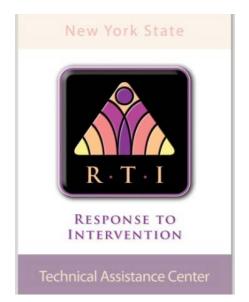
RESPONSE TO INTERVENTION AND THE ADOLESCENT READER: RESPONSIVE READING PRACTICES AND STRATEGIES

Decoding, Fluency, Vocabulary, Comprehension, and Writing-to-Learn

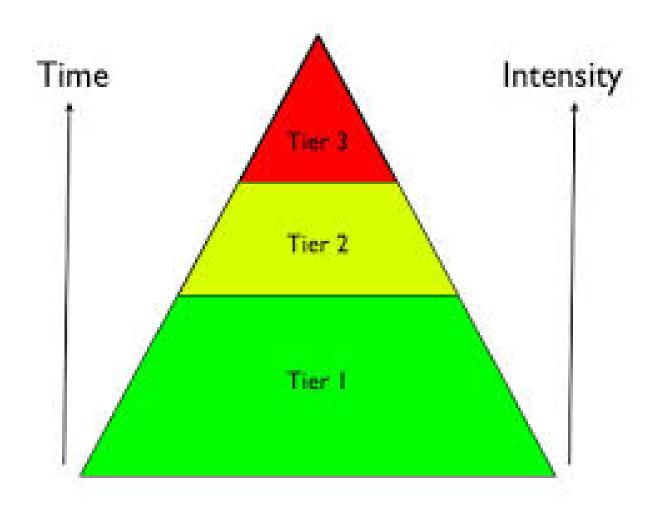


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Archer, A., & Hughes, C. (2011). *Explicit Instruction: Effective and Efficient Teaching*. NY: Guilford Publications.
 www.explicitinstruction.org

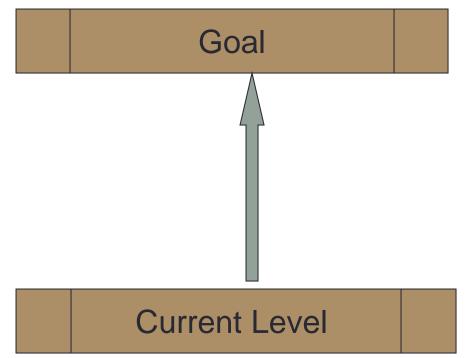
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How does **instruction** differ across the tiers?



Scaffold Instruction

Provide scaffolding that promotes academic success.



Scaffolding

Scaffolding

temporary supports

that assist students in accomplishing new tasks that students typically would not achieve on their own

The scaffolding is gradually removed as students become more competent. (Gradual Release of Responsibility)

Scaffolding – Through Explicit Instruction

Deborah C. Simmons and Edward J. Kameenui

Examples

- Teacher
 - Provides dynamic models of the instruction
 - Guides students in performing new strategy
 - Clearly describes a concept using examples and non-examples
 - Provides multi-exposures to new concepts
 - Clearly describes the purpose of an activity
 - Models practice tasks

Scaffolding – Content/Task

Examples

- Breaks the content into obtainable segments for instruction
- Presents easier content before introducing more difficult material
- Starts with easy strategy steps
- Sequences the content logically
- Select examples that progress from less to more difficult

Scaffolding - Material

Examples

- Provides written prompts or cues to help students perform a task
- Provides a worked example to support completion of task
- Provides a graphic organizer for recording/organizing content
- Introduces a mnemonic to remember a strategy

Elements of Reading

Decoding Fluency Vocabulary Comprehension Writing

DECODING

Decoding - Why?

Decoding is necessary for comprehension.

- Word recognition is a necessary, though not sufficient, skill to allow **comprehension**.
- "There is NO comprehension strategy powerful enough to compensate for the fact that you can't read the words." (Archer, 2006)

Decoding - Why?

Struggling older readers have specific challenges when reading long words.

- Poor readers, including students with dyslexia, attempt to process long words letter by letter rather than part by part. (Bhattacharya, 2006)
- Poor readers are more likely to mispronounce affixes and vowels and to omit syllables. (Shefelbine & Calhoun, 1991)

Decoding - Why?

The number of multisyllabic words significantly increases in the intermediate grades.

- From fifth grade on, average students encounter approximately 10,000 words a year that they have never previously encountered in print. (Nagy & Andersen, 1984)
- Most of these new words are longer words having two or more syllables. (Cunningham, 1998)

Decoding – Why?

- Directions: Assume you cannot read multisyllabic words. Read the following passage, deleting the underlined, multisyllabic words. How much would you gain from reading this social studies passage?
- "When <u>explorers</u> from <u>Portugal</u> arrived in <u>Brazil</u> in 1500, as many as 5 <u>million Native Americans</u> lived there. During the 1500s, the <u>Portuguese established</u> large sugar cane <u>plantations</u> in <u>northeastern</u> <u>Brazil</u>. At first they <u>enslaved Native Americans</u> to work on the <u>plantations</u>. Soon, however, many <u>Native Americans</u> died of <u>disease</u>. The <u>plantation</u> <u>owners</u> then turned to <u>Africa</u> for <u>labor</u>. <u>Eventually</u>, <u>Brazil</u> brought over more <u>enslaved Africans</u> than any other North or South <u>American country</u>."

⁽From World Cultures and Geography (2005), published by McDougal-Littell)

Decoding Interventions – Examples

Tier 2 and 3

available programs.

Program	Publisher	
Phonics for Reading	Curriculum Associates	
REWARDS Intermediate	Voyager/Sopris Learning	
REWARDS Secondary	Voyager/Sopris Learning	
Sipps – 4 – 12	Center for the Collaborative Classroom	
Wilson Reading	Wilson	
Corrective Reading	SRA	
System 44	Scholastic	
Language !	Voyager/Sopris Learning	
Language Live	Voyager/Sopris Learning	
Note: This list is not meant to be inclusive of all		

REWARDS Strategy

Overt Strategy

- 1. Circle the prefixes.
- 2. Circle the suffixes.
- 3. Underline the vowels.
- 4. Say the parts of the word.
- 5. Say the whole word.
- 6. Make it a real word.

reconstruction instruction unconventionality

(REWARDS Intermediate published by Voyager/Sopris Learning)

Pronunciation of Words - Tier 1 and 2

1. Segmenting

Teacher reads the word. Students repeat the word. Teacher and students say the word by parts. Students repeat the word.

2. Looping

Teacher segments the written word in parts.

Teacher loops under the parts. Students read each part. Students say the word.

FLUENCY

Accuracy, Appropriate Rate, and Expression

Fluency - What?

- "Fluency is the ability to read text quickly, accurately, and with proper expression" (National Reading Panel)
- The ability to read connected text accurately with appropriate rate and expression (prosody).
 (Judson, Mercer, & Lane, 2000)

Fluency - What

 "The ability to read connected text rapidly, smoothly, effortlessly, and automatically with little conscious attention to the mechanics of reading such as decoding." (Meyer & Felton, 1999)

Fluency - Why?

Fluency is related to reading comprehension.

 Both empirical and clinical research support the relationship between fluent oral reading and overall reading ability including comprehension.

(Cunningham & Stanovich, 1998; Fuchs, Fuchs, & Maxwell, 1988; Gough, Hoover, & Peterson, 1996; Herman, 1985; Jenkins, Fuchs, Espin, van den Broek, & Deno, 2000)

• When students read fluently, decoding requires less attention. Attention can be given to comprehension. (Samuels, Schermer, &Reinking, 1992)

2005 Hasbrouck & Tindal Oral Reading Fluency Data

Jan Hasbrouck and Gerald Tindal completed an extensive study of oral reading fluency in 2004. The results of their study are published in the technical report, "Oral Reading Fluency: 90 Years of Measurement," (brt.uoregon.edu/tech_reports.htm), and in the article, "Oral Reading Fluency Norms: A Valuable Assessment Tool...," in the April 2006 issue of *The Reading Teacher* (www.reading.org/publications/journals/RT/).

The table below shows the mean oral reading fluency of students in grades 1 through 8 as determined by Hasbrouck and Tindal's data.

You can use the information in this table to draw conclusions and make decisions about the oral reading fluency of your students. Students who score 10 or more words below the 50th percentile using the average score of two unpracticed readings from grade-level materials need a fluency-building program. In addition, teachers can use the table to set the long-term fluency goals for their struggling readers.

Average weekly improvement is the average words per week growth you can expect from a student. It was calculated by subtracting the fall score from the spring score and dividing the difference by 32, the typical number of weeks between the fall and spring assessments. For grade 1, since there is no fall assessment, the average weekly improvement was calculated by subtracting the winter score from the spring score and dividing the difference by 16, the typical number of weeks between the winter and spring assessments.

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*	Avg. Weekly Improvement**
	90		81	111	1.9
	75		47	82	2.2
1	50		23	53	1.9
	25		12	28	1.0
	10		6	15	0.6
	90	106	125	142	1.1
	75	79	100	117	1.2
2	50	51	72	89	1.2
	25	25	42	61	1.1

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*	Avg. Weekly Improvement**
	90	128	146	162	1.1
	75	99	120	137	1.2
3	50	71	92	107	1.1
	25	44	62	78	1.1
	10	21	36	48	0.8
	90	145	166	180	1.1
	75	119	139	152	1.0
4	50	94	112	123	0.9
	25	68	87	98	0.9
	10	45	61	72	0.8
	90	166	182	194	0.9
	75	139	156	168	0.9
5	50	110	127	139	0.9
	25	85	99	109	0.8
	10	61	74	83	0.7
	90	177	195	204	0.8
	75	153	167	177	0.8
6	50	127	140	150	0.7
	25	98	111	122	0.8
	10	68	82	93	0.8
	90	180	192	202	0.7
	75	156	165	177	0.7
7	50	128	136	150	0.7
	25	102	109	123	0.7
	10	79	88	98	0.6
	90	185	199	199	0.4
	75	161	173	177	0.5
8	50	133	146	151	0.6
	25	106	115	124	0.6

Fluency - Why?

An accurate, fluent reader will read more.

 As more material is read, decoding skills, fluency, vocabulary, background knowledge, and comprehension skills increase. (Cunningham & Stanovich, 1998; Stanovich, 1993)

The rich get richer. The poor get poorer. (Stanovich, 1986)

• It has been suggested that voracious reading can alter measured intelligence. (Cunningham & Stanovich, 1998)

Variation in Amount of Reading

Percentile Rank	Minutes per day reading in books	Minutes per day reading in text	Words per year in books	Words per year in text
98	65.0	67.3	4,358,000	4,733,000
90	21.2	33.4	1,823,000	2,357,000
80	14.2	24.6	1,146,000	1,597,000
70	9.6	16.9	622,000	1,168,000
60	6.5	13.1	432,000	722,000
50	4.6	9.21	282,000	601,000
40	3.2	6.2	200,000	421,000
30	1.8	4.3	106,000	251,000
20	0.7	2.4	21,000	134,000
10	0.1	1.0	8,000	51,000
2	0	0	0	8,000

Fluency - Why?

Other reasons for increasing fluency

- Fluent readers **complete assignments** with more ease.
- Fluent readers can spend more time remembering, reviewing, and comprehending text.
- Fluent readers will also perform **better on reading tests**.

Fluency - Why?

Other reasons for increasing fluency

Fluent readers can change reading rate based on reading purpose.

Purpose	Reading Rate
Study	Slow and reflective
Pleasure - Novel	Steady & Fluent
Search for information	Rapid

Factors Effecting Fluency

 Proportion of words in text that are recognized as "sight words".

Sight words include any word that readers have practiced reading sufficiently often to be read from memory." (Ehri, 2002)

- Speed of decoding strategies used to determine the pronunciation of unknown words.
- 3. Speed with which word meanings are identified.
- 4. Background knowledge of reader.
- 5. Speed at which overall meaning is constructed.

Fluency – How

Tier 2 and 3

Procedure # 1. Word Recognition Instruction

- If students read slowly and inaccurately, couple instruction on fluency with advanced decoding
- REWARDS Multisyllabic Word Reading Strategies (Sopris)
- SIPPS (Developmental Studies Center)
- Corrective Reading (SRA)
- Language! (Voyager)

Fluency – How Tier 1, 2, and 3

Procedure #2: Prepare students for reading a passage.

- Preteach the pronuciation of words.
- Preteach the meaning of words.
- Preteach necessary background knowledge.
- Preview the text with students.

Fluency – How Tiers 1, 2, and 3

- Procedure #3. Utilize passage reading procedures in class that optimize the amount of reading practice.
 - **Example Procedures:**
 - Augmented silent reading
 - Choral reading
 - Cloze reading
 - Partner Reading

Augmented Silent Reading (Whisper Reading)

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

Choral Reading

- Read selection with students
- Read at a moderate rate
- Tell students "Keep your voice with mine"
- Possible Uses: Chorally read wording on slide, directions, steps in strategy, initial part of story/chapter

Cloze Reading

- Read selection
- Pause and delete "meaningful" words
- Have students read the deleted words

 Possible Uses: When you want to read something quickly and have everyone attending

Individual Turns

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

If used with large group,

- Assign paragraphs for preview and practice OR
- Utilize the me or we strategy

Partner Reading

Assign each student a partner

Reader whisper reads to partner

Narrative - Partners alternate by page or time

Informational text - Partners alternate by paragraph

Read - Stop - Respond

Respond by: *Highlight critical details, take notes, retell content, or answer partner's questions*

Partner Reading

Coach corrects errors

- Ask Can you figure out this word?
- Tell This word is _____. What word? Reread the sentence.

Fluency - Passage Reading Procedures

Partner Reading - Scaffolding lowest readers

- Highest reader in partnership is given the #1 and lower reader is given the #2. Partner #1 reads material. Partner #2 rereads the same material
- Lowest reader placed on triad and reads with another student
- Partners allowed to say "me" or "we"

Fluency - How

Procedure #4. Repeated Reading

 Student reads the same material at the independent or instructional level a number of times (at three to four times).

Tiers 2 and 3

- General procedure
 - Cold-timing (one minute timing without prior practice)
 - Practice rereading of material to increase fluency
 - Hot-timing (one minute timing)
- Often coupled with the following interventions:
 - Modeling done by teacher or listening to tape
 - Self-monitoring of progress through graphing

Fluency Interventions – Examples Tier 2 and 3

Program	Publisher
Read Naturally	Read Naturally
Six Minute Solution	Voyager/Sopris Learning
Note: This list is not meant	
to be inclusive of all available programs.	

Fluency – How All Tiers

Procedure #5 - Wide Reading Reading different types of text.

- Text at independent or instructional level
 - Short articles
 - Short stories
 - Novels
- Read with partners.

VOCABULARY

Explicit Vocabulary Instruction Word Learning Strategies

Vocabulary is related to reading comprehension.

"Indeed, one of the **most enduring findings** in reading research is the extent to which students' vocabulary knowledge relates to their reading comprehension."

(Osborn & Hiebert, 2004)

- "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)

- Limit number of words given in depth instruction to 4 to 5 words. (Robb, 2003)
- 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 – Words used in many domains. (suitcase words)

Examples: contrast, analyze, observe, evidence

 Domain-specific vocabulary that provides background knowledge

Examples: tariff, acute angle, foreshadowing

 When possible, teach clusters of words that are meaningfully related.

Math: angles, acute, right, obtuse, straight angle Science: matter, mass, weight, volume, density Social Studies: colony, ethnic group, migration, society, settlement, settler

- Select difficult words that need interpretation.
 - Words not defined within the text
 - Words with abstract referent
 - Words with an unknown concept

- Select a limited number of words.
- Select words that are unknown.
- *Select words critical to passage understanding.
- *Select words that can be used in the future.
- Select difficult words that need interpretation.

Text: American Journey Chapter 11, Section 1					
Publisher: Glencoe Jacksonian Democracy					
favorite son	majority	plurality	mudslinging		
landslide	nominating convention	tariff	suffrage		
nullify	secede				

Text: My World		Chapter 4, Section 3		
Publisher: Pearson		Central America and the		
	Caribbean Today			lay
* carnival	* Santeria		* diaspora	*microcredit
* ecotourism	indigenous		democracy	parliamentary system
dictatorship	free-trade agreements			

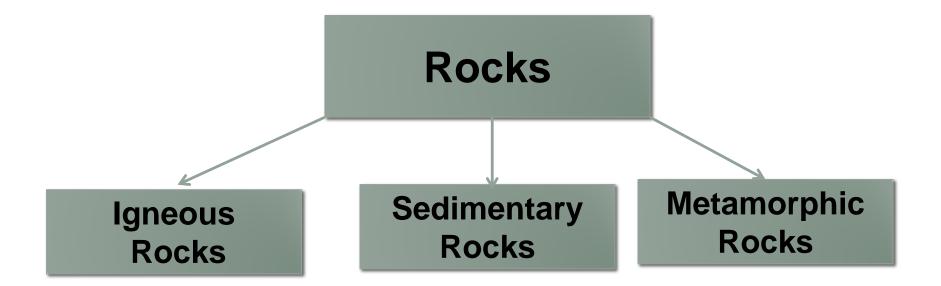
Explicit Instruction of Vocabulary Organize words for Instruction

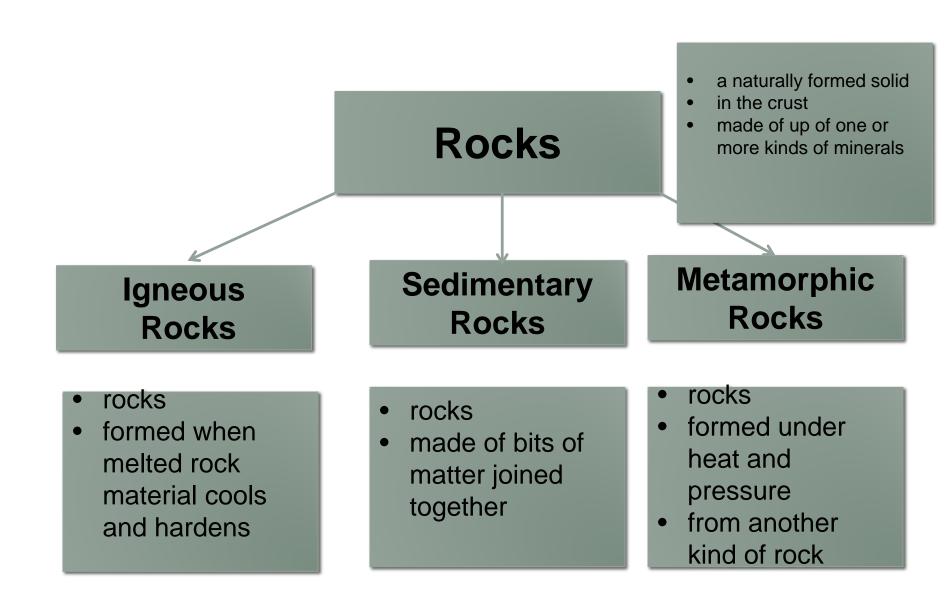
 Order words in list to stress relationships between words.

• Group words into semantic clusters to create a scheme. (Marzano & Marzano, 1988; Wixson, 1986)

Explicit Instruction of Vocabulary Organize Words for Instruction

Rocks					
rock	sediment	pollution			
igneous rocks	sedimentary rocks	rock cycle			
magma	fossil	classify			
lava	humus	metamorphic rocks			





Explicit Instruction of Vocabulary Student-Friendly Explanation

- Dictionary Definition
 - protect -

to defend or guard from attack, invasion, loss, annoyance, insult, etc.; cover or shield from injury or danger

- Student-Friendly Explanation
 - Uses known words.
 - Is easy to understand.

To **protect** someone or something means to prevent them from being harmed or damaged.

On-line Dictionaries with Student-friendly Explanations

Collins Cobuild Dictionary of American English http://www.collinslanguage.com/free-online-cobuild-ESL-dictionary 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

(Pronunciation assistance: www.howjsay.com)

Vocabulary Instructional Routine Tiers 1,2 and 3

Step 1: Introduce the word.

Step 2: Introduce the word's meaning.

Step 3: Illustrate the word with examples.

(and non-examples when helpful)

Step 4: Check students' understanding.

Explicit Instruction of Vocabulary Secondary Example

Step 1. Introduce the word.

- a) Show the word on the screen.
- 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 or say the parts of the word as they tap.

Introduce the word with me.

This word is **suffrage**. What word? suffrage Tap and say the parts of the word. suf frage Read the word by parts. suf frage What word? suffrage **Suffrage** is a noun.

Step 2. Introduce meaning of word.

Have students locate the definition in the glossary or text and break the definition into the critical attributes. OR

Present the definition using critical attributes.

Glossary: Suffrage - the right to vote

suffrage

- the right
- to vote

Step 3. Illustrate the word with examples.

- a. Concrete examples
 - objects
 - acting out
- a. Visual examples
- b. Verbal examples

Suffrage Examples

When the United States was founded only white men with property had <u>suffrage</u>.

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

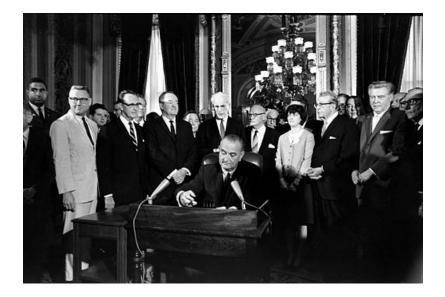
Suffrage Examples

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



Suffrage Examples

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



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, _____

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

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.



suffragenounsuffragistnoun

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.

Practice 1

• Displayed on screen.

classify v

 Introduce the word.
 This word is classify. What word? classify
 Tap and say the syllables. class i fy
 Again. class i fy
 What word? classify

Classify is a verb, an action word.

Practice 1

Displayed on screen.

classify v

- Introduce the word's meaning.
 Present a student-friendly explanation.
- To classify things means to divide them into groups or types so that things with similar characteristics are in the same group.
- When you divide things into groups or types, you _____. classify
- Items in the group have similar characteristics.

Practice 1

- Displayed on screen.
- classify
- synonymscategorize
- Categorize
- group
- sort
- order

2. Introduce the word's meaning.

Echo read the synonyms for classify.

- categorize categorize
- group group
- sort sort

• order order

Step 1: Illustrate the word with examples.

(and non-examples when helpful)

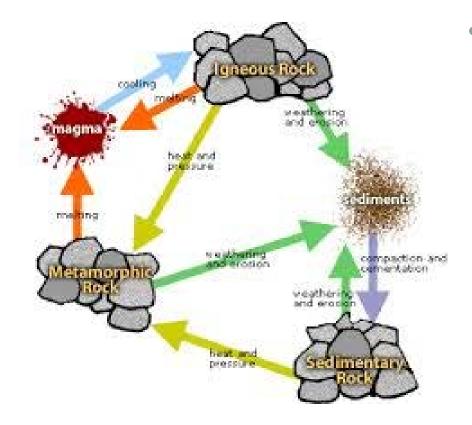
by land by air by sed

 You could classify vehicles into these three groups: vehicles that travel by land, vehicles that travel by air, vehicles that travel by sea.

Ones, tell your partner a vehicle in each group. (Pause) Twos, tell your partner a vehicle in each group.

Step 1: Illustrate the word with examples.

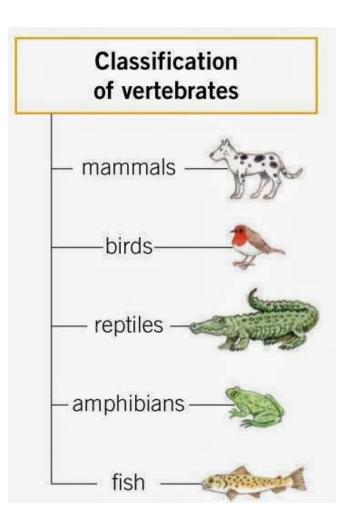
(and non-examples when helpful)



 We can classify rocks as igneous rock, sedimentary rock, and metamorphic rock. (Point to each type of rock.)

- Step 4: Check students' understanding.
- We can classify animals with backbones (vertebrates) into groups. For example, one group would be birds.
- With your partner, list other groups with similar characteristics that could be used to classify animals. (Circulate and monitor. Record and share the students' ideas.)

Word Family



- classify
- classifying
- classified
- classification
- In science, we classify things into groups based on similar characteristics. When classifying vertebrates, similar body traits are used. Vertebrates can be classified into these groups: mammals, birds, reptiles, amphibians, and fish. Classification is an important part of science studies.

(Displayed on screen.)

- classify
- classifying
- classified
- classification
- In science, we classify things into groups based on similar characteristics. When classifying vertebrates, similar body traits are used.
 Vertebrates can be classified into these groups: mammals, birds, reptiles, amphibians, and fish. Classification is an important part of science studies.

(Teacher instruction.)

- These words are in the "classify" word family. Echo read the words.
- classify classify
- classifying classifying
- classified classified
- classification classification
- I will read this paragraph. When I stop, say the next word.

(Displayed on the screen.) fossil n

- any remains or imprint
- of living things
- of the past

- 1. Introduce the word.
- This word is fossil. What word? fossil
- Fossil is a noun, a thing.
- Write the word fossil in you science journal. (Circulate and monitor.)

(Displayed on the screen.) fossil n

- any remains or imprint
- of living things
- of the past

2. Introduce the word's meaning .

- Let's read the parts of the definition.
- any remains or imprint
- of living things
- of the past

- When we have the remains of an ancient living thing, we have a ______. fossil
- List the parts of the definition in your science journal. (Circulate and Monitor)

This is a **fossil**. The image of an ancient fish is imprinted on this material.



This is not a **fossil.** This fish is living, not dead. There are no remains of a fish from the past.



This is a fossil. The remains (skeleton) of this ancient dinosaur is a **fossil.**



This shell is a **fossil.** The image of a shell from the past is imprinted in this material. This shell was once part of a living animal.



This ancient sword is NOT a fossil. The sword is not a living thing.



Check students' understanding. Agree/Disagree/Why This leaf is a fossil.



Check students' understanding. Agree/Disagree/Why This leaf is a fossil.



Check students' understanding. Agree/Disagree/Why This is a fossil.





4. Check students' understanding.

Draw a picture of a **fossil** in your science journal.

Word-Learning Strategies

Around the Word: Context clues

Inside the Word: morphology including prefixes, suffixes, roots-bases

Outside the Text: dictionary, thesaurus, partners, teachers

Scott & Nagy, 2000

Word-Learning Strategies-Use of context clues

- Teach students to use context clues to determine the meaning of unknown vocabulary. (Baumann, Edwards, Boland, Olejnik, & Glopper, 1998; Gipe & Arnold, 1979; Kame'enui, 2003;)
- If a student reads 100 unfamiliar words in print, he/she will only learn between 5 to 15 words. Thus, we can not depend on learning words from context as the sole method for vocabulary attainment.

(Nagy, Hermann, & Anderson, 1985; Swanborn & de Glopper, 1999)

Word Learning Strategies-Use of context clues

Context Clues

1.Read the sentence in which the unknown word occurs. Look for clues as to the word's meaning.

2.Read the surrounding sentences for clues as to the word's meaning.

3. Look at the parts of the word (prefixes, roots, suffixes) .

4.Ask yourself, "What might the word mean?"

5. Try the possible meaning in the sentence.

6.Ask yourself, "Does it make sense?"

The Most Common Prefixes in English

Prefix	Meaning	% of prefixed words	Examples
un	not; opposite	26%	uncover, unlock, unsafe
re	again; back	14%	rewrite, reread, return
in/im/ir/il	not; into	11%	incorrect, insert, inexpensive, illegal, irregular, inability
dis	away, apart, negative	7%	discover, discontent, distrust
en/em	cause to	4%	enjoy, endure, enlighten, entail
mis	wrong; bad	3%	mistake, misread, misspell, misbehave
pre	before	3%	prevent, pretest, preplan
pro	in favor of	1%	protect, profess, provide, process
а	not; in, on, without	1%	atypical, anemia, anonymous, apolitical, apathy

Most Common Suffixes in English

Suffix	Meaning	%of prefixed words	Examples
s, es plural	more than one	31%	movies, wishes, hats, amendments
ed past tense	in the past	20%	walked, jumped, helped
ing present tense	In the present	14%	walking, jumping, helping
ly adverb	how something is	7%	quickly, fearfully, easily, happily, majestically, nonchalantly
er,or noun	one who, what/that/which	4%	teacher, tailor, conductor, boxer, baker, survivor, orator
ion, tion, sion noun	state, quality; act	4%	action, erosion, vision, invitation, conclusion, condemnation
able, ible adjective	able to be, can be done	2%	comfortable, likable, enjoyable, solvable, sensible, incredible
al, ial adjective	related to, like	1%	fatal, cordial, structural, territorial, categorical

Common Latin and Greek Roots

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

Common Latin and Greek Roots

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

Common Latin and Greek Roots

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

Word Learning Strategies-Word Families

- A group of words related in meaning. (Nagy & Anderson, 1984)
- If you know the meaning of one family member, you can infer the meaning of related words.

enthusiasm enthusiastic enthusiastically	collect collecting collection collector	educate educated education educator	
imperial Imperialism imperialistic	predict prediction predictable predictability unpredictable unpredictability	communicate communicated communicating communication	evaluate evaluating evaluation

Word Learning Strategies-Word Families

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enthusiasm enthusiastic enthusiastically	collect collecting collection collector	educate educated education educator	
imperial Imperialism imperialistic	predict prediction predictable predictability unpredictable unpredictability	communicate communicated communicating communication	evaluate evaluating evaluation

Word Learning Strategies-Word Families

"In general, students are **not making associations** between such words as *reduce and reduction...*74 percent of fourth graders know pretend, but *pretense*, the noun form of pretend, is not commonly known until the twelfth grade." (Dale, O'Rourke, & Bamman, 1971.)

Vocabulary Interventions – Examples

Tier 2 and 3

Program	Publisher
Word Generation	SERP http://wordgen.serpmedia.org
Academic Vocabulary for English Learners	Voyager Sopris
Daily Oral Vocabulary Exercises (DOVE)	Voyager Sopris
Word Wisdom	Zaner-Bloser
Note: This list is not meant to be inclusive of all available programs.	

COMPREHENSION

Background Knowledge Previewing Comprehension Strategies

Increased Emphasis on Informational Text Reading

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

- Grade 4 Literary 50%
- Grade 8 Literary 45%
- Grade 12 Literary 30%

Informational 50% Informational 55% 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.

Comprehension – Strategies and Procedures

Tiers 1, 2, and 3 – Depending on difficulty of text and students' language comprehension and background knowledge

Frontload background knowledge

•Preview the text

•Teach and promote use of effective comprehension strategies

Frontload Background Knowledge - Why

"Students who lack sufficient background knowledge or are unable to activate it may struggle to access, participate, and progress through the **general curriculum**." Strangman, Hall, & Meyer, 2004

Frontload Background Knowledge - Why

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. Frontload Background Knowledge - Why

BIG IDEA

Even a thin slice of background knowledge is useful.

Frontload Background Knowledge - How Tiers 1, 2, and 3 - Depending on Background Knowledge

Anchor Instruction in:

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

CHAPTER 11 THE JACKSON ERA 1824-1845

Section 1 Jacksonian Democracy

Essential Question

How did **political beliefs** and **events** shape Andrew Jackson's Presidency?

Andrew Jackson

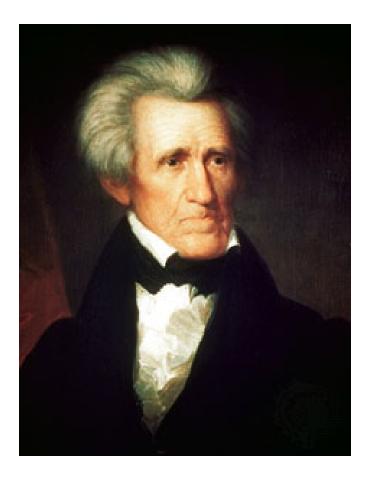
Background Knowledge

President

- 7th President
- 1829 1837

Early Life

- Parents emigrated from Ireland
- Father died before his birth
- Mother died when he was 14
- Two brothers also died



Andrew Jackson

Background Knowledge

Career - Military

- At 13 joined Continental Army
- Major General of Tennessee Militia
- Lead campaign against Creek Indians in Georgia
- In 1815 lead military victory over British at the Battle of New Orleans

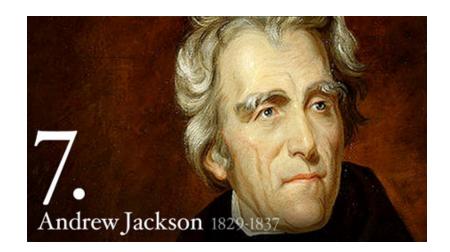


Andrew Jackson

Background Knowledge

Career - Politician

- Lawyer
- US Representative
- US Senator
- Circuit Judge
- President



Andrew Jackson

Background Knowledge

Personal Life

- Married Rachel Jackson
- Two adopted children
- Owned large cotton plantation with 150 slaves
- Killed man in pistol duel



Preview the Text - Why

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.

Preview the Text – How Tiers 1, 2, and 3

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

Preview the Text

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*

Preview: Jacksonian Democracy

The Election of 1824

Striking a Bargain The Adams Presidency

The Election of 1828

Jackson Triumphs

Jackson as President

"Old Hickory" New Voters The Spoils System Electoral Changes

Comprehension Strategies Tiers 1, 2, and 3

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

Comprehension - Informational Text

- **Read** (a paragraph or a number of related paragraphs)
- Stop
- Respond
 - answer teacher questions
 - generate questions/answer questions
 - verbally retell content
 - mark text /notes in margin
 - take notes (two column notes, foldables)
 - map/web content
 - *Getting the Gist* Strategy

Curriculum Questions

- Ask questions provided in the curriculum material.
- Adapt or supplement curriculum questions.

The Teacher-Generated Questions

- Divide the material into appropriate segments.
- Develop questions on the content, focusing on the most important understanding, reflecting your essential question and/or reading purpose.

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

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

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

Guidelines:

- 1. **Purpose:** Keep the reading purpose in mind as you select, adapt, or write questions.
- 2. **Text Dependent Questions:** Ask questions that focus on information (evidence) provided in the text.
- All Respond: Everyone thinks.
 Everyone writes.
 Everyone shares with his/her partner.

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.

Guidelines continued:

- Think Time: Provide an adequate amount of thinking time.
 For higher order questions, provide 3 seconds to 6 seconds of thinking time.
 - Results: More detailed, logical answers More evidence Greater participation Number of questions asked increases

Guidelines continued:

5. Scaffold as needed:

- Ask **foundation questions** before higher order questions

- Support answers with **sentence starters**
- Use optimum active participation strategies

Scaffolding - Sentence Frames

Scaffolding Answers with Sentence Starters

Why were Adams and Clay accused of making a "corrupt bargain" (stealing the election)?

Begin by saying or writing:

Adams and Clay were accused of making a "corrupt bargain" for a number of reasons.

Scaffolding – Foundation Questions

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 Adams to be elected as president?

What position in the government was Clay given?

Big Question to be asked:

Why were Adams and Clay accused of making a "corrupt bargain" (stealing the election)?

Scaffolding – Active Participation

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**

Comprehension - Informational Text Students Generate Questions

Option 1: Students generate 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(s)

Classifying Rocks

Question How do you classify rocks?

How are rocks classified?

Answer

Rocks are classified by mineral composition, color, and texture.

How Rocks Form

Question	Answer
Igneous rocks How do igneous rocks form?	
Sedimentary rocks How do sedimentary rocks form?	
Metamorphic rocks How do metamorphic rocks form?	

How Rocks Form

Question	Answer
Igneous rocks	Igneous rocks are formed when magma or lava cools.
Sedimentary rocks	
Metamorphic rocks	

Why was Poe	
labeled a "loner"?	- orphaned by three
	- separated from siblings
	- conflict with foster family
	- unable to gain approval
	of foster father
What turmoil and	
grief did Poe face?	- lost job
	- plagued with alcoholism &
	illness
	- wife died of tuberculosis
Why is Poe considered	
a líterary giant?	- considered first modern writer
	- Poe's stories continue to be
	read

Comprehension - Informational Text Students Generate Questions

Option 2: Students generate study questions after reading segment

- 1. Read a paragraph or related paragraphs
- 2. Generate one or two questions
- 3. Record the questions
- 4. Answer the questions

Energy and Work p. 297

What is work?

Work is done when energy is transformed (changed) or transferred (moved) to another system.

Energy is measured in joules. (p. 297)

When can we observe energy?

We can only observe energy when it is transferred from one object to another.

Energy is measured in joules. (p. 297)

How do we express the amount of energy?

Energy is the ability to do work. Work is expressed in joules. Energy is expressed in joules.

Potential Energy (p. 298)

What is elastic potential energy?

Elastic potential energy is energy stored in a stretched elastic material.

Potential Energy (p. 298)

What is gravitational potential energy?

Gravitational potential energy is the stored energy in two objects resulting from gravitational attraction between the two objects.

Potential Energy (p. 298)

What determines the amount of gravitational potential energy?

The amount of gravitational potential energy depends on:

- the mass of the objects
- the distance between them.

Comprehension - Informational Text

Comprehension Strategies Tiers 1, 2, and 3

- Teach students strategies that can be used during reading of informational text.
 - Marking the Text
 - Adding Notes in the Margin
 - Two Column Note-taking
 - Mapping
 - Foldables
 - Verbal Rehearsal
 - Getting the Gist

 Informational text strategies are based on the pattern found in factual paragraphs: topic and critical details.

Comprehension - Informational Text Comprehension Strategies

Marking the Text

- 1. Number the paragraphs
- 2. Circle the topic and/or topic sentence
- 3. Underline supportive details

Comprehension - Informational Text Comprehension Strategies

Notes in the Margin

Notes in the margin might include:

- Topic
- A summary of the critical content
- Key vocabulary terms and definitions
- A drawing to illustrate a point
- Responses to interesting information, ideas, or claims

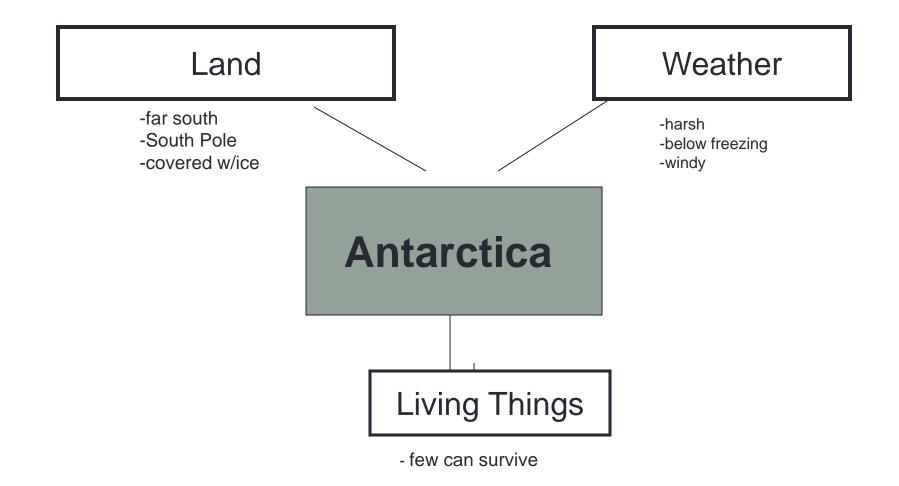
The Car Care Book, 4th Edition by Ron Haefner Marking the Text

segure distributes the future att, which become all to perform the Antari CTING STATES Functions Reduce fruiting-About they and help to regive costing Thelp to choose details from between incredeg more. Form a firm of gallwest, her wore the pinner and the country well, shows homes they be the balance of standard on passes part the proton. 5. Contains strong they receive for farms that propert strength and recommendents of PRODUCTION TO oil pan - collector oil pickap oil pickap oil filter Lubrication System Parts To aisomorphic the Investions Interd and the Interference operation in a souther of party. These is a rearry dir, so of pay, to collect and many a automat attance of otheranating sill. The oil paint appared as exercicable to the oil in the oil part and daments in mo the tai party. The all pump hereat the lebraries from the oil part to the of their The call have strains out particles that easy be harmful to due posting parts. For an there, the presentional will be distributed through a senior of proceedings, radian gellerings, throught an else regree. The following hirselates through the algorithm, sit pap, between proving pays re-earlient doub and fash ever dence. As the of adverdence, it paths up have been the party. Frendly, the tail doesn't the oil man and as pixeland says by the passage names. A typical Identication neutron is shown in Figure 6-1. Key parts of the Julyman man systems are described to the following save galleries Off Pass. Of an added the same or resorance the of yor to a straight area from (Ingane on) it is approxing made from share send on pass share seen. The of past of fortist in the increase of the relianter block our before the exercices. A poweril repier oil pass intife about 4 graphs of us). There is approximately according quart or the use filter. To department an angenety tail experity value no your parasety married The shape of the net pair, nation, depending on how seasy choose components is start clear. Also, or make over the size of purep pickep, as broke person over Array and Frency the part, some circular every install hadden, or however study

Comprehension - Informational Text Comprehension Strategies Two Column 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.

Comprehension - Informational TextComprehension StrategiesMapping/Webbing



Cells TISSES Organs Body Systems

defention errangele neux cello - carry from menager to and from train Ello are tasic Sulding blocks skin cella - correr angen neve alter - stunie Lissues are graps that do same tead of work agans are structures Heart made up there of - Hovel teasue train that all une together. Bady systems are digectic system - function - digest forei ophipal of agans that perform a specific functions

- muscle terrie - new trance

Comprehension - Informational Text Comprehension Strategies – *Getting the Gist*

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
- **3. "Shrink" the paragraph by stating or writing the main idea.** (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

Model – I do it.

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
- 3. "Shrink" the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

The Republic of Kenya is a country in East Africa. Ethiopia borders Kenya to the north. Kenya is bordered by Somalia to the northeast, Tanzania to the south, Uganda to the west. On the Southeast is the Indian Ocean.

Model – I do it with main idea sentence

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
- 3. "Shrink" the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading) The Republic of Kenya is a country in East Africa. Ethiopia borders Kenya to the north. Kenya is bordered by Somalia to the northeast, Tanzania to the south, Uganda to the west. On the Southeast is the Indian Ocean.

Kenya, an East African country, is surrounded by four African countries and the Indian Ocean.

Model – I do it

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
- 3. "Shrink" the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

Part of their history was a time of problems. At some times, other countries attacked to take over the country. There was much fighting. Kenya was made a British colony. That meant that Kenyans did not rule their own land. The native people of Kenya believed in independence. They did not want to be a colony. It took years, but they got their land back. Kenya became independent in 1963, and the Kenyan people declared not only their independence but formed a country. They took the name Kenya as the name of their country.

Model – I do it with main idea sentence

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
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Kenya, once a British colony, became an independent country in 1963.

We do it

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
- 3. "Shrink" the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

There are different groups of people in Kenya. It was not one country before it became a colony. Different groups lived in different places and had their own languages and ways of living. After independence, they joined together in one country, but they still have differences. There are different culture groups within Kenya. While they are from the same region they have different histories. Each has its own traditions. Traditions should be respected. While most people in Kenya speak and write in English because of the colonial years, each culture has its own language and history. There still are problems having a united country.

We do it with main idea sentence

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.
- 2. Identify two or three important details about the topic.
- 3. "Shrink" the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

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Conflict occurs in Kenya because of different groups, different languages, different cultures and different histories.

Comprehension Interventions – Examples

Tier 2 and 3

Program	Publisher		
REWARDS REWARDS PLUS	Voyager Sopris		
Read to Achieve	Mc Graw Hill Education		
READ 180	Houghton Mifflin Harcourt		
PALS	Peer Assisted Learning Strategies		
Strategy Intervention Model (SIM)	http://www.ku-crl.org		
Note: This list is not meant to be inclusive of all available programs.			

Writing – to - Learn

Summaries Compare and Contrast Explanations Arguments

Writing – to – Learn

Learning

- Students learn more due to
 - Rehearsal
 - Retrieval
- Promotes critical thinking
- Helps clarify thinking

Why?

Writing – to – Learn Why?

Engagement

- Active thinking
- Active reflection
- Active participation
- When writing precedes discussion,
 - More thoughtful participation
 - Increased diversity of student voices

Why?

Writing

- Develops writing skills
- Keeps writing skills sharp
- Increases ability to communicate in domain

Why?

Embedded Formative Assessment

- Students can appraise their grasp of critical content and concepts
- Teachers can appraise grasp of critical content and concepts

Writing – to – Learn What

Short Writing Tasks

- Writing-to-Learn
- Develop big ideas and concepts
- Embedded within the lesson
 - Beginning
 - During
 - End
- Focus on ideas rather than correctness of style, grammar, or spelling
- Less structured than disciplinary writing

Writing – to – Learn What

The following types of products will be particularly useful in terms of writing practice, comprehension, and content learning:

Summaries Compare and Contrast Explanations Arguments

HOW – Scaffolding

Tiers 1, 2, and 3

Scaffolding

Students' writing can be supported using:

- Writing Strategies
- Writing Frames
- Think Sheets

SUMMARIES

Students summarize chapter, segment of chapter, article, lecture, or unit focusing on the most critical content.

Sum it up

- Step 1. **LIST** (Make a list of important ideas.)
- Step 2. **CROSS-OUT** (Cross out any unnecessary or weak ideas.)
- Step 3. **CONNECT** (Connect ideas that could go in one sentence.)
- Step 4. **NUMBER** (Number the ideas in the order that they will appear in the paragraph.)
- Step 5. **WRITE** (Write the paragraph.)
- Step 6. **EDIT** (Revise and proofread your answer.)

• REWARDS PLUS (Sopris Learning)

Greek Theater

4

- began as a religious ceremony

- honored the Greek god Dionysus

- beliefs in Dionysus began to spread southward
- 2 choruses chanted lyrics
- 3 actors joined the choruses
- the Dionysus festival in Athens became a drama competition

- amphitheaters were built

- performed tragedies that taught lessons 5 - performed comedies that made fun of life
 - 6 -declined when playwrights died and the government changed

The roots of modern theater can be found in early Greek theater. Greek theater began as a religious ceremony that honored the Greek god Dionysus. At first, choruses chanted lyrics. When actors were added to interact with the chorus, theater was born. Later, the Dionysus festival in Athens became a drama competition, and amphitheaters were built to accommodate the event. Both tragedies, which taught lessons, and comedies, which made fun of life, were performed. Greek theater declined when the great playwrights died and the government changed.

Summary - Informational Text

Chapter: _____ Topic: _____

In this section of the chapter, a number of critical points were made about ...

First, the authors pointed out that...

This was important because...

Next, the authors mentioned that...

Furthermore, they indicated...

This was critical because...

Finally, the authors suggested that...

Summary - Informational Text – Example

- Chapter: Drifting Continents
- Topic: Wegener's Theory
- In this section of the chapter, a number of critical points were made about Alfred Wegener's theory of continental drift. First, the authors pointed out that Wegener believed that all the continents were once joined together in a single landmass that drifted apart forming the continents of today. This was important because it explained why the outline of the continents as they are today fit together. Next, the authors mentioned that Wegener argued that there were many pieces of evidence supporting his theory of continental drift. Furthermore, they indicated that Wegener used evidence of similar landforms and fossils on different continents to prove his theory. This was critical because other scientists could validate this evidence. Finally, the authors suggested that despite this evidence, other scientists did not accept Wegener's theory because he could not explain the force that pushes and pulls the continent.

Why – Complete this writing frame on a separate piece of paper.

- •There are a number of reasons why writing frames are beneficial to students.
- •The most important reason is...
- Another reason is ...
- •A further reason is ...
- •So you can see why...

Summary - Video

Although I already knew that ...

- I learned some new facts from the video titled ...
- I learned ...
- I also discovered that...
- Another fact I learned was ...

However, the most important/interesting thing I became aware of was...

COMPARE AND CONTRAST

172

Compare and Contrast

... and ... are similar in a number of ways.

First, they both.....

Another critical similarity is ...

An equally important similarity is ...

Finally, they ...

The differences between ... and ... are also obvious.

The most important difference is ...

In addition, they are ...

In the final analysis, ... differs from ... in two major ways: ...

Compare and Contrast - Example

Narrative and informative written products are similar in a number of ways. First, they both have an author intent on sharing his/her ideas. Another critical similarity is the goal of informative and narrative writing: to communicate to a reader or group of readers. An equally important similarity is that both genre' utilize the words, mechanics, and grammar of the author's language. Finally, both are read on a daily basis across the world.

The differences between narrative and informative written products are also obvious. The most important difference is their purpose. Narratives convey a story, real or imagined, while informative products transmit information that the reader needs or is interested in learning. In addition, they are structured differently. The structure of a narrative is based on the elements of a story: settings, characters, the character's problems, attempts at resolving the problem, and finally its resolution. In contrast, when writing an informative product, authors organize the information into paragraphs each containing a topic and critical details. In the final analysis, narratives differ from informative text in two major ways: content and structure.

Compare and Contrast

... and ... are the same in several ways .
First of all, ... and ... are both
Likewise, they are
In the same way, they are
Therefore, ... and ... have much in common.

... and ... are different in several ways. First of all, ... is/arewhile ... is/are ... Moreover, ... are/is ... while ... is/are ... Another way that they are differ is ...

Compare and Contrast

Although...and...are different..., they are alike in some interesting ways.

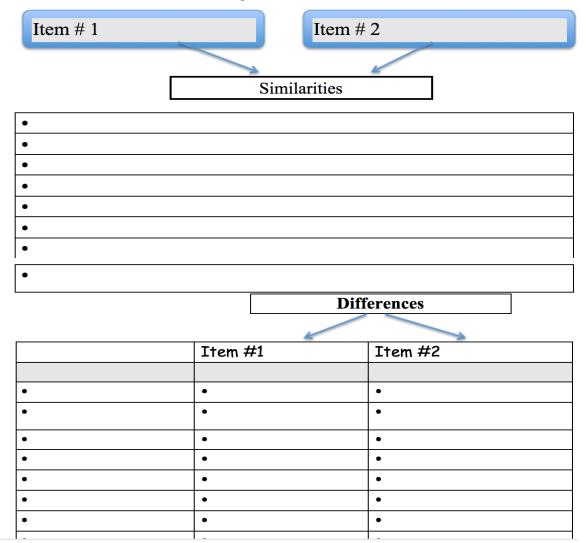
For example, they both...

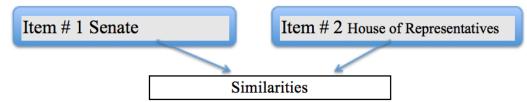
They are also similar in

The...is the same as...

The ...resembles...

Finally they both...





- Both are part of the legislative branch of government
- Two parts of the Congress

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- Members of Congress are elected by citizens of states
- Joint powers make laws, declare war, collect taxes

		Differences		
	Senate		House of Representatives	
Number	 100 Senators 		•	435 Representatives
Number from each state	• 2 per state		•	Determined by population
Qualifications	• At le	ast 30 years old	•	At least 25 years old
	• US ci	itizen for 9 years	•	US citizen for 7 years
	• Resid	ent of state	•	Resident of state
Different Powers	• Ratif	y treaties	•	Starts spending bills
		rm presidential nations	•	Impeaches high officials
	• Tries	impeached	•	If electoral college has
	et	ficials		tie, elects president

Differences

Compare

The Senate and the House of Representatives are similar in a number of ways. First, they are both part of the legislative branch of government referred to as Congress. Furthermore, citizens in each state must elect the senators and representatives that serve in Congress. In addition, the two bodies of Congress have a number of joint powers including the power to make laws, declare war, and collect taxes.

Contrast

While the Senate and House are similar in a number of ways, their membership composition differs. There are 100 elected senators with two senators from each state regardless of the state's population. In contrast, the House has a total of 435 representatives with the number from each state dependent on the state's population. The qualifications also differ between senators and representatives. Representative must be at least 25 years old, a US citizen for 7 or more years, and a legal resident of the state that they represent. On the other hand, a senator must be at least 30 years old, a US citizen for 9 years or more, and a legal resident of their state.

The Senate and House of Representatives, while given joint powers, are also accorded separate powers. The Senate is given the responsibility for ratifying treaties, confirming presidential nominations, and trying impeached officials. In contrast, the House of Representatives' specific powers include initiating spending and tax bills, impeaching high officials, and determining who will be president if the Electoral College ends in a tie.

EXPLANATIONS

How (Does mass affect how quickly an object falls? How does a computer work? How are mountains formed? How does a spider spin a web?)

Why (Why do some things float or sink? Why is the ozone layer getting thinner? Why does iron go rusty? Why do living things need food?)

Scientific Explanations Question:

 Claim a statement that answers the question 	
Evidencescientific data that supports the claim	
 Reasoning a justification for why the evidence supports the claim using scientific principles 	

Scientific Explanations

Question: How was the Grand Canyon formed?

Claim •a statement that answers the question	The Grand Canyon was mainly formed by water cutting into and eroding the soil.
Evidence •scientific data that supports the claim	The soil in the Grand canyon is hard, cannot absorb water, and has few plants to hold it in place. When it rains in the Grand Canyon it can rain very hard and cause flash floods. The flash floods come down the side of the Grand Canyon and into the Colorado River.
Reasoning •a justification for why the evidence supports the claim using scientific principles	Water moving can cause erosion. Erosion is the movement of materials on the earth's surface. In terms of the Grand Canyon, The water moved the soil and rock from the sides of the Grand Canyon into the Colorado River where it was then washed away. <i>McNeill, 2013</i>

Explanation - Why

There are a number of reasons why The most important reason is... Another reason is ... A further reason is ... So you can see why...

Explanation

- There are differing explanations as to why (how, what, when)...
- One explanation is that....
- The evidence for this is ...
- An alternative explanation is...
- The basis of this explanation is ...
- Of these possible explanations, I think the most likely is ...

Explanation

- There are differing explanations as to why...
- One explanation for this is...
- The evidence for this is ...
- An alternative explanation is ...
- The explanation is based on...
- Of the alternative explanations, I think the most likely is...

Analysis of Graphic

The title of this graphic is...

The type of graphic is

Its purpose is to ...

One critical observation that I made was...

This is important because ...

I reached a number of conclusions through my analysis of this graphic.

First,

Second,

Finally, ...

Analysis of Graphic

Title of Graphic	
Type of Graphic	
Purpose	
Observations	a.
	b.
	C.
Conclusions	a.
	b.
	C.

Process

To ..., you need to follow these basic steps. First, you need to ...

Next ...

Then...

When you finish, you should have

Problem-Solution

In this problem, we were asked to figure out....

Some information was already given including ... and ...

When creating a plan to solve this problem, I decided to follow a number of steps.

First, I....

Next, I...

Then, I ...

Finally, I ...

After following these steps, I determined that the answer was ...

To check this answer, I ...

Based on my verification of the answer, I am quite certain that it is accurate.

ARGUMENTS

Argument

Though not everybody would agree, I want to argue that... I have several reasons for arguing this point of view. My first reason is ...

A further reason is...

Furthermore...

Therefore, although some people might argue that ...

I have shown that ...

Argument

There is a lot of discussion about whether...

The people who agree with this idea claim that...

A further point they make is ...

However, there are also strong arguments against this point of view.

People with the opposing view believe that...

They say that...

Furthermore, they claim that...

After examining the different points of view and the evidence for them, I think... because...

Opinion

I think that ... I feel this way because ... Another reason I feel this way is... Most importantly, I think ... For these reasons, I believe that ...

Exit Ticket

Name:

Directions: Complete _____ of these statements.

- 1. Today I learned...
- 2. I was surprised by...
- 3. The most useful thing I will take from this lesson is...
- 4. One thing I am not sure about is....
- 5. The main thing I want to find out more about is....
- 6. After this lesson, I feel...
- 7. I might have gotten more from this lesson if....

Thank you

May you thrive as an educator.

How well we teach = How well they learn

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