pollution (air, health)*, *dinosaurs (extinction)*, *baseball (teams, mascots)*. Have students select a topic of interest and limit their search and see how many results they obtain.

- Explain advanced searches and the many additional ways that searches can be limited: date, Lexile level, source, etc.
- Have students search for different media related to a topic of their choice: magazine article, encyclopedia article, illustration, map, film clip.
- Explain to students how they can set up digital folders and save items in their folders. Have students set and save articles and other items to their folders.

Make the use of databases a part of your program. Students might use databases as part of their classroom work, to complete homework assignments, to engage in self-selected reading, to build vocabulary, to answer a question they have, and to investigate areas of interest. Present databases as valuable literacy tools for both schoolwork and out-of-school living and learning. The ultimate goal is to have students use databases on their own as part of their literacy lives.

### Chapter 3: Ebooks

Ebooks are widely available in local and school libraries. Ebooks can be classified as being static or interactive. Static ebooks are digital versions of printed books. Interactive ebooks are ebooks that have been provided with additional features. These features may be minimal and may consist of highlighting and a search feature or they may include text-to-speech or read-aloud, which might have variable speeds and translation capability. Other possible enhancements consist of click-on or rollover gloss items; animations, background music; hot spots that contain illustrations, video or audio clips, and questions and comments and links to websites. Depending on their enhancements, interactive ebooks increase the accessibility of texts so that they can be read by struggling readers, or if they have translation capability, can be read by English learners. Video clips and other enhancements can build understanding and clarify concepts. However, students need to be trained in the use of these tools and also provided with guided and independent practice in their use.

#### Ebook Libraries

**Axis 360** (Baker & Taylor) Features an extensive collection of ebooks and read-alouds. Contains many of the most popular titles for children and young people.

**Ebsco Book Collection: Nonfiction - Elementary School Edition** Contains abstracts and searchable full-text for more than 1,300 popular nonfiction books. Subjects include Adventure, Animals, Biographies, Holidays, Native Americans, Nature, Sports, and

Weather. Books tend to be older and are broken up into chapters. Can be a useful resource if topics are timeless.

**Ebsco Book Collection: Nonfiction - Middle School Edition** Contains abstracts and searchable full-text for more than 1,300 popular nonfiction books. The database includes titles on careers, health, life skills, ethnicity, disabilities, adventure, sports, technology, biographies, history, science, women, civics, and more.

**BookFlix (Scholastic)** Features pairs of books on the same topic: one fiction and the other nonfiction. For instance, the folktale, *Ant and the Grasshopper* is paired with the informational book, *Inside an Ant Colony* by Alan Fowler. Children can read the book on their own or follow along as it is read to them. Words whose meaning might not be known to readers are defined in an embedded glossary. Follow-up activities include puzzles and questions designed to build vocabulary and comprehension. Links to related websites are provided along with brief biographies of the author and artist. Book pairs are available in nine categories: Animals and Nature, Earth, People and Places, ABCS and 123's, Adventure, Family and Community, Celebrations, Music and Rhyme, and Imagination. Appropriate for grades K to 4.

**EPIC** Has thousands of books and videos. Readers can have books read aloud and individual words pronounced and defined. Teachers can create collections for students and also quizzes. Can track progress, including books read, time spent reading, and activities completed, and can supply rewards. Has books in Spanish. Appropriate for grades K to 6. Is a subscription service that is free to teachers but charges parents. Free for parents until June 30, 2020.

**Hoopla Kids** Has an extensive collection of audio books, read-along books, ebooks, movies, and music. Includes many of the most popular children's and young people's titles. Has books in Spanish. Appropriate for grades K-5.

**Mackin** Has extensive libraries of print and ebooks. Also has free resources for teachers, including MackinVia, which is management system for handling digital materials.

MackinVia provides highlighting and notetaking tools and enables teachers to form and manage groups. Offers free access to hundreds of Mackin Classics from now until the end of September 2020.

**Overdrive** (Library Connection) Kids' version provides access to a variety of children's books, including some of the most popular titles. Is browser based and so runs on most computers and mobile devices. Books can be read on the browser or Kindle. Kindle offers a dictionary feature so students can click on an unknown word and get a definition and sample usage. The browser version also has a click-on dictionary along with a translation feature. Words can be translated into French, Spanish, or Arabic. The translation feature also provides a spoken pronunciation of words in English. Overdrive has excellent search capability. Can browse titles on the homepage, or select a category from the Subjects, Collections, or Levels menus. Can also search by title, author, or keyword. Has books in Spanish. Kids version is appropriate for grades K to 5. Regular Overdrive has books for all ages.

**Project Gutenberg** Features more than 60,000 free ebooks. Most are older works. Includes many classic children's books. Project Gutenberg Books can be read online using HTML. Can also be read as an Epub, with or without images, or in a Kindle version. Kindle versions include dictionary, Google, and Wikipedia lookup. Clicking on a

term accesses a dictionary definition, a Wikipedia article, and the results of a Google search.

**Stories** (Audible, Amazon) Has about 200 audio books in the following age categories: Littlest Listener, Elementary, Tween, and Teen. Has three speeds of oral reading. Most books are classics. Free during the Corona Virus crisis.

**Teen BookCloud** Contains ebooks, audio books, graphic novels, and 120 National Geographic videos. Teacher resources include quizzes. Has a tracker that enables teachers to make assignments and track student progress. Using My History and My Reading Log, students can also keep a record of books read. Appropriate for middle and high school students.

**TrueFlix** (Scholastic) Contains more than 100 48-page books in the following areas: American Indians, Ancient Civilizations, the Civil War, Continents, the Thirteen Colonies, U.S. Government, U.S. Regions, Westward Expansion, Science and Nature, Disasters, Ecosystems, Experiments, Extreme Nature, Human Body, Outer Space, the Solar System. True Books are well written and contain headings, index, bibliography, and a regular glossary. The digital version contains a rollover glossary and text-to-speech in which words are highlighted as they are read. Books can be read at a regular and slower speed. True Books have accompanying videos, related printable articles, project ideas, a digital quiz, and related websites. Has lesson plans and printable quizzes that contain multiple-choice and constructed response items along with answer keys. Lexile levels range from 580 to 960. Most of the books are on 5th grade ATOS level. Is available in many libraries. Exceptional resource. Appropriate for grades 4-6.

**TumbleBook Library** Offers more than 1,100 books, including a selection of nonfiction books that include science, biographies, and history books. Has animation and a read-along feature in which the sentence being read is highlighted. Also has a feature that allows individual words to be read. Has accompanying film clips, games, and quizzes and a template for composing book reports. Provides grade and/or Lexile levels. Also has free-standing videos and games. Tumble Tracker allows teachers to make assignments and keep track of students reading, including their performance on quizzes. Using My History and My Reading Log, students can keep track of books read, dates of reading, and minutes spent reading. Using My Rewards, students earn stars and move up into higher levels. Has books in French and Spanish. Although this is a subscription service, it is offered by many school and public libraries. Appropriate for grades K-6.

**TumbleBookCloud Junior** Has over 500 titles, including 100 ebooks, 120 enhanced ebooks, 120 National Geographic videos, 45 non-fiction ebooks, and 17 graphic novels. Also available are quizzes and other teacher resources. Appropriate for grades K to 6.

**Tumble Math** Features hundreds of math picture books. Three types of picture books are provided: books designed specifically to present a math concept, books that include math concepts within a story, books that have math connections. Lists books by key math concepts and also Common Core Standards. One exceptional feature, Quiz Portal, lists Common Core Standards and books, quizzes, and lesson plans aligned with them. Appropriate for grades K to 5.

## Chapter 4: Recommended Websites

Websites are a rich resource. Listed below are sources of links to high-quality websites. Links are cold. They need to be pasted into your browser. Unless noted otherwise, sites are free. Interest (IL) and, where appropriate, estimated readability levels (RL) are provided.

### General Websites

**netTrekker (Knovation)** < <https://www.knovationlearning.com/school-solutions/nettrekker/>> Provides links to thousands of digital Internet resources that have been reviewed and assigned readability levels. New resources are added daily. Tools for students include variable speed read-aloud, translation, and citation help. Features extensive resources for students and teachers. Subscription service. IL K-12.

**Fact Hound** <[www.FactHound.com](http://www.FactHound.com)> 1,600+ websites selected to extend information in Capstone books. A number of publishers provide databases of information or websites related to topics covered in their books. Readers access the information or sites by going to the designated website and entering a code, book ID number, title, keyword, or ISBN.

**4Kids.org** <<http://4kids.org/>> Produced at the University of Kansas by a team of educators and students, describes and provides access to safe, high-quality websites. Created as a newspaper supplement, a new edition appears weekly.

Each week three reviews of websites are published along with “Ask Amy,” a feature that invites readers to ask questions about technology and the Internet. Other ongoing features include “Kid Quest,” a quiz about the content of the internet site reviewed, and “Speak



Out,” a question about an issue to which students can respond with a short essay. Also presents games and videos. An archive is maintained. IL 4-8 RL 4-5

### **High-Quality Informational Websites**

The following sites are devoted to specific areas or topics. Estimated interest levels (IL) and reading levels RL) are noted. All of the sites are of high-quality. Those that are marked with an asterisk are of particular high quality.

**Abraham Lincoln Research Site** <<http://rogerjnorton.com/Lincoln2.html>> Has extensive print and pictorial resources covering all aspects of Lincoln’s life. I L5-8 RL-5-6

**Age of the Dinosaurs** <[http://www.bbc.co.uk/sn/prehistoric\\_life/dinosaurs/](http://www.bbc.co.uk/sn/prehistoric_life/dinosaurs/)>.

Extensive information with many film clips. Is archived and no longer updated. IL 4-8 RL 5-6

**All About Birds** (Cornell Lab of Ornithology) <<https://www.allaboutbirds.org>>

Information on more than 500 species. Fairly easy to read with illustrations and maps. IL 3-8+ RL 4-6

**America’s Story from America’s Library** (Library of Congress)

<<http://www.americaslibrary.gov/>>

**Meet Amazing Americans.** Presents brief biographies with illustrations of famous Americans. IL-3-8 RL-4.

**Jump Back in Time.** Provides an overview of an era in American history and a number of related articles that portray key figures and events of the era. IL-4-8 RL-5.

**Explore the States.** Gives a brief history of each state and brief descriptions of interesting events and customs in the state. IL-4-8 RL-5.

America's Story sites include sets of primary sources, which vary in topic and reading level.

**Animal Fact Guide** < <http://www.animalfactguide.com> > Extensive information about animals. Could be good for building vocabulary. Many of the difficult words are defined in context. Has worksheet for taking notes. Lesson plans and other teaching resources are available. IL 3-8+ RL: 4-6

**ARKive (Wildscreen Arkive)** < [www.arkive.org](http://www.arkive.org) > Contains descriptions and outstanding photos and films of wildlife, with a focus on endangered species. Also has articles related to wildlife and conservation. IL 4-12 RL 6-8+.

**BBC Primary History** <<http://www.bbc.co.uk/schools/primaryhistory/>>  
History is told from a UK point of view, but segments on ancient history and world leaders would be appropriate. Easy to read and broken into segments, has a click-on glossary, and very brief factual quiz at the end. Has gallery of photos, timeline, and many activities. IL 3-5 RL 3-4

**BrainPOP** < <https://www.brainpop.com/> > Has hundreds of movies in seven curriculum areas. Also has quizzes, short-response questions, vocabulary exercises, graphic organizers, added information, and lesson plans. Has several editions: BrainPOP, Junior Brainpop (K-3) BrainPOP Español, BrainPOP ESL, and BrainPOP Francais. BrainPOP is a subscription service, but has some free materials. IL K-12 RL K-12s

**Climate Kids: NASA's Eyes on the Earth** < <http://climatekids.nasa.gov/>>.

Features articles on weather and climate and the impact of climate change on air, oceans, fresh water, carbon, travels, plants and animals, and technology. Has extensive graphics, including animated illustrations and video clips. Good use of subheads that pose questions: “Why is Earth getting warmer? How do we know what Earth was like long ago?” IL 3-8 RL: 4-5

**Building Big** (PBS) <<http://www.pbs.org/wgbh/buildingbig/index.html>>

Articles explain how bridges, domes, skyscrapers, dams, and tunnels were built. Has illustrations and charts and a click-on glossary. IL 5-8+ RL 5

**Enchanted Learning** <<http://www.enchantedlearning.com/Home.html>> Extensive range of informational articles, activity sheets, and graphics. Has 35,000 web pages. Free sample pages or small subscription fee. IL K-12. Free access during Corona virus.

**Energy Kids** <<http://www.eia.gov/kids/>> Extensive information about energy production, consumption, & saving energy. Glossary, energy calculator, riddles, puzzles, & a quiz. Good use of headings. IL 5-8+ RL 5-6.

**EPA** < <http://www2.epa.gov/students> > Provides links to articles, games, quizzes, and videos about the environment. IL K-12

**Everyday Mysteries** < <http://www.loc.gov/rr/scitech/mysteries/> > Library of Congress. Asks and answers questions such as, “Why does chopping onions make you cry?” Provides links to websites. IL 4-8 RL 4-5

**Fact Monster**<sup>TM</sup> <<http://www.factmonster.com/>> Information in major subject areas is presented. Features dictionary, almanac, atlas, *Columbia Encyclopedia* (6th ed.). Has games, timeline, fun quizzes. IL 4-8+ RL 4-6.

**Highlights Kids** <<http://www.highlightskids.com/>> Features animated and read along stories with spoken word-by-word highlighting and articles on a variety of topics. Has click-on science questions such as, “How do squid change color?” and “Why can’t penguins fly?” IL K-6 RL varies.

**Lemelson Center for the Study of Invention and Innovation/ Invention Stories**

(Smithsonian) < <http://invention.si.edu/explore/invention-stories> > and <<http://invention.smithsonian.org/home/>>. Tells the stories of a number of inventions, such as the electric guitar, Kevlar, Velcro, and others. Also explores sources of inspiration for inventions. IL 5-8 RL 5-6.

**Kids Discover Spotlight** <<http://www.kidsdiscover.com/spotlight/>> Key topics are explored in brief (Quick Reads) and extended (Spotlights) informational articles and Infographics, which are explanations of key concepts supported by a diagram or other visual. Spotlights are accompanied by brief quizzes. Many of these can be downloaded or accessed for free. Others may be purchased. Also has a wide variety of informational apps and a periodical, *Kids Discover*. IL 4-8+ RL 5-7.

**Meet Our Animals** (Smithsonian National Zoological Park)

<<http://nationalzoo.si.edu/Animals/default.cfm>>. Provides descriptions of a variety of animals. Has numerous photos and some film clips. Features a video cam for the pandas. IL all ages RL 5-6

**My Plate Kids’ Place** <<http://www.choosemyplate.gov/kids/index.html>>

Presents games, activity sheets, videos, songs, and recipes related to healthy eating and exercise. IL 2-5 RL 3-4

**NASA Stem Resources** < <https://www.nasa.gov/stem/foreducators/k-12/index.html> >

Has numerous resources for K-4, 5-8, and 9-12. A particularly valuable series is “NASA’s Earth Minute” in which a number of key scientific concepts are explained in brief videos.

**NASAVideoclips** <<http://www.nasa.gov/audience/foreducators/nasaclips/index.html>>

Features weather, space, and other STEM clips specially designed for students. As clip is being shown keywords such as *habitat* are flashed on screen so vocabulary is developed.

**National Aquarium** < <https://aqua.org/Experience/Animal-Index> > Provides photos and information on hundreds of animals. IL 3-8+ RL 4-6.

**National Geographic Kids** <<http://kids.nationalgeographic.com>> Presents articles, photos, videos about animals, geography, nature, and other topics. Also has games and quizzes. IL 2-8 RL 4-5.

**Natural History Notebooks** <<http://nature.ca/notebooks/english/mammpg.htm>>

Describes more than 250 species of animals in words and photos. IL 4-8+ RL 5-6

**Newsela.** < [Newsela.com](http://Newsela.com) > News articles written at 5 Lexile levels presented daily.

Archive available. Has a regular and elementary version. IL 3-8+ RL 400-1200.

Offering free access to premium features for 2019-2020 school year.

**Ology** (American Museum of Natural History) < <https://www.amnh.org/explore/ology>>.

Readers select articles from anthropology, archaeology, paleontology, marine biology, and other areas. Presents experiments, interviews, quizzes, & activities. IL 3-8 RL 3-4

**The Presidents** < <https://www.whitehouse.gov/about-the-white-house/presidents/> >

Brief biographies of presidents and first ladies. IL 3-8+ RL 5-6.

SciJinks <<http://scijinks.jpl.nasa.gov/>> (NOAA & NASA). Contains articles -many in question-and-answer format, photos, & videos about weather. Also has games and graphic adventures. IL 6-8+ RL 4-6.

**Seaworld Animal Books** < <http://seaworld.org/>>. Provides factual information about a variety of animals. Has many photos. Uses technical language. IL 6-8 RL 7-8

**Smithsonian's History Explorer** < [historyexplorer.si.edu](http://historyexplorer.si.edu)>.

Wide range of topics are explored through primary sources, reviewed websites, and other resources. Can select grade level: K-2, 3-5. 6-8, 9-12. IL K-12.

**Smithsonian Tween Tribune** < <http://tweentribune.com/> >Features daily news articles, photos, graphics, audio/video in current events, history, art, culture & science. Contains archives, self-scoring quizzes, teacher-student sharing. Has four versions: K-4, 5-8, 9-12, & Spanish. Articles can be read at 4 Lexile levels. IL K-12 RL 2-12

**Smithsonian National Zoological Park Zoo Just for Kids Get the Facts**

< <https://nationalzoo.si.edu/animals> > Presents illustrated articles about varied animals. IL 3-8 RL 5-6

**Starchild** < <https://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html> >

Portrays solar system in 2 levels: Level 1: 2-3. Level 2: 4-5. Level 1 can be read aloud.

Has film clips and click-on glossary. Also available in Spanish, German, Portuguese, and Italian. IL 2-5+ RL 2-5

**State Facts for Kids** (U. S. Census Bureau) <<http://www.census.gov/schools/facts/>>

Provides information about each state and compares current and prior statistics. IL 3-8

RL 3-4

**USDA Image Gallery** < <https://www.ars.usda.gov/oc/images/image-gallery/>>

Features library of 2,000 images of animals, farms, crops, insects, food, and plants.

**USGS Science Resources for Primary Grades (K–6)** <<https://www.usgs.gov/science-support/osqi/yes/resources-teachers/grade-k-2>>. Maps and well-illustrated articles provide information about animals, geography, geology, storms, natural disasters, water, and other topics. IL K-6 RL-varies.

**Walking with Dinosaurs** (BBC) <<https://www.bbcearth.com/walking-with-dinosaurs/>>. Describes major dinosaurs in detail. Extensive illustrations, including a number of charts and diagrams are presented. IL 3-8 RL 5-6

\***Wonderopolis** < <https://www.wonderopolis.org/wonders/> > Includes hundreds of wonder questions, such as as: “Why are there different size batteries? How do you build a tunnel underwater? What is a volcano? What does the moon do? The question is answered with a text accompanied by a brief quiz, a vocabulary activity, film clips, and photos. Text-to-speech with highlighting of text is available. IL 4-8 RL 5-6

**The World Factbook** (Central Intelligence Agency)

<<https://www.cia.gov/library/publications/the-world-factbook/>>

Contains basic updated information about every country in the world. Also has maps. IL 6-8 RL 7-8.

**Youngzine** < <http://www.youngzine.org/> > News, features, interesting facts are presented. Has visuals, videos, comics, games. Readers invited to express views, submit articles, & blog. Has teacher resources. IL 4-8+ RL 4-6+.

## Chapter 5: Free Online Programs

Created by nonprofits, both ReadWorks and CommonLit offer extensive, high-quality programs that include materials, instruction, practice, and assessment.

### ReadWorks

Designed for students in K-12,, especially who struggle, ReadWorks offers an extensive collection of high-quality nonfiction, fiction, and poetry. Articles can be searched by topic, grade, text type, Lexile level, and whether the text is to be read by itself, is paired, or is part of a feature known as Article-a-Day. Articles and stories are Lexiled and accompanied by vocabulary introduction and multiple-choice and constructed response questions. The vocabulary introduction includes a listing of example sentences and cognates. Student tools include highlighting and annotating. Audio versions are available for some texts. Teaching tips and a management system that allows teachers to set up classes, make assignments, view students' work, and track progress are also supplied.

ReadWorks can be used in a number of ways. Articles can be read independently or as part of a guided reading lesson. In a feature know as Article a Day students devote ten minutes each day to informational reading. Articles are arranged in sets by topic. Topics range from bug to inventors. All the articles for the week are related to the topic. Students read the article or have it read to them and then write two or three things that have learned and then share for one minute. Extra supports are supplied for English learners. These include an audio version of the article, translations of the article, and writing support in the form of a partially written response sentence: I learned that \_\_\_\_\_.



There are boost articles for students reading below level and challenge articles for students reading above level. These articles are read in addition to the articles read by everyone.

In a feature known as StepReads™ articles are rewritten at an easier level. Teachers might have below-level readers attempt the original article after reading the rewritten version. This feature is not available for all articles. Parent/ Guardian accounts are available for at-home instruction.

### **CommonLit**

Designed for grades 3-12, CommonLit contains 2,000 high-quality reading passages for grades 3-12, complemented by teacher resources and parent guides. Also has passages in Spanish. Can browse by genre, grade level, literary device, text set, and theme. Texts have read-aloud, translate, and annotation tools. Texts also have a click-on embedded glossary for selected words. Introductions to passages include a brief overview of the passage and a purpose for taking notes. The purpose for taking notes is the annotation task. The teacher can alter the introduction and annotation task. The teacher can view annotations which show up on the assignment dashboard and respond to them. With the annotation tool, the teacher can conduct a virtual discussion. Students can respond to teacher comments and change or add to their responses.

Texts are accompanied by multiple-choice guiding and assessment questions and also a discussion question. Guiding questions are optional and are designed to be used while students are reading a selection. After students read a section of a selection, they are provided a multiple-choice guiding question related to that section.

CommonLit resources are organized in a number of ways. Selections can be read individually or they can be read according to one of the following organizational patterns.

**CommonLit Units** Six to ten 6–10 texts are organized around an essential question. Each unit lasts 1–3 weeks and comes with a graphic organizer, paired texts, multiple-choice questions, short constructed response questions, and final assessment essay prompts.

**Text Sets** Has more than 50 text sets. Each text set includes several reading passages about a historical era, science topic, or literary genre. Has a number of text sets specifically designed for use by parents at home.

**Book Pairings** Short passages from a variety of genres have been organized to provide background information for a particular book. Suggestions are made for using each of the passages to enhance the understanding and appreciation of the book being read.