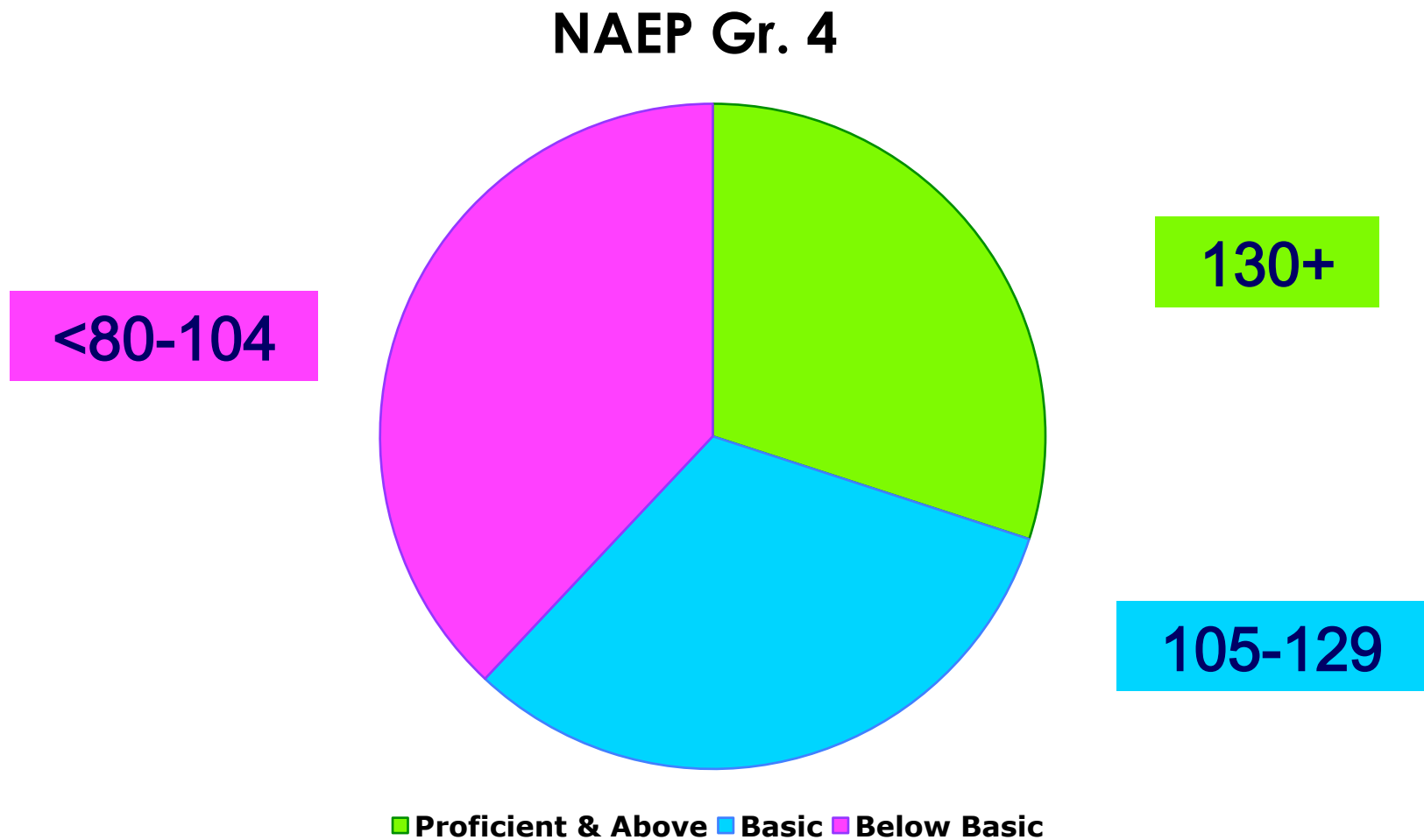


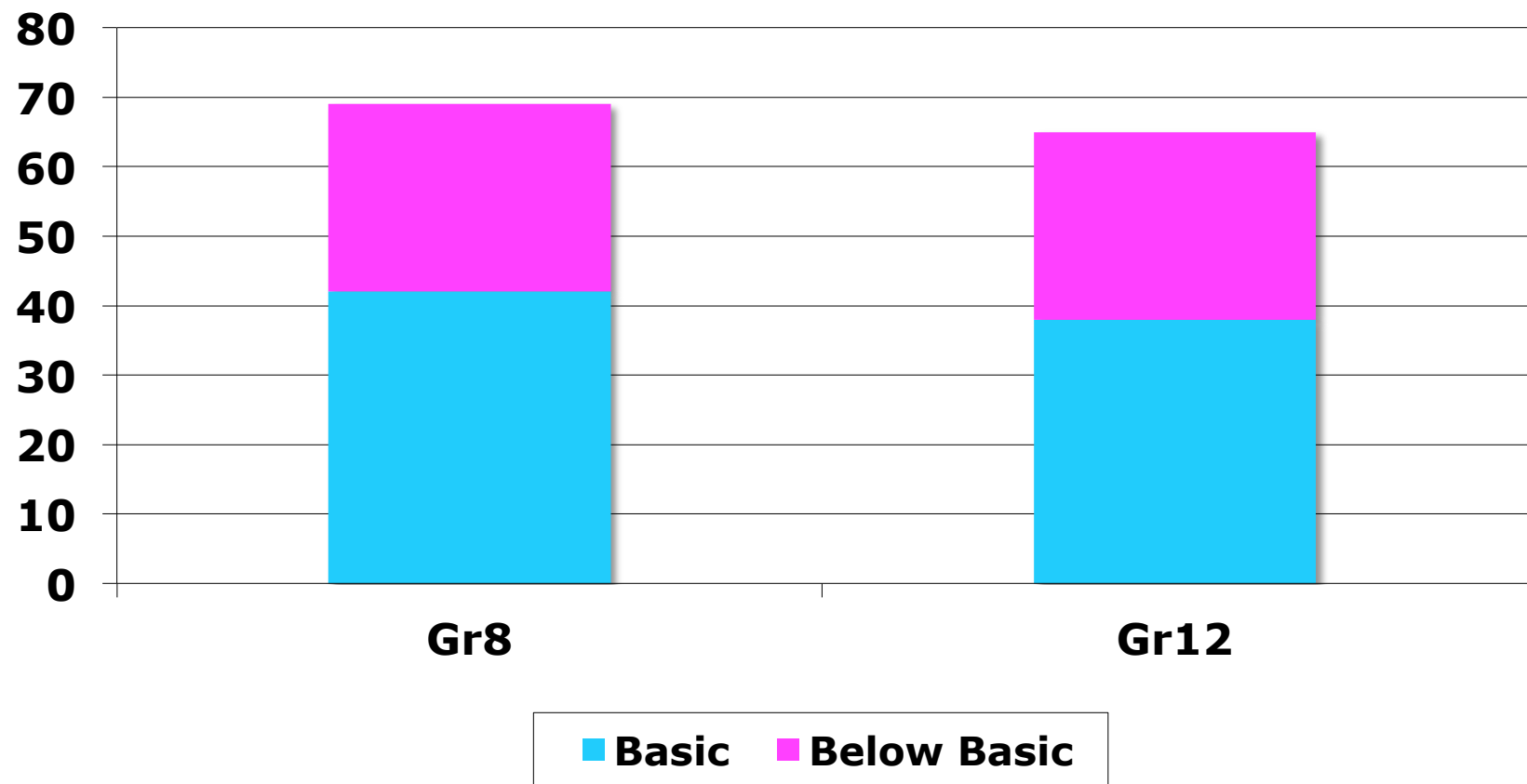
How QuickReads Increase Capacity with Complex Texts

ELFRIEDA H. HIEBERT
TEXTPROJECT & UNIVERSITY OF CALIFORNIA, SANTA CRUZ

Elementary students who are not fluent:

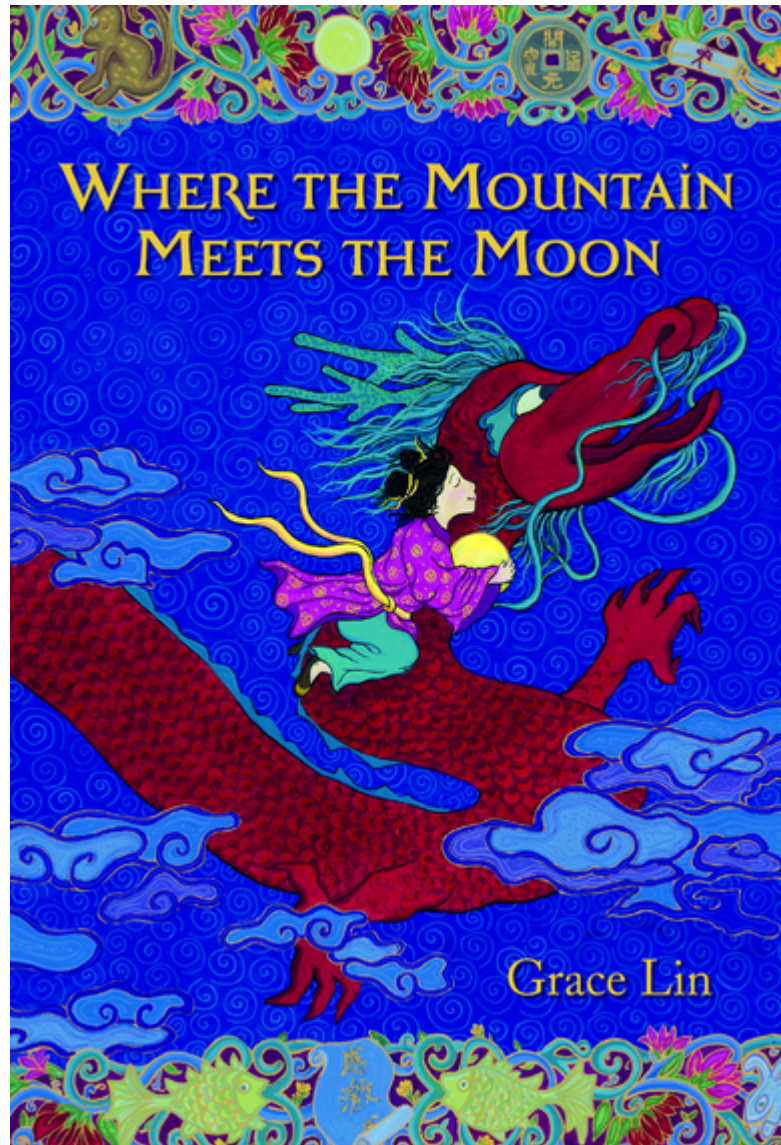


How Many Students?
Approximately 2/3 of an Age Cohort
(National Assessment of Educational Progress, 2005)

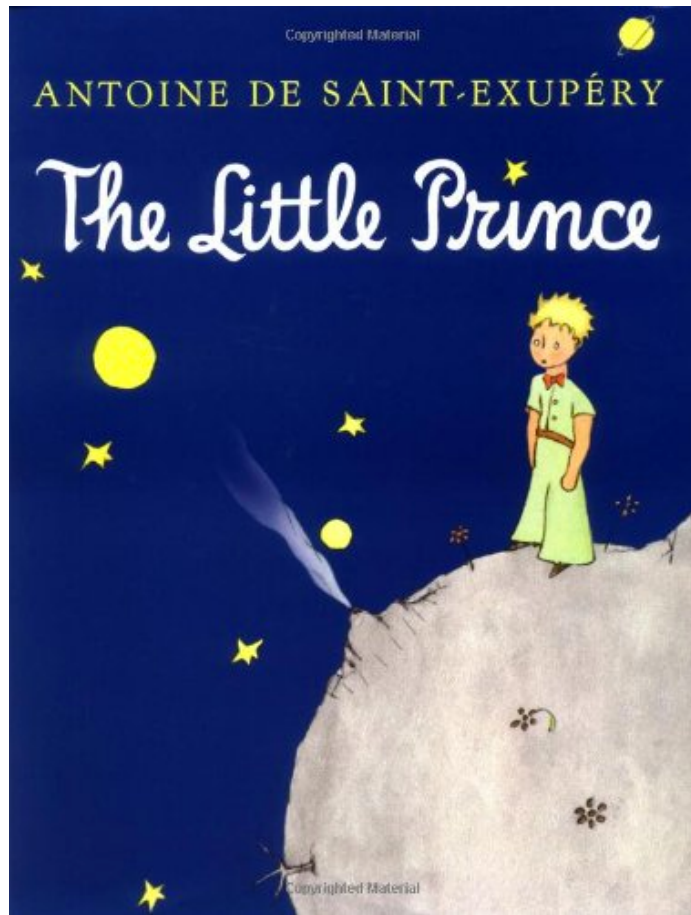


Mean Proportions of CORE Vocabulary within Exemplars of CCSS

Grade	Narrative	Informational
2-3	.93	.92
4-5	.92	.91
6-8	.93	.87
9-10	.89	.91
11-CCR	.89	.87

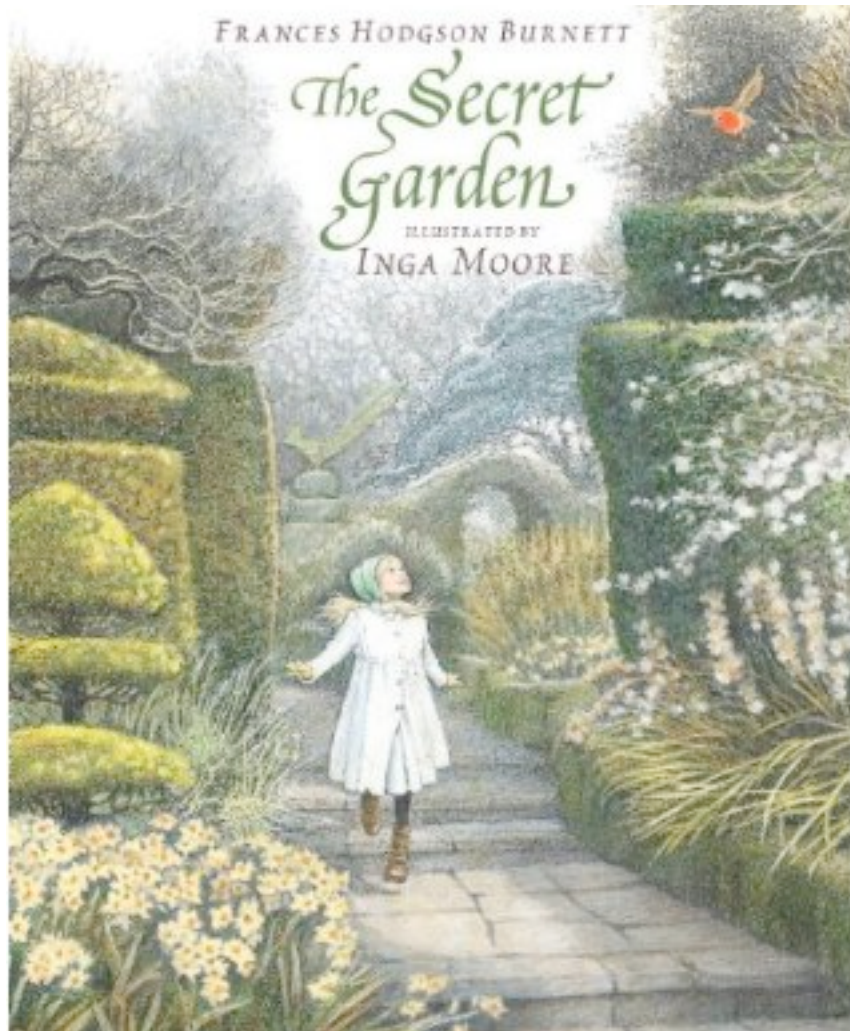


One of the houses in this village was so small that its wood boards, held together by the roof, made one think of a bunch of matches tied with a piece of **twine**. Inside, there was barely enough room for three people to sit around the table which was lucky.



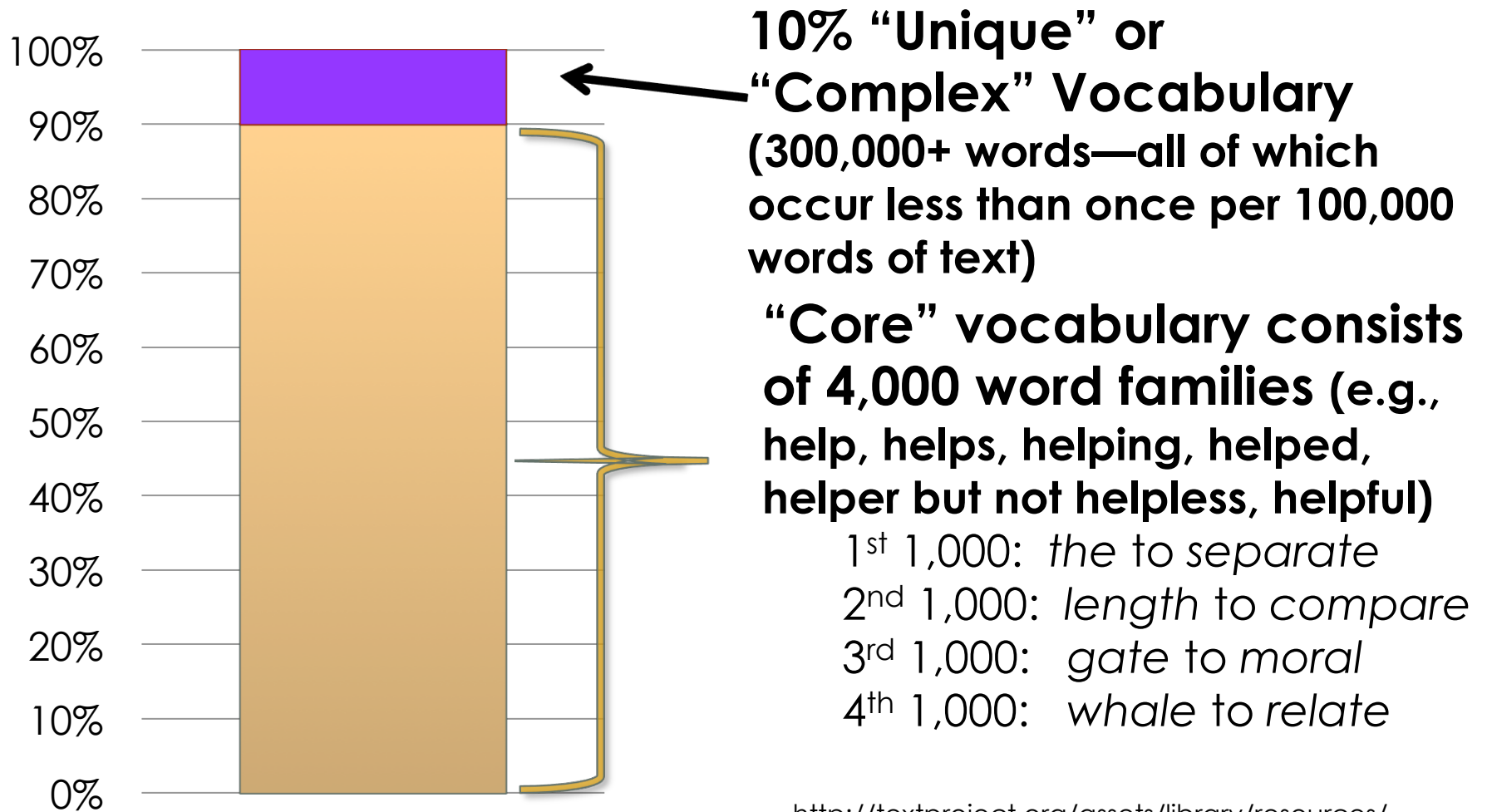
Once when I was six years old I saw a magnificent picture in a book, called True Stories From Nature, about the **primeval** forest. It was a picture of a **boa constrictor** in the act of swallowing an animal. Here is a copy of the drawing.

In the book, it said, **Boa constrictors** swallow their prey whole



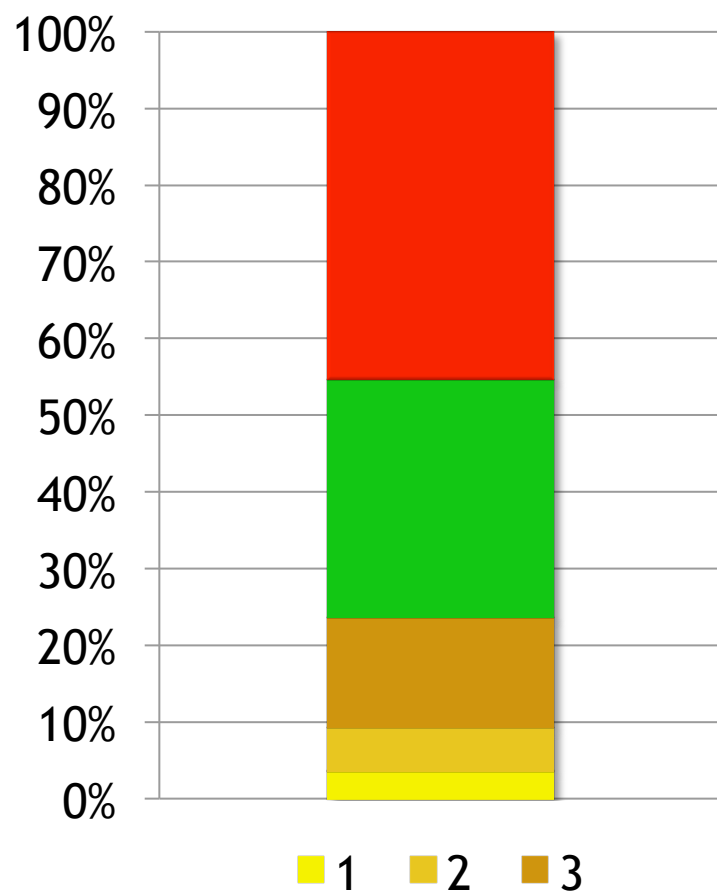
“Well **enow**. Th’ carriage is **waitin’** outside for **thee**.” A **brougham** stood on the road before the little outside platform. Mary saw that it was a smart carriage and that it was a smart **footman** who helped her in. His long **waterproof** coat and the **waterproof** covering of his hat were shining and **dripping** with rain

Solution 2: Supporting Students in Developing a Strong Vocabulary

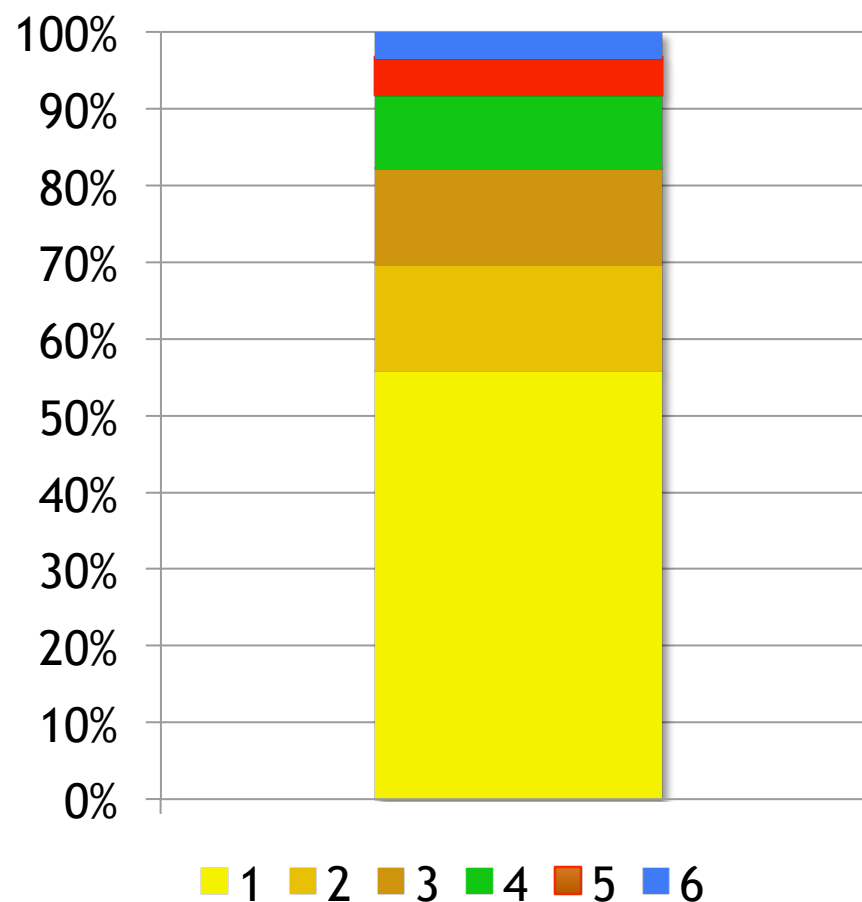


The 4,000 Simple Word Families

Root Words



Total Words



The Core Vocabulary Curriculum

Level A	300 most frequent words; short and long vowels
Level B	600 most frequent words; short, long and r controlled vowels
Level C	1000 most frequent words; all monosyllabic words
Level D	1000 most frequent words; monosyllabic words; two-syllable words with regular vowel patterns
Level E	2,500 most-frequent words (plus monosyllabic words)
Level F	5,000 most frequent words (plus monosyllabic words)

Insects



Goliath beetles are large insects that have feelers and wings.

66

What Is an Insect?

A flea can be so small that you might not see it land on this page. A Goliath beetle can be¹¹ as long as half of this page. Fleas and Goliath beetles are different in size, but they are both insects.

Many insects have feelers for¹² smelling and wings for flying. However, some insects do not have feelers and wings.

How are insects the same? All insects have six legs and¹³ a three-part body. This means that fleas and Goliath beetles have six legs and three-part bodies.¹³

67

Insects



The shells of ladybugs are red with black dots.

68

An Animal with No Bones

Without bones, people would be like jam. Bones help people walk and stand. Insects don't have any bones inside their¹² bodies. Yet they can fly, **crawl**, or jump. How do they do it?

In place of bones, insects have a hard shell on the outside¹³ of their body. The hard shell makes insects strong. It keeps their soft, inside parts safe. The hard shells of many insects are beautiful. **Ladybugs** have a red shell with black dots. Their shells make it easy to find ladybugs resting on flowers.¹⁴

69

The Speed of Insects

Most insects have wings. Other than birds and bats, insects are the only animals that can fly. Insects fly at different speeds. One kind of fly goes 35 miles an hour. **Houseflies** go five miles an hour. That's still fast when you are trying to catch a housefly!

Insects without wings jump or crawl. One kind of flea can jump more than one foot into the air. Other insects crawl, such as **cockroaches** and ants. One kind of cockroach can crawl 3 miles an hour. That's fast for a small insect.

Where Insects Live

When you play in a park, 0 to 2,000 insects may be around you. Some are **underground**. Others are on plants or trees. You might not see many of these insects because insects often look like the rocks or plants around them. A leaf insect looks like a leaf on the trees around it.

There are more insects on earth than any other kind of animal. Insects live in most places on earth. Some insects even live in water. The only place without insects is the deep water of the sea.

How Insects Help and Hurt

When a housefly buzzes around your head at night, it's a pest! Some insect pests can hurt plants, animals, and people. Flies can carry germs that make people sick. Ticks can feed on animals and even people. Some kinds of insects eat farmers' crops.

However, many insects are helpful to plants, animals, and people. Ladybugs eat the **greenflies** that eat plants. Without ladybugs, some plants would be eaten by greenflies. Many beetles eat dead things like leaves. By doing this, they help the farmers' crops to grow.

Technology Changes The Arts

New technologies, or new ways of doing things, have changed the world. Today, we can ride in planes instead of riding on horses. That's because of new technology. We can send mail through *computers* instead of through the post office. New technologies have changed art and music, too. Although artists still use paint and musicians still play pianos, new technologies allow artists and musicians to create their work in new ways. Perhaps the most exciting part of these new technologies is that they have *created* new ways to create art works. Just as people still send letters through the post office, people still use paint and pianos without speakers.

Today, however, artists can paint with beams of light. Musicians can write music with computers. Technology adds richness to the ways people can create and experience the arts.

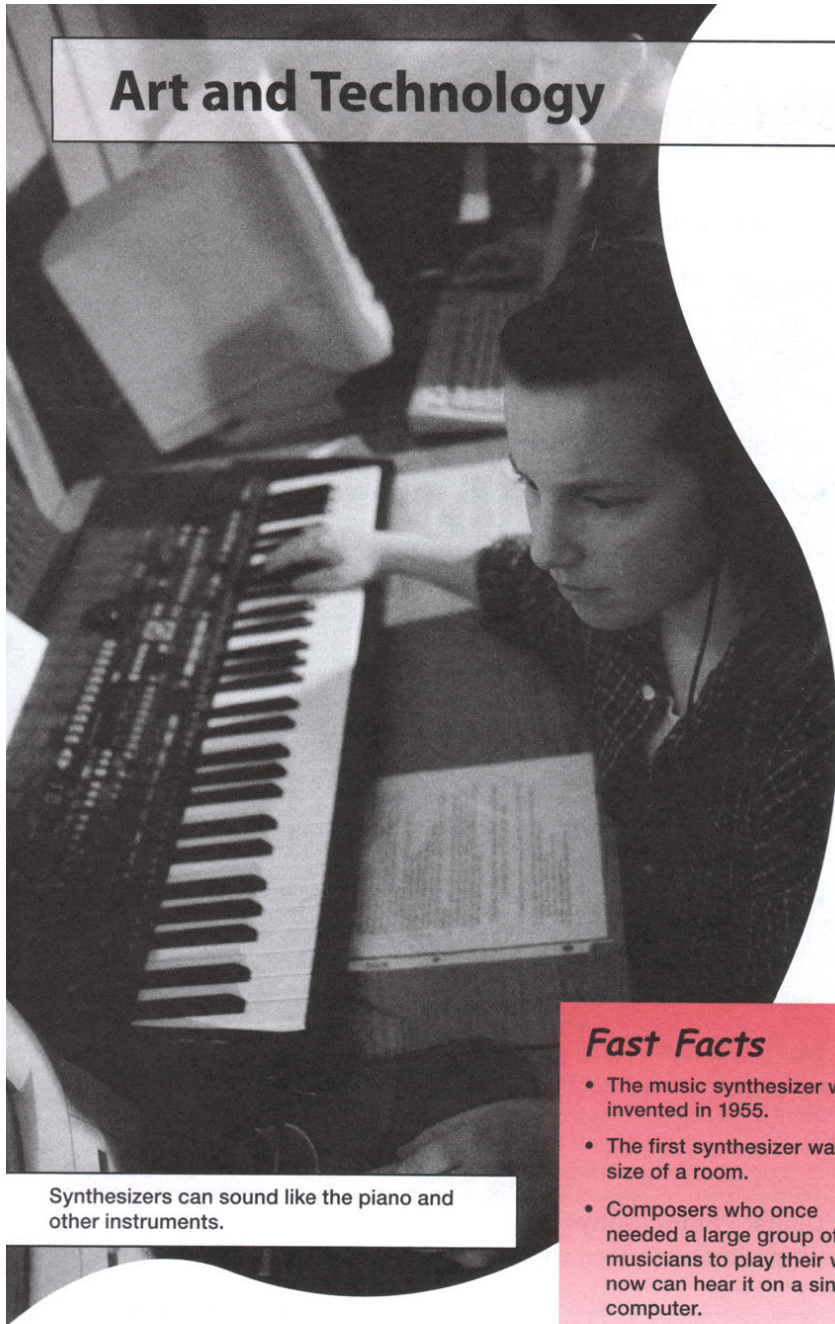
Digital Photography

At first, many people thought that photography was not really one of the arts. A photograph, after all, was nothing more than a picture of something that *existed* in life. Early in the 20th century, though, people began to think of photographs as art. They understood that photographers chose their subjects and arranged them just as painters did. Today, photography is an *accepted* art form.

Although photography was once a new technology, digital photography has become an even newer technology. Digital cameras store photos on *memory* chips, not on film. Photographers using this new technology do not need a darkroom. Instead, they load their images on a computer and print them on a printer.

Artists can easily change the colors, sizes, and shapes of their subjects on a computer screen. Digital photographers can also create photographs that look like paintings.

Art and Technology



Synthesizers can sound like the piano and other instruments.

Fast Facts

- The music synthesizer was invented in 1955.
- The first synthesizer was the size of a room.
- Composers who once needed a large group of musicians to play their work now can hear it on a single computer.

Music and Computers

At first, people did not think computers should be used in music. Some people wondered if musicians were really²² composing music if they used a computer. If the sounds weren't coming from instruments, were they listening to real music?⁴²

There are several ways musicians can use computers as they write and perform. Composers can program a computer⁶⁰ with sounds and rhythms and tell the computer how to arrange them. Composers can also tell a computer to add sounds that⁸² no instrument can make. The work can then be played either by instruments or on a machine called a synthesizer¹⁰². A synthesizer has a keyboard and can make the sounds of other instruments.¹¹⁵

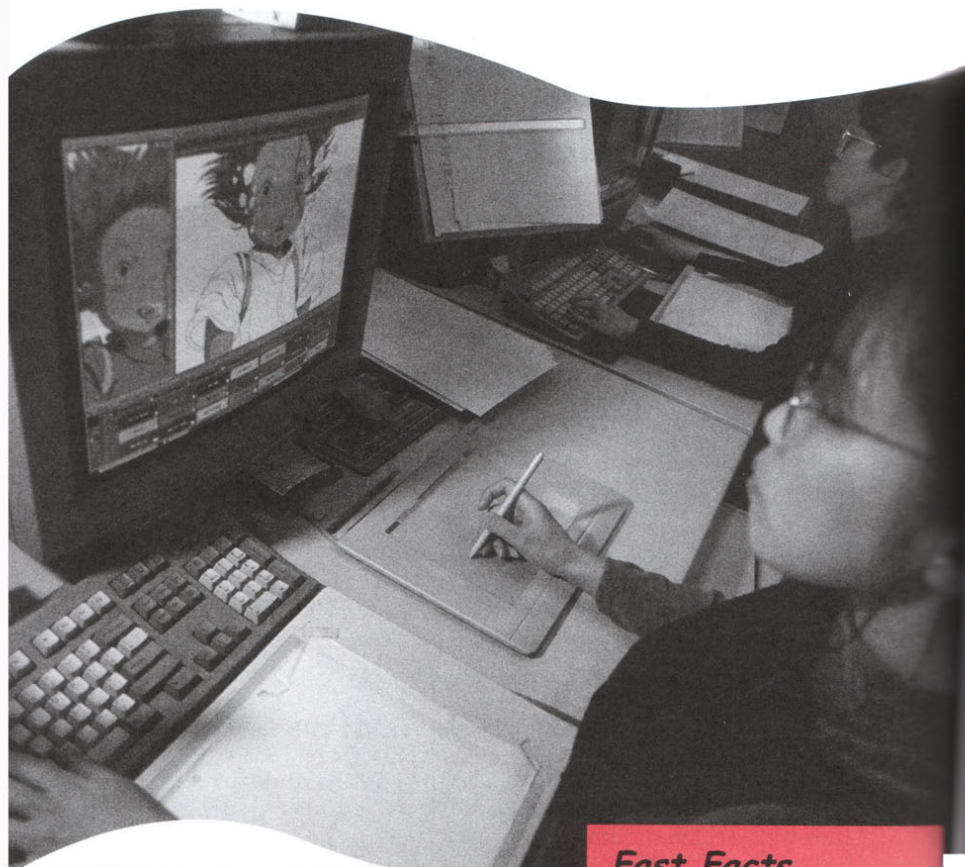
Musicians can also use a computer to write music. They play a song, and the computer records the sounds and turns them into written music that others can play.¹⁴⁴

KEY NOTES

Music and Computers

How can musicians use computers?

Art and Technology



Some artists are digital painters.

Fast Facts

- A company offering computer art greeting cards online was sold for \$780 million.
- The first computer art competition was held in 1963.
- One piece of computer-generated artwork is a wall-sized head that answers questions people ask it.

Computer Art

Artists began using computers to create art in the early 1960s. As with music, some people did not think that art and computers should be used together. Computer artists, though, proved that computers could be used as an artist's tool.⁴²

Some techniques allow artists to create and change images on a computer screen. One technique, called digital painting,⁵⁹ is like painting or drawing that is done on a computer screen, not on paper. Digital painters draw with a stylus,⁸⁰ or a special pen, on a tablet that is connected to the computer. The lines drawn by the stylus then appear on the computer screen.¹⁰⁴ Using this technique, painters can work on one part of a painting and easily transfer their work to another part of the painting. Later, they can print their work and hang it on a wall.¹⁴¹

KEY NOTES

Computer Art

How can computers be used in art?

What Does The Nervous System Do? Level F

Although your body's systems work together, each one has a special job. The job of the nervous system is to manage the other system.

Your nervous system is made up of your brain, **spinal** cord, and nerves. Your brain is the control center of your body. Your spinal cord joins your brain to your nerves. Your nerves receive information from inside and outside your body and carry it to your brain. They also carry information from your brain to your muscles so that you can respond.

Your body has two types of responses. One is a conscious response. You think before making conscious responses, like answering a question. The other type of response is an unconscious response. You do not think before making unconscious responses. Jerking your hand away from a flame is an **unconscious** response. Your muscles respond before your brain tells you the flame is hot.

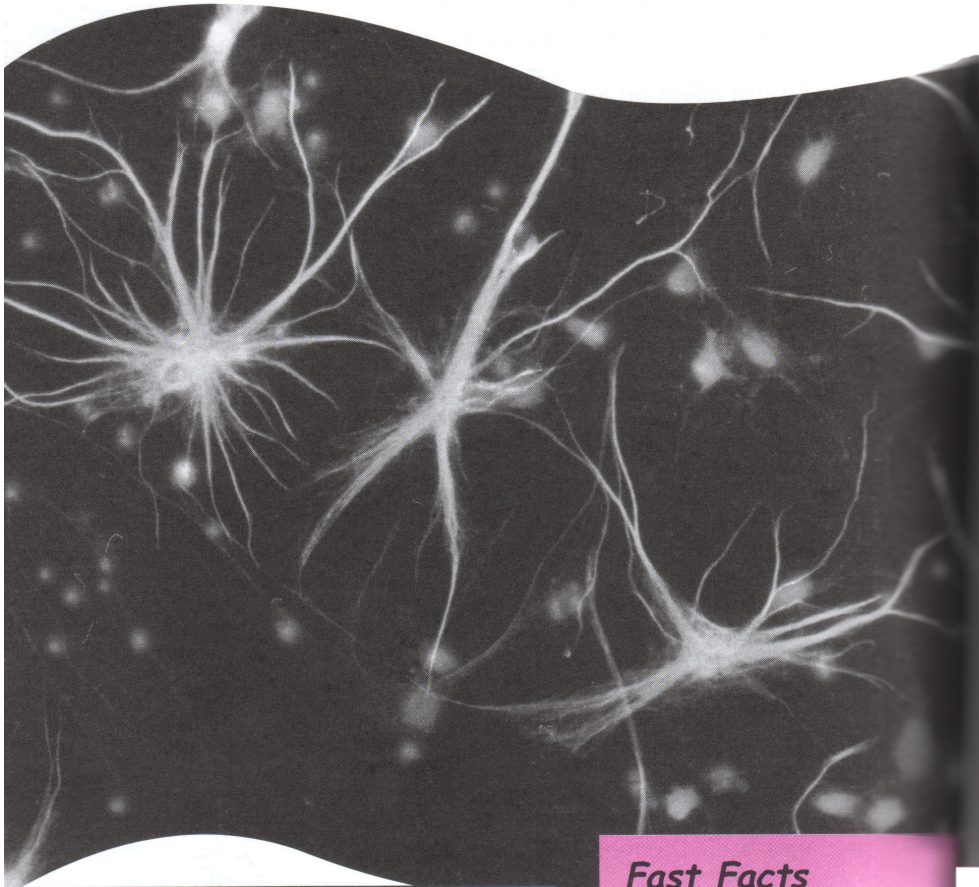
The Control Center

The human brain, which weighs about 3 pounds, is not the largest brain on earth. However, it is the largest when it is compared to the size of the body it is in.

The human brain is also the most complex brain on earth. It thinks about what is going on around it, and it plans what to do in response. Thinking is a complex process. It allows humans to decide how to respond to things. It allows humans to change themselves and the world around them. It also lets humans create things.

The three main parts of the brain are the **cerebrum**, the **cerebellum**, and the **brainstem**. Thinking and learning take place in the cerebrum. The cerebrum also stores memories. The cerebellum controls muscle movement. It also controls balance, keeping the body steady and stable. The brainstem manages basic life jobs, such as breathing and blood pressure.

The Human Nervous System



This neuron in a mammal's spinal cord (in center of photo) is very thin.

Fast Facts

- The human nervous system has billions of neurons.
- The cell part of a neuron is about 1/1000 of an inch wide.
- One neuron can make contact with as many as 1,000 other neurons.

Sending Messages

Nerves are made up of cells called **neurons**. There are two kinds of neurons: sensory neurons and motor neurons. **Sensory**²² neurons send information from the senses to the brain, telling the brain what is happening. For example, they tell the brain⁴³ that the hand has just touched something sharp or the eye has just seen something big. Motor neurons send messages from the⁶⁵ brain to the muscles, telling the muscles how to respond to the information.⁷⁸

Neurons are different sizes and shapes. They can range in size from a fraction of an inch to about 3 feet in length. Most neurons look like an insect with thin legs and a long tail.¹¹⁴

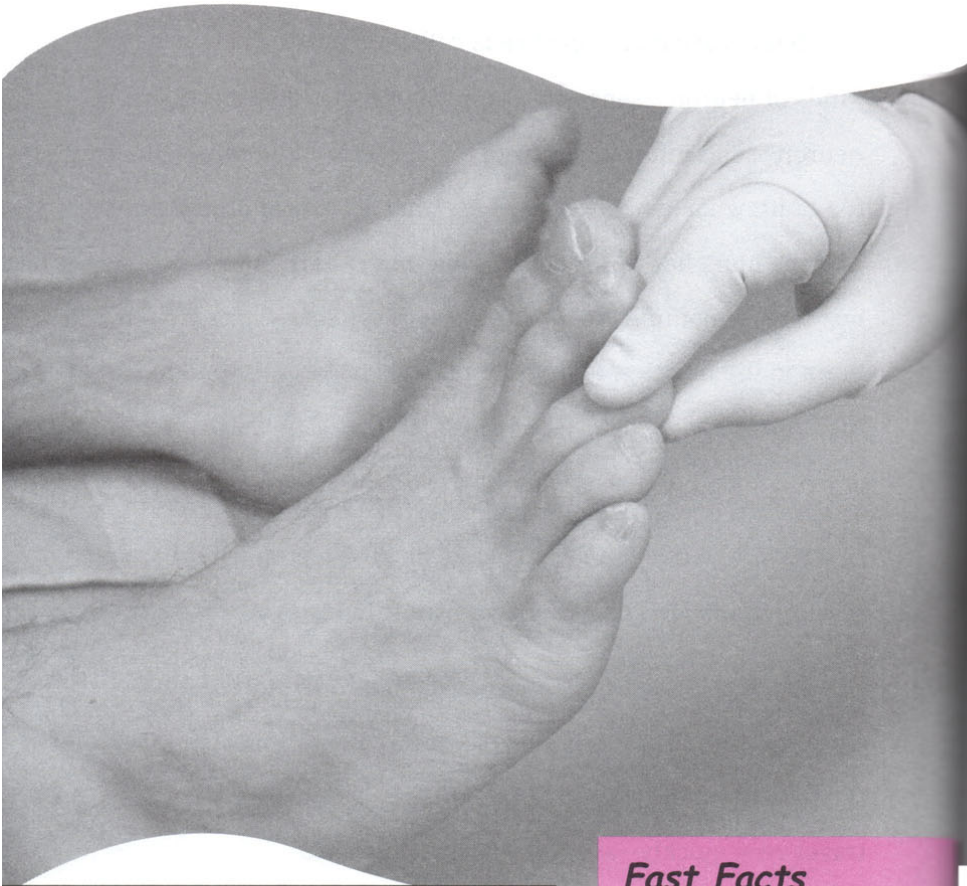
A neuron's "legs" pick up information in the form of electrical signals. The signals travel through the neuron to its¹³⁴ "tail," where they jump to the next neuron. Some signals can travel very quickly—at about 250 miles per hour.¹⁵⁴

KEY NOTES

Sending Messages

What are the two kinds of neurons?

The Human Nervous System



Nerves connect feeling in the toes to the brain.

Fast Facts

- The human spinal cord has 31 pairs of nerves.
- The human backbone has 33 sections.
- In the United States, about 11,000 people injure their spinal cord each year.

The Super-Highway

The human nervous system is like a super-highway that runs through the body. The spinal cord, which is made up²⁴ of bundles of nerves, starts at the brain and extends about 18 inches down the back, through a hollow part of the backbone.⁴⁷ All along the spinal cord, nerves branch off and extend to different parts of the body, connecting the body to the brain.⁶⁹

The nerves at the bottom of the spinal cord connect the legs to the brain. If the bottom of the spinal cord is damaged,⁹³ messages cannot go from the legs to the brain, and a person could be paralyzed. People who are paralyzed might be unable to walk at all.¹¹⁹

The nerves at the top of the spinal cord control unconscious tasks, such as breathing. If the top of the spinal cord is¹⁴² damaged, these unconscious tasks can stop, and the person can die.¹⁵³

KEY NOTES

The Super-Highway

What does the spinal cord do?

Upcoming Events



24 April 2013

Key Shifts in Assessment and Instruction Related to CCSS-ELA

Dr. Karen K. Wixson, University of North Carolina at Greensboro

1—2pm, Pacific Daylight Time

Registration is now open! <https://www4.gotomeeting.com/register/751883535>



30 May 2013

Informational Text and the CCSS: Pitfalls and Potential

Dr. Nell K. Duke, University of Michigan

1—2pm, Pacific Daylight Time

More information, including how to register, will be available soon.



20 June 2013

Quantitative Measurement of Text Complexity

Elfrieda H. Hiebert, TextProject & the University of California, Santa Cruz

Please note that the date for this webinar has been changed to June 20, 2013.

2—3pm, Pacific Daylight Time (5—6pm Eastern)

Registration is now open! <https://www4.gotomeeting.com/register/916300207>

Common Core State Standards Webinar Series

CCSS

Webinar Series

TextProject presents **FREE** webinar series on the Common Core State Standards.

Previous Events



27 February 2013

CCSS and Education Policy

Timothy Shanahan, University of Illinois at Chicago

Dr. Shanahan identifies tasks which states and districts must undertake to successfully implement the English/Language Arts Common Core standards.



25 January 2013

Research and the Common Core: Can the Romance Survive?

Dr. P. David Pearson, University of California, Berkeley

This presentation considers the research foundations of the Common Core State Standards, especially as it pertains to comprehension.

Recordings of past webinars are available at TextProject's YouTube channel.



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TextProject aims to bring beginning and struggling readers to high levels of literacy through a variety of strategies and tools, particularly the texts used for reading instruction.

TextProject Topics



Common Core State Standards

[More topics](#)

FYI for Kids! New from TextProject

A collection of engaging magazine articles designed to enhance the Common Core classroom's reading repertoire. Take a look at topics offered in *FYI for Kids!*

Student Resources

TextProject provides free, downloadable sets of texts that fill specific needs:



Stop the summer slump



"Read to learn" while learning to read



Increase meaningful, text-based discussions



A magazine based reading program

Teacher Resources

TextProject helps teachers with evidence-based lessons and lists. Free downloads.



Use everyday words to teach new words



Use pictures to teach complex words

WORD LISTS

Be informed about vocabulary

Read-Aloud Favorites

Increase student knowledge through read-alouds

Professional Development Resources

TextProject provides resources for teacher education.

Keep up with the latest reading research



Learn core ideas about complex text

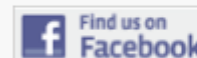
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