

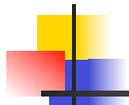


# **Scaffolding Comprehension of Informational Text**

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**Responding to the Common Core  
State Standards**

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Anita L. Archer, Ph.D  
Author and Educational Consultant  
[archerteach@aol.com](mailto:archerteach@aol.com)

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## Informational Text - What

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The Common Core State Standards addresses informational text in the following categories

- **Literary Nonfiction** – uses factual information within a story-like format
- **Exposition** – factual, textbook-like reading
- **Argument/Persuasion** – texts that use argument to present a position and convince reader
- **Procedural** – step by step instructions; how-to-do something

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## Informational Text - What

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Distribution of Literary and Informational Passages by Grade in the 2009 NAEP Reading Framework

- |            |              |                   |
|------------|--------------|-------------------|
| ■ Grade 4  | Literary 50% | Informational 50% |
| ■ Grade 8  | Literary 45% | Informational 55% |
| ■ Grade 12 | Literary 30% | Informational 70% |

Source: National Assessment Governing Board. (2008). *Reading framework for the 2009 National Assessment of Educational Progress*. Washington, DC: U.S. Government Printing Office.

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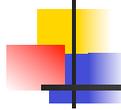
## Informational Text - Why

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### Why emphasized in Common Core?

- By sixth grade, 80% of school reading tasks are expository (Venezky, 2007)
- 80% of adult/workplace reading is informational
- Standardized tests are 85% expository (Daniels, 2007)
- Students' success or failure in school is closely tied to their ability to comprehend expository text (Kamil, 2003)

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## Informational Text - Where

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- The percentages on the table reflect the sum of student reading, not just reading in ELA settings. Teachers of senior English classes, for example, are not required to devote 70 percent of reading to informational texts. Rather, 70 percent of student reading across the grade should be informational.

*(Common Core State Standards, page 5)*

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## Informational Text - Complex Text

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### **Features of Complex Text**

- Subtle and/or frequent transitions
- Multiple and/or subtle themes and purposes
- Density of information
- Unfamiliar settings, topics or events
- Lack of repetition, overlap or similarity in words and sentences
- Complex sentences
- Uncommon vocabulary
- Lack of words, sentences or paragraphs that review or pull things together for the student
- Longer paragraphs

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## Informational Text - Text-Dependent Questions

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### **Text-Dependent Questions and Tasks**

- do not require information or evidence outside the text
- can only be answered by careful scrutiny of text
- require careful thinking about the text
- require finding evidence in text to support response

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## Informational Text - Close Reading

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- **Close reading**

- Rigorous reading of informational text
- Creating deep understanding
- Determining what text says explicitly
- Making logical inferences
- Drawing conclusions about content
- Examining meaning thoroughly

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## Path to the Common Core

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Use research-validated practices on

- Comprehension
- Vocabulary
- Background Knowledge
- Writing

Use research-validated practices on

- Explicit Instruction
  - Design of Instruction
  - Delivery of Instruction

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Reading Comprehension:

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**Before Reading**  
**During Reading**  
**After Reading**

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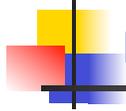


**Preview - Before Reading Strategies**

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- Teach the pronunciation and meaning of critical, unknown **vocabulary** words.
- Teach or activate any necessary **background knowledge**.
- **Preview** the text.

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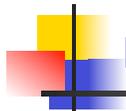


## Before Reading - Vocabulary

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- “direct vocabulary instruction has an impressive track record of improving students’ background knowledge and comprehension of academic content.” Marzano, 2001, p. 69
- .97 effect size for direct teaching of vocabulary related to content (Stahl & Fairbanks, 1986)

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## Before Reading - Vocabulary

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### Attributes of Good Vocabulary Instruction

1. Promote **word learning strategies**
2. Select words that enhance academic success
  - **General Academic Vocabulary** - Generalize across domains
  - **Domain-Specific Vocabulary** - Specific to a domain or field of study
3. Group words **semantically**
4. Provide **student-friendly explanations**

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## Before Reading - Vocabulary

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### Attributes of Good Vocabulary Instruction

5. Teach **parts of words** at the “moment of opportunity”
6. Provide **multiple exposures** to terms and meanings
7. Expand instruction to “**word relatives**”
8. Have students maintain vocabulary **log**
9. Maintain a **word wall**
10. Provide judicious **review**

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## Before Reading - Vocabulary

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- Select words that are **unknown**
- Select words that are **critical** to passage understanding
- Select words that students are likely to use in the **future** (Stahl, 1986)
  - General academic vocabulary found used in many domains
  - Domain-specific vocabulary that provides background knowledge
- Select **difficult words** that need interpretation
  - Words not defined within the text
  - Words with abstract referent
  - Words with an unknown concept

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## Before Reading - Vocabulary

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- **Dictionary Definition**
  - **compulsory** - (1) Employing compulsion; coercive. (2) Required by law or other rule.
  
- **Student-Friendly Explanation**
  - **Uses known words.**
  - **Is easy to understand.**
  
  - When something is **compulsory**, it is required and you must do it.

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## On-line Dictionaries with Student-friendly Explanations

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Collins Cobuild Dictionary of American English  
<http://www.collinslanguage.com/free-online-cobuild-ESL-dictionary>  
[dictionary.reverso.net/english/cobuild](http://dictionary.reverso.net/english/cobuild)

Longman's  
<http://www.ldoceonline.com>  
(Longman's Dictionary of Contemporary English Online)

Heinle's  
<http://www.nhd.heinle17e.com/home.aspx>  
(Heinle's Newbury Dictionary for American English)

Merriam Webster's  
<http://www.learnersdictionary.com>

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## Before Reading - Vocabulary

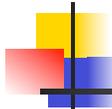
### Step 1. Introduce the word.

- a) Write the word on the board or overhead.
- b) Read the word and have the students repeat the word.  
If the word is difficult to pronounce or unfamiliar have the students repeat the word a number of times.

*Introduce the word with me.*

*This word is **suffrage**. What word? suffrage  
**Suffrage** is a noun.*

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## Before Reading - Vocabulary

### Step 2. Introduce meaning of word.

#### Option # 1. Present a student-friendly explanation.

- a) Tell students the explanation. OR
- b) Have them read the explanation with you.

*Present the definition with me.*

*When someone has **suffrage**, they have  
the right to vote in an election.*

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## Before Reading - Vocabulary

### Step 2. Introduce meaning of word.

**Option # 2. Have students locate the definition in the glossary or text and break the definition into the critical attributes.**

Glossary: **Suffrage** - the right to vote

suffrage

- the right
- to vote

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## Before Reading - Vocabulary

### Step 2. Introduce meaning of word.

**Option # 3. Introduce the word using the meaningful parts in the word.**

autobiography  
auto = self  
bio = life  
graph = letters, words, or pictures

hydroelectricity  
hydro = water

telescope  
tele = distant  
scope = look at

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## Common Latin and Greek Roots

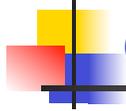
<b>aqua</b>	water	Greek	aquarium, aqueduct, aquaculture, aquamarine, aquaplane, aquatic
<b>aud</b>	hearing	Latin	audio, audition, audiovisual, auditorium, audiotape, inaudible
<b>auto</b>	self	Greek	autograph, autobiography, automobile, autocrat, autonomy
<b>astro</b>	star	Greek	astronomy, astrophysics, astrology, astronaut, astronomer, asterisk
<b>biblio</b>	book	Greek	Bible, bibliography, bibliophobia, bibliophile, biblioklept
<b>bio</b>	life	Greek	biography, biology, autobiography, bionic, biotic, antibiotic, biome, biosphere, biometrics
<b>chrono</b>	time	Greek	synchronize, chronology, chronic, chronicle, anachronism
<b>corp</b>	body	Latin	corpse, corporation, corps, incorporate, corporeal, corpulence
<b>demo</b>	the people	Greek	democracy, demography, epidemic, demotic, endemic, pandemic
<b>dic, dict</b>	speak, tell	Latin	dictate, dictation, diction, dictator, verdict, predict, contradict, benediction, jurisdiction, predict, indict, edict
<b>dorm</b>	sleep	Latin	dormant, dormitory, dormer, dormouse, dormition, dormitive
<b>geo</b>	earth	Greek	geology, geologist, geometry, geography, geographer, geopolitical, geothermal, geocentric

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## Common Latin and Greek Roots

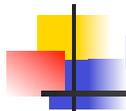
<b>graph</b>	to write, to draw	Greek	autograph, biography, photograph, telegraph, lithograph
<b>hydro</b>	water	Greek	hydroplane, dehydrate, hydroelectric, hydrogen, hydrophone
<b>ject</b>	throw	Latin	reject, deject, project, inject, injection, projection
<b>logos, logy</b>	study	Greek	geology, astrology, biology, numerology, zoology, technology, psychology, anthropology, mythology
<b>luna</b>	moon	Latin	lunar, lunacy, lunatic, interlunar
<b>meter</b>	measure	Greek	meter, thermometer, diameter, geometry, optometry, barometer, centimeter, symmetry, voltammeter
<b>mega</b>	great, large, big	Greek	megaphone, megalith, megalomania, megatons, megalopolis
<b>min</b>	small, little	Latin	minimal, minimize, minimum, mini, miniature, minuscule, minute, minority
<b>mit, mis</b>	send	Latin	mission, transmit, transmission, remit, missile, submission, permit, emit, emissary
<b>path</b>	feeling, suffering	Greek	pathetic, pathology, apathy, antipathy, sympathy, telepathy, empathy, sociopath
<b>ped</b>	foot	Latin	pedestrian, pedal, peddle, peddler, pedicure, pedometer
<b>philia</b>	love, friendship	Greek	philosopher, Philadelphia, philanthropist, philharmonic, philip



## Common Latin and Greek Roots

<b>phono</b>	sound	Greek	phonograph, microphone, symphony, telephone, phonogram, megaphone, phony, euphony, xylophone, phony,
<b>photo</b>	light	Greek	photograph, photosynthesis, telephoto, photometer, photophilia
<b>port</b>	carry	Latin	port, transport, transportation, portable, portage, report
<b>spect</b>	see	Latin	respect, inspection, inspector, spectator, spectacles, prospect
<b>scope</b>	look at	Greek	microscope, telescope, periscope, kaleidoscope, episcopal
<b>sol</b>	sun	Latin	solar, solar system, solstice, solarium, parasol
<b>struct</b>	build, form	Latin	instruct, instruction, construction, reconstruction, destruct, destruction, infrastructure, construe, instrument, instrumental
<b>tele</b>	distant	Greek	telephone, television, telegraph, telephoto, telescope, telepathy, telethon, telegenic
<b>terra</b>	land	Latin	territory, terrestrial, terrace, terrarium, extraterrestrial, Mediterranean Sea, terra cotta, subterranean

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## Before Reading - Vocabulary

**Step 3.** Illustrate the word with examples.

- a. Concrete examples
- b. Visual examples
- c. Verbal examples

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## Before Reading - Vocabulary

### Suffrage Examples

When the United States was founded only white men with property had suffrage.

At the time of the American Civil War, most white men had been granted suffrage.

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## Before Reading - Vocabulary

### Suffrage Examples

In 1920, women were granted suffrage. The passage of the Nineteenth Amendment granted women the right to vote in all United States elections.



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## Before Reading - Vocabulary

Suffrage Examples

The Voting Rights Act of 1965 outlawed discriminatory voting practices that denied **suffrage** to many African Americans in the United States.



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## Before Reading - Vocabulary

**Step 4. Check students' understanding.**

**Option #1. Ask deep processing questions.**

*Check students' understanding with me.*

Why is suffrage a critical aspect of a democracy?

Begin by saying or writing:

Suffrage is a critical aspect of democracy for the following reasons. First, \_\_\_\_\_

30



## Before Reading - Vocabulary

**Step 4. Check students' understanding.**

**Option #2. Have students discern between examples and non-examples.**

*Check students' understanding with me.*

Tell me **suffrage** or **not suffrage**.

The right to run for elected office. **not suffrage** Why not?

The right to vote. **suffrage**

The right to develop ads for a candidate. **not suffrage** Why not?

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## Before Reading - Vocabulary

**Step 4. Check students' understanding.**

**Option #3. Have students generate their own examples.**

*Check students' understanding with me.*

*Make a list of ways that **suffrage** could be limited or compromised.*

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## Before Reading - Vocabulary

suffrage      noun  
suffragist      noun



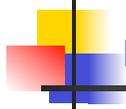
In 1917, all women in the United States did not have **suffrage**, the right to vote. **Suffragists** in New York City collected more than a million signatures of women demanding voting rights. They then paraded down Firth Avenue with the signature placards.

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## Background Knowledge - What

- ....what one already knows about a subject.  
Stevens, 1980
- ...all the knowledge learners have when entering a learning environment that is potentially relevant for acquiring new knowledge.  
Biemans & Simons, 1996

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## Background Knowledge - Why?

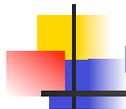
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Read this paragraph and explain it to your partner.

From a neuroanatomy text (found in *Background Knowledge* by Fisher and Frey)

Improved vascular definition in radiographs of the arterial phase or of the venous phase can be procured by a process of subtraction whereby positive and negative images of the overlying skull are imposed on one another.

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## Background Knowledge - Why?

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Read this paragraph and explain it to your partner.

( *Background Knowledge* by Fisher and Frey)

How much a reader already knows about the subject is probably the best predictor of reading comprehension. When readers engage with a text for which they have limited background knowledge, the text is much more difficult to understand than one for which they have ample background knowledge. ...research indicates that children continue to spin their wheels when they don't have the background knowledge required to understand much of what they are reading. p2

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## Background Knowledge - Why

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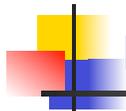
- Background knowledge of text has a major impact on whether or not a reader can comprehend text.

Anderson & Pearson, 1984; Bransford, Stein, & Shelton, 1984; Wilson & Anderson, 1986

- Across grades and reading ability, prior knowledge of subject area and key vocabulary results in higher scores on reading comprehension measures.

Langer, 1984; Long, Winograd, & Bridget, 1989; Stevens, 1980

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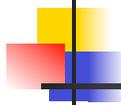
## Background Knowledge

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# **BIG IDEA**

Even a thin slice of background knowledge is useful.

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## Teach Background Knowledge

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### **Preparation**

1. What is critical?
2. What information would ease acquisition of new knowledge?
3. What information would reduce cognitive overload?

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## Teach Background Knowledge

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### **Anchor Instruction in:**

- Supplementary informational Text
- Power-point
- Visuals
- Video

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## Preview - Informational Passage

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As the student previews, he/she discovers:

- the topics to be **covered**,
- the information that will be **emphasized**,
- how the material is **organized**.
- In addition, background knowledge is **activated**.

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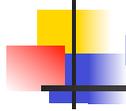


## Preview - Informational Passage

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- Guide students in previewing the chapter and formulating a topical outline using the **text structure**: title, introduction, headings, subheadings, questions.
- Has students preview the selection independently, with his/her partner, or team members.

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## Preview - Informational Passage

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### Warm-Up

Before you read a chapter or a section of a chapter in your science, social studies, or health book, Warm-up. Get an idea of the chapter's content by previewing these parts.

#### BEGINNING

- Title
- Introduction

#### MIDDLE

- Headings
- Subheadings

#### END

- Summary
- Questions

Curriculum Associates, *Skills for School Success*

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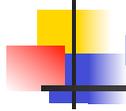


## Preview - During Reading Strategies

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- Utilize passage reading procedures that provide adequate reading practice.
- Ask appropriate questions during passage reading.
- Have students generate questions.
- Teach text structure strategies that can be applied to passage reading.

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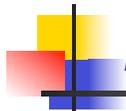


## Passage Reading Procedures

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- What are some disadvantages of “round-robin reading” when the group size is large?

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## Passage Reading - Silent Reading

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### Augmented Silent Reading

- Pose pre- reading question
- Tell students to read a certain amount and to reread material if they finish early
- Circulate and monitor students’ reading  
Have individuals whisper-read to you
- Pose post- reading question

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## *Passage Reading - Choral Reading*

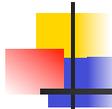
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### **Choral Reading**

- Read selection with your students
- Read at a moderate rate
- Tell your students, “Keep your voice with mine”

(You may wish to have the students pre-read the material silently before choral reading.)

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## *Passage Reading - Cloze Reading*

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### **Cloze Reading**

- Read selection
- Pause on “meaningful” words
- Have students read the deleted words

Excellent practice for reading initial part of a chapter or when you need to read something quickly

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## Passage Reading - Individual Turns

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### Individual Turns

- Use with small groups
- Call on an individual student
- Call on students in random order
- Vary the amount of material read

### If used with large group,

- Assign paragraphs for preview and practice OR
- Utilize the me or we strategy. When called on, student has the option of saying “we” and asking everyone to join in reading.

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## Passage Reading - Partners

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### Partner Reading

- Assign each student a partner
- **Reader** whisper-reads to partner
  - Narrative - Partners alternate by sentence, page, or time
  - Informational text - Partners alternate by the paragraph (Read - Stop - Respond).
- **Coach** corrects errors.
  - Ask - *Can you figure out this word?*
  - Tell - *This word is \_\_\_\_\_. What word?*
  - Reread the sentence.*

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## Passage Reading - Partners

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### Alternatives to support lowest readers

- **Option #1** Lowest reader placed on a triad and reads with another student
- **Option #2** Partners allowed to say “me” or “we”
- **Option #3** Higher reader reads material  
Lower reader in partnership reads same material

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## Informational Text Reading

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- Read
- Stop
- Respond
  - answer teacher questions
  - answer partner questions
  - generate questions/answer questions
  - highlight
  - take notes
  - map content

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## During Reading - Teacher Asks Questions

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Procedure for asking students questions on text material.

### **Saying answer to partner** (Partners First)

1. Ask a **question**
2. Give students **thinking time or writing time**
3. Provide a verbal or written **sentence starter or paragraph frame**
4. Have students share answers with their **partners** using the sentence starter
5. Call on a student to give answer
6. Engage students in a **discussion**

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## During Reading - Teacher Asks Questions

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Scaffolding Answers with Sentence Starters

Why were Adam and Clay accused of making a “corrupt bargain” (stealing the election)?

Begin by saying or writing:

Adam and Clay were accused of making a “corrupt bargain” for a number of reasons.

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## During Reading - Teacher Asks Questions

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What are the benefits of having students share answers with their partners before you call on them?

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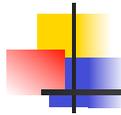
## During Reading - Teacher Asks Questions

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### **Discussion**

- Have students discuss responses to question, task, or directive
- Scaffold the discussion with sentence starters

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## During Reading - Teacher Asks Questions

### Discussion sentence starters

#### Disagreeing

I disagree with \_\_\_\_\_ because \_\_\_\_\_.

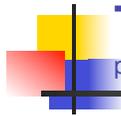
I disagree with \_\_\_\_\_. I think \_\_\_\_\_.

#### Agreeing

I agree with \_\_\_\_\_ because \_\_\_\_\_.

I agree with \_\_\_\_\_ and I also think \_\_\_\_\_.

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## During Reading - Teacher Asks Questions

Adapted from  
presentation by Kate Kinsella, PhD

### Structured Discussion

#### Agreeing

My idea is similar to \_\_\_\_\_ idea. I think \_\_\_\_\_

My ideas expand on \_\_\_\_\_ idea. I think \_\_\_\_\_

I agree with \_\_\_\_\_ and want to add \_\_\_\_\_

#### Disagreeing

I don't agree with \_\_\_\_\_ because \_\_\_\_\_

I have a different perspective from \_\_\_\_\_. I think \_\_\_\_\_

My views are different from \_\_\_\_\_. I believe \_\_\_\_\_

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## During Reading - Teacher Asks Questions

Adapted from presentation by Kate Kinsella, PhD

### Structured Discussion

#### Clarifying

Will you please explain \_\_\_\_\_

What did you mean when you stated \_\_\_\_\_

Could you please clarify your idea for me.

#### Paraphrasing

What I hear you saying is \_\_\_\_\_

So you believe \_\_\_\_\_

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## During Reading - Teacher Asks Questions

### The Teacher-Generated Questions

- Divides the material into appropriate segments.
- Develops questions on the content, focusing on the **most important** understanding that students should construct.

OR

### Curriculum Questions

- Asks questions provided by the curriculum material.

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## During Reading - Text-Dependent Questions

Ask questions that focus on information (evidence) provided in the text.

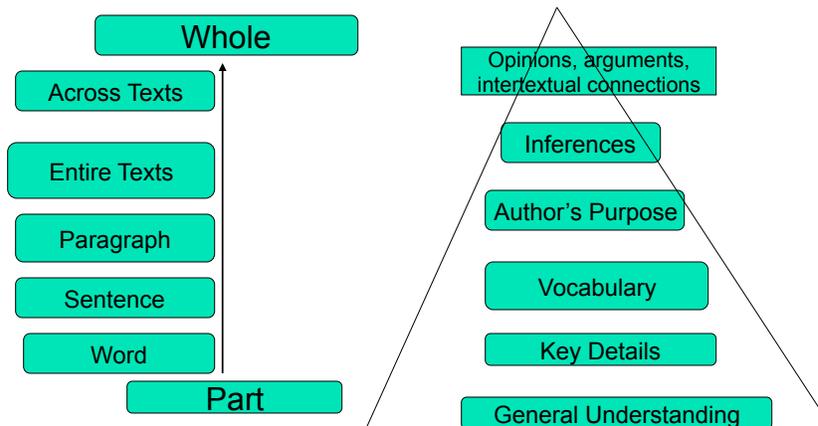
Students must answer the questions based on passage information NOT on previous experience or personal ideas.

**Keep students cognitively in the text... don't draw them out of the text.**

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## During Reading - Teacher Asks Text Dependent Questions

Fisher & Frey, 2012



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## During Reading - Teacher Asks Higher Order Text Dependent Questions (Summary from Common Core)

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### Grades 6 - 12

#### Key Ideas and Details

Cite textual evidence

- for what is stated explicitly

- for inferences

Determine central idea

- objectively summarize text

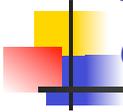
- analyze development of central idea

Analyze

- key individuals, events, ideas

- interactions between individuals, events, ideas

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## During Reading - Teacher Asks Higher Order Text Dependent Questions (Summary from Common Core)

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### Grades 6 - 12

#### Craft and Structure

Determine meaning of words and phrases

Analyze choice of words on meaning and mood

Analyze structure of sentence, paragraph, chapter

Analyze and evaluate development of ideas or claims

Determine and analyze point of view

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## During Reading - Teacher Asks Higher Order Text Dependent Questions (Summary from Common Core)

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### Grades 6 - 12

#### Integration of Knowledge and Ideas

- Analyze topics through different sources
  - determine emphasized details
  - integrate information from different sources to answer a question
- Delineate and evaluate argument and claims in text
  - assess validity of reasoning
  - assess sufficiency of evidence
  - identify false statements
- Analyze significance of historical documents

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## During Reading - Teacher Generated Questions

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If the question is a difficult, higher order question, scaffold (support) the students' performance by:

- Asking lower order (literal) questions **first** to establish a foundation on which higher order responses can be based.

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## During Reading - Teacher Generated Questions

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### Scaffolding Questions:

#### Scaffolding Questions

How many political parties were there in 1824?

Four men in the party ran for president. Did Andrew Jackson get a majority of votes?

Which of the 4 candidates received the most votes?

Who did the House of Representatives select as president?

Who helped Adam to be elected as president?

What position in the government was Clay given?

#### Big Question to be asked:

Why were Adam and Clay accused of making a “corrupt bargain” (stealing the election)?

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## Student-Generated Questions - Based on Chapter Structure

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### Student-Generated Questions based on Headings and Subheadings

1. Read the heading or subheading
2. Generate one or two questions
3. Read the section
4. Answer the question

68



## Student-Generated Questions - Question-Answer Relationships

Taffy Raphael, 1984

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- **Right There.** The answer is in the text, and if we pointed at it, we'd say it's "right there!" Often, the answer will be in a single sentence or place in the text, and the words used to create the question are often also in that same place.
- **Think and Search.** The answer is in the text, but you might have to look in several different sentences to find it. It is broken up or scattered or requires a grasp of multiple ideas across paragraphs or pages.

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## Student-Generated Questions - Question-Answer Relationships

Taffy Raphael, 1984

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- **Author and You.** The answer is not in the text, but you still need information that the author has given you, combined with what you already know, in order to respond to this type of question.
- **On My Own.** The answer is not in the text, and in fact you don't even have to have read the text to be able to answer it.

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## During Reading - Informational Text Strategies

### The Teacher:

- Teaches students strategies that can be used during reading of informational text.
  - Note-taking
  - Mapping
  - Verbal Rehearsal
  
- **Informational text strategies** are based on the pattern found in factual paragraphs: topic and critical details.



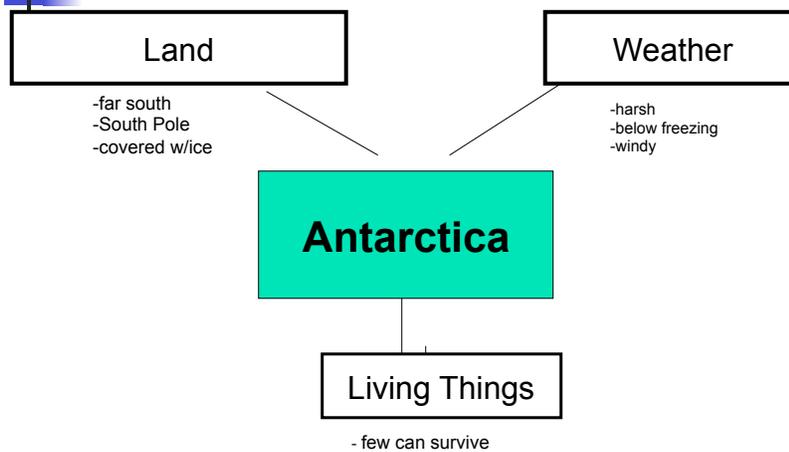
## During Reading - Informational Text Strategies

### Cornell Notes

Antarctica	- far south continent
	- South Pole
	- Covered with ice
Weather	- Harsh
	- Below Freezing
	- Windy
Living Things	- Few
	Antarctica, the most southern continent, has very harsh weather and is covered in ice. Few living things survive on Antarctica.

## During Reading - Informational Text Strategies

### Mapping



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## During Reading - Informational Text Strategies

### Paragraph Shrinking

- 1. Name the who or what.**  
(The main person, animal, or thing.)
- 2. Tell the most important thing about the who or what.**
- 3. Say the main idea in 10 words or less.**

**(Optional: Record your main idea sentence.)**

(From the PALS program by Fuchs, Mathes, and Fuchs)

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## During Reading - Informational Text Strategies

**I do it.**

### Types of Rocks

One type of rock is **igneous** rock. Igneous means “fire-made.” Deep inside earth, rock is heated by the great weight of the rock above pressing down. The rock is heated so much that it melts and because the liquid rock called **magma**. Sometimes magma pushes its way through cracks in the bedrock and spreads over the ocean floor. Other times it explodes from the ground as lava from a volcano. More often, magma rises only to earth’s crust where it cools. As magma cools, it forms crystals and becomes igneous rock. Sometimes it cools so quickly that crystals do not form, and the lava turns into volcanic glass, called obsidian. Granite is another common igneous rock.

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## During Reading - Informational Text Strategies

Record your main idea sentence

Igneous rock is formed when magma, liquid rock,  
cools.

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## During Reading - Informational Text Strategies

### We do it.

The second type of rock is **sedimentary**. Earth builds sedimentary rock layer by layer. Forces such as wind, water, and ice cause rocks to break down into smaller pieces of rock and minerals. This soft material, called sediment, flows into river or sea beds where it is deposited in layers. Over thousands of years, the great weight of the sediment on the top compresses the pieces of the deeper sediment. At the same time, certain chemicals in the water act as a glue that cements the bits and pieces into a solid mass. Thousands or millions of years later, the old sea floor may be thrust up as dry land, exposing the sedimentary rock layering. Sandstone, shale, conglomerate, and limestone are all examples of sedimentary rock.

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## During Reading - Informational Text Strategies

### You do it.

The third type of rock is **metamorphic**. The word metamorphic means “changed in form.” Metamorphic rock is formed when igneous and sedimentary rocks are exposed to great heat and pressure. Metamorphic rocks are almost always found deep in young mountain ranges as rocks are folded and compressed beneath other rocks. Slate and marble are examples of metamorphic rock.

*From Advanced Skills for School Success published by Curriculum Associates*

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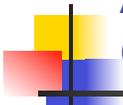


## Preview - After Reading Strategies

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- Have students complete or generate graphic organizers that summarize critical information.
- Have students write a summary of the passage content.

79



## After Reading - Graphic Organizers

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### The teacher:

- Provides students with a **graphic organizer** that reflects the structure of the text material
  - Central Idea
  - Hierarchy
  - Compare/Contrast
  - Sequence of Events
  - Cause/Effect
  - Problem/Solution

80



## After Reading - Graphic Organizers

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- After completing the graphic organizer, students:
  - Teach the content on the graphic organizer to their partners.
  - Use the graphic organizer as a support during class discussions.
  - Write a summary of the content based on the graphic organizer.

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## After Reading - Summarize Passage

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### The Teacher:

- Has students **retell** the passage content using their notes or graphic organizer.
- Teaches students how to write a **summary** using a writing frame or a writing strategy.

82



## Writing Frames - informational Text Summary

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Antarctica is the coldest continent on the earth.  
The land is covered with \_\_\_\_\_.  
The temperature stays below \_\_\_\_\_ and the \_\_\_\_\_ constantly blow. Because of these conditions, not many \_\_\_\_\_ things are found on this continent.

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## Summary Writing Strategy

---

Write down the topic of the summary.

- |                  |   |
|------------------|---|
| <b>List</b>      | - Make a list of important ideas.                                       |
| <b>Cross-out</b> | - Cross out any unnecessary or weak ideas.                              |
| <b>Connect</b>   | - Connect ideas that could go in one sentence.                          |
| <b>Number</b>    | - Number the ideas in the order that they will appear in the paragraph. |

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## List - Make a list of important ideas.

---

### Penquin's birth

- Male takes care of egg
- Female lays egg
- Female leaves
- Female spends winter at sea
- The water is very cold
- Male puts egg on his feet under belly
- Male stays on egg for two months
- Male doesn't eat
- Egg hatches
- Male must care for baby

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**Cross-out** - Cross out any unnecessary or weak ideas.

**Connect** - Connect ideas that could go in one sentence.

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### Penquin's birth

Male takes care of egg

Female lays egg

Female leaves

Female spends winter at sea

~~The water is very cold~~

Male puts egg on his feet under belly

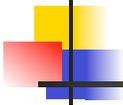
Male stays on egg for two months

Male doesn't eat

Egg hatches

Male must care for baby

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## Number - Number the ideas in the order that they will appear in the paragraph.

- Penquin's birth
- 3 Male takes care of egg
  - 1 Female lays egg
  - 2
    - Female leaves
    - Female spends winter at sea
    - The water is very cold
  - 4
    - Male puts egg on his feet under belly
    - Male stays on egg for two months
  - 5 Male doesn't eat
  - 6
    - Egg hatches
    - Male must care for baby

87



## Write a summary.

The birth process of penguins is fascinating and quite different from that of other animals. The female penguin lays an egg. However, the female penguin leaves soon after laying the egg and spends the winter in the sea. Meanwhile the male must take care of the egg. For two months, he places the egg on his feet under his belly. During this time, the male penguin doesn't eat. Even after the baby penguin hatches, the male penguin continues to take care of the infant penguin.

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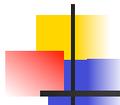
## Summary Writing Strategy

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Write down the topic of the summary.

- List** - Make a list of important ideas.
- Cross-out** - Cross out any unnecessary or weak ideas.
- Connect** - Connect ideas that could go in one sentence.
- Number** - Number the ideas in the order that they will appear in the paragraph.

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## Summary Writing

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**Prompt:** Summarize some of the major results of the collapse of the Roman Empire and the absence of a central government.

### Results of collapse of Roman Empire

- 1- no central government
- 3- rise of new leaders such as Charlemagne
- 4- increase in role of Catholic Church in providing services
  - monks lived in monasteries & nuns lived in convents
- 5- development of new systems of government such as Feudalism
  - Feudalism led to lesser nobles obtaining land
- 2- people living in the country rather than in cities

90



## **Write a summary.**

---

There were many important results of the collapse of the Roman Empire. The major result was the destruction of the central government that previously maintained roads, water systems, and buildings. Without a protective government, people fled to the countryside. New leaders such as Charlemagne emerged. In addition, the Catholic Church participated in the governance of the people and provided services such as care of the sick and elderly. But the most striking result of the collapse of the Roman Empire was the emergence of new systems of government including Feudalism in which lesser nobles obtained land in exchange for providing services, particularly military protection, to the higher nobles.

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