



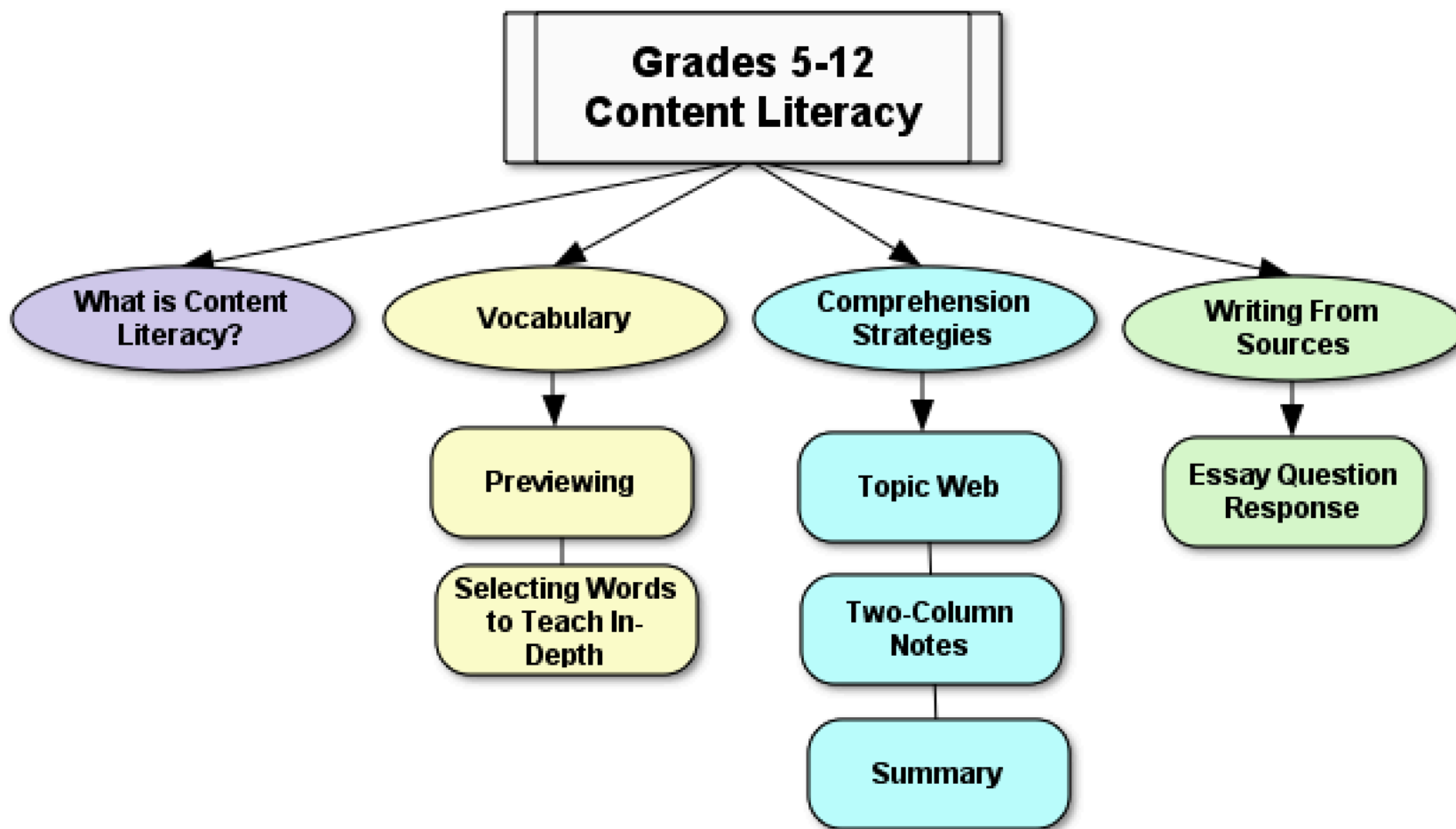
Grades 5-12 Content Literacy:
*Embedding Reading & Writing
Instruction in All Subjects*

Joan Sedita

www.keystoliteracy.com

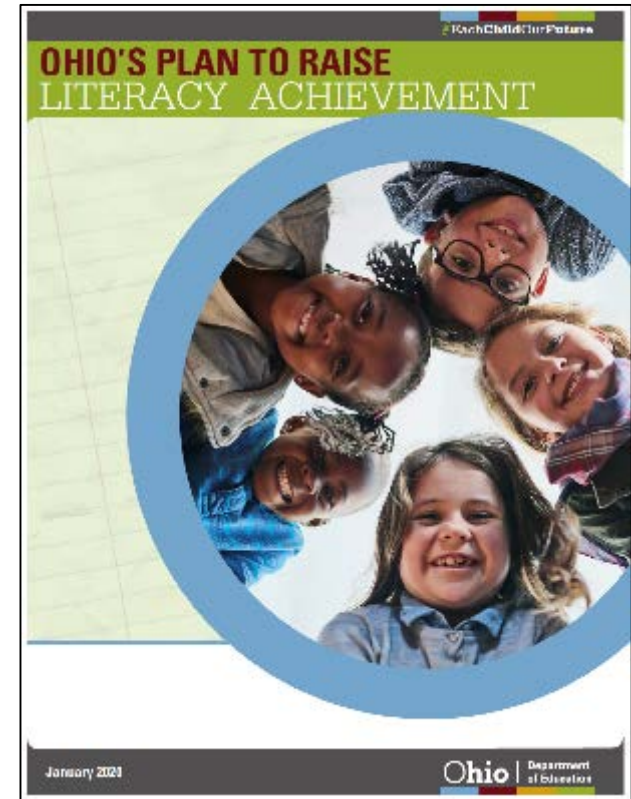


Top-Down Topic Web



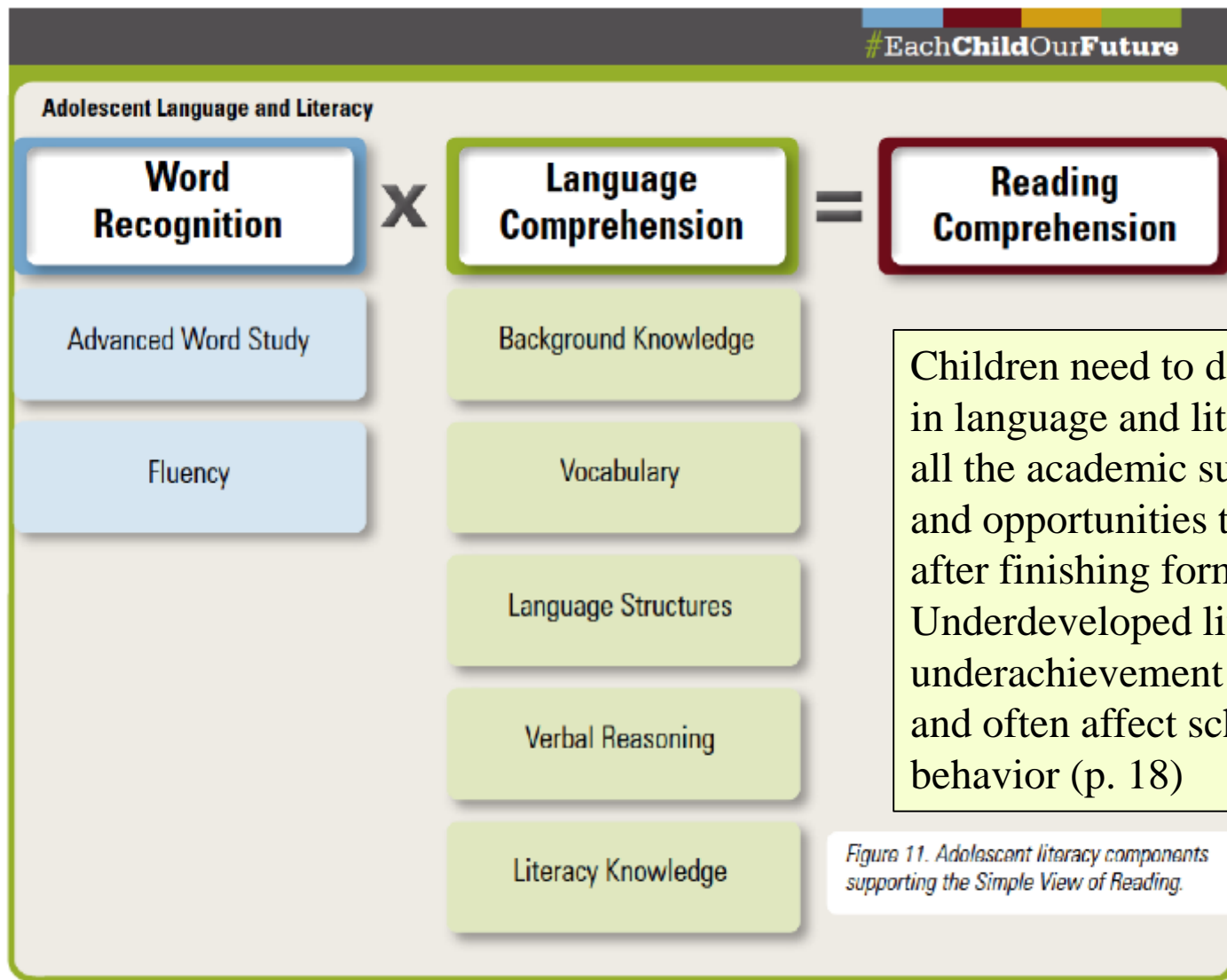
2020 Ohio Plan Revisions

- Focus on need for differentiated core instruction across MTSS aligned to S of R
- Promote collaboration among educators, such as content area teachers and intervention specialists
- Bridge gap between research, jargon & instructional practice





Ohio's Language & Literacy Vision

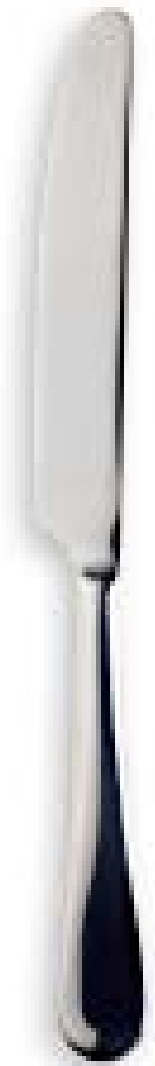
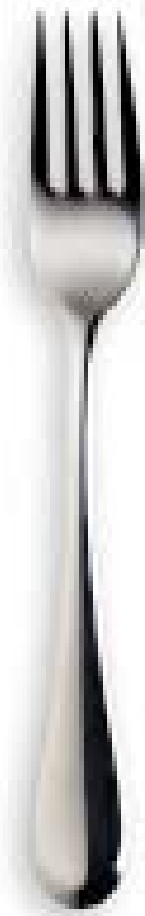


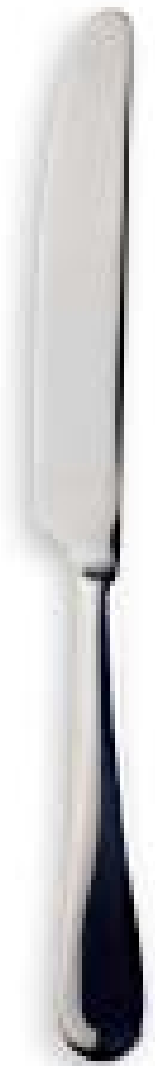


Content Literacy

- The above essential components **must be integrated into all content areas and become the shared responsibility of all secondary educators and specialists who support learners across this grade range.** This does not mean all educators become reading teachers, but that all educators differentiate instruction within their disciplines to ensure all learners have equitable opportunities to access discipline-specific text, discourse and writing.
- To meet the needs of all learners in this phase, districts and schools implement **evidence-based strategies across content areas**, such as explicit vocabulary instruction and extended discussion of text meaning and interpretation; provide literacy instruction and support that is **discipline-specific**; and provide **individualized intensive intervention in reading**, as needed.

(Ohio Literacy Plan p. 32)







What is content literacy?



K-4 Literacy Instruction

**Phonemic
Awareness**

Phonics

Fluency

Vocabulary

Comprehension

Writing

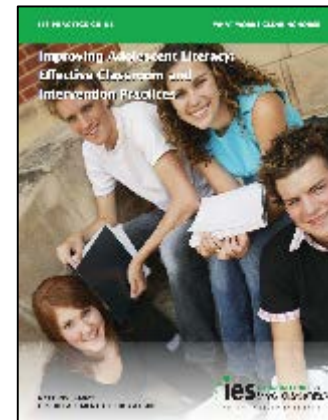
**Core instruction
for all students
must address**

**all five
components of
reading, plus
writing!**



For Grades 5-12

IES Report (2008)



5 recommendations:

Tier 1

1. Provide explicit vocabulary instruction
2. Provide direct and explicit comprehension strategy instruction
3. Provide opportunities for extended discussion of text meaning and interpretation
4. Increase student motivation and engagement in literacy learning
5. **Make available intensive and individualized interventions for struggling readers that can be provided by trained specialists**



The Strands That Are Woven Into Skilled Writing

(Sedita, 2019)

Critical Thinking

- Generating ideas, gathering information
- Writing process: organizing, drafting, writing, revising

Syntax

- Grammar and syntactic awareness
- Sentence elaboration
- Punctuation

Text Structure

- Narrative, informational, opinion structures
- Paragraph structure
- Patterns of organization (description, sequence, cause/effect, compare/contrast, problem/solution)
- Linking and transition words/phrases

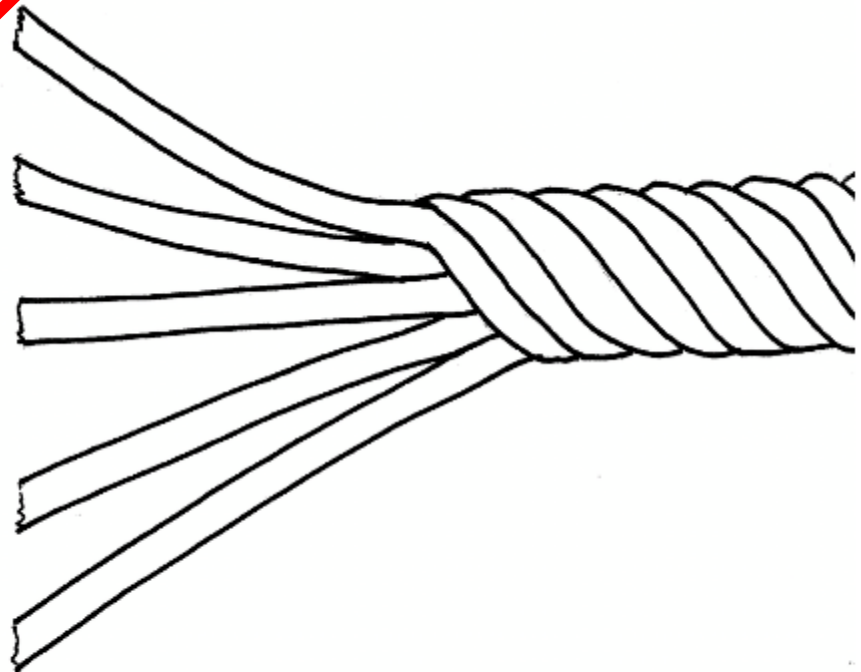
Writing Craft

- Word choice
- Awareness of task, audience purpose
- Literary devices

Transcription

- Spelling
- Handwriting, keyboarding

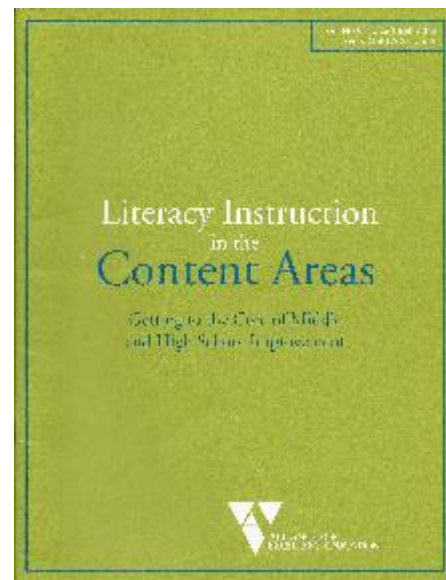
Content Teachers





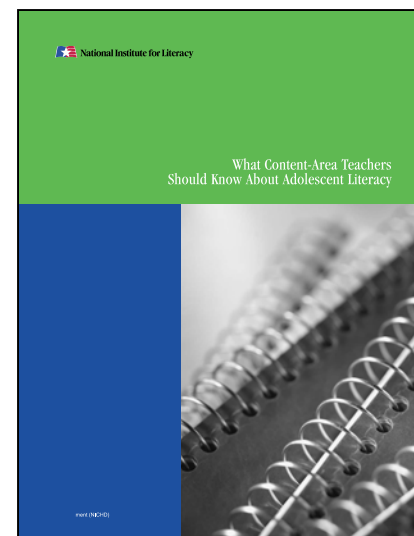
Literacy Instruction in the Content Areas:

*Getting to the Core of
Middle and High School
Improvement (2007)*



What Content-Area Teachers Should Know About Adolescent Literacy

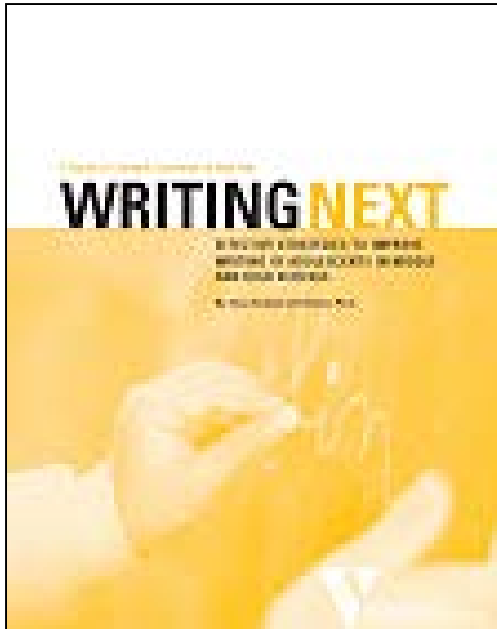
*National Institute for Literacy,
2007*



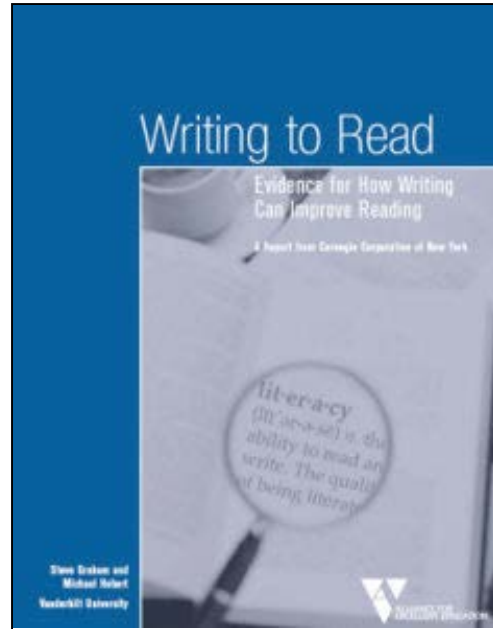


The Research Base

**Writing
Next**



**Writing to
Read**



**Reading
Next**



www.all4ed.org



Practice Activity: "Napping"

- Vocabulary tasks
 - *Previewing*
 - *Selecting words to teach in-depth*
- Comprehension strategies:
 - *Topic web graphic organizer*
 - *Two-column notes*
 - *Summary*
- Writing from sources
 - *Essay question response*

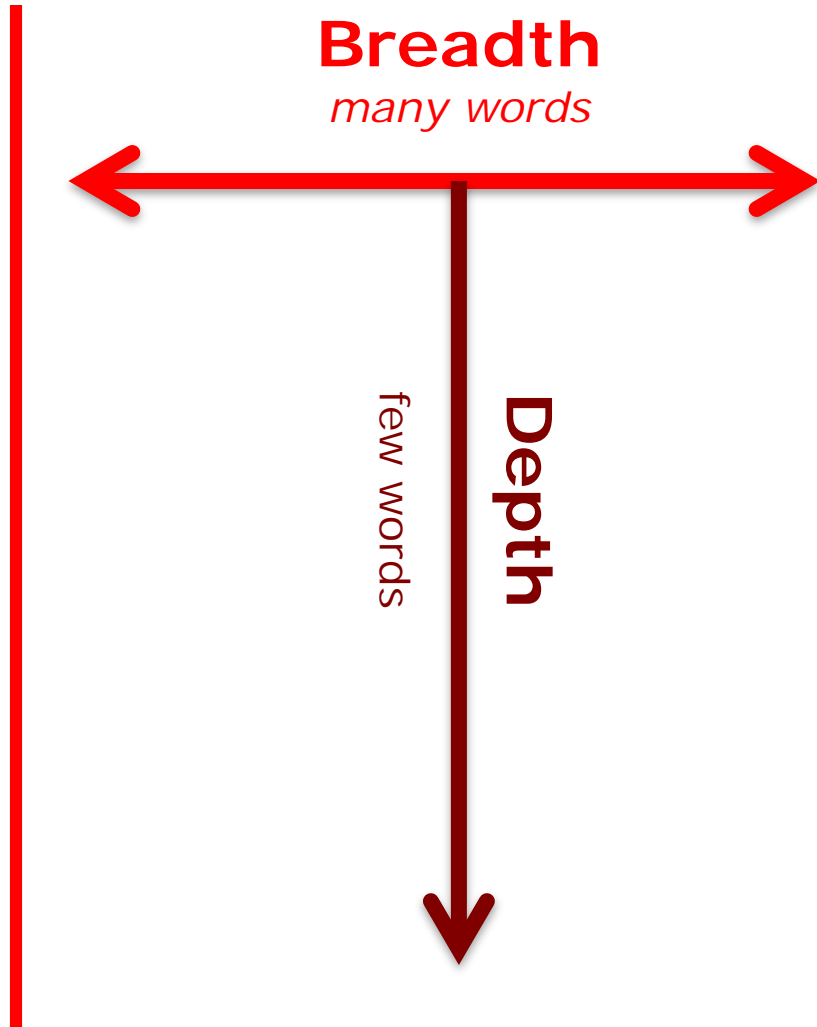


Part 1:

Content Vocabulary



Effective Vocabulary Instruction



1 Preview

2 Word connections

3 Select, teach in-depth

4 Word learning strategies

5 Word consciousness



Why Preview Vocabulary?

- Activate prior knowledge
- Clear up misconceptions about a word's meaning
- Clarify meaning of known words with multiple meanings
- Provide some familiarity with unknown words

Previewing is more of a comprehension strategy than it is direct teaching of specific words.



Goal of Previewing

- **Goal:** to offer temporary, basic familiarity with the meaning of the words in text to be read

“Introduce the word so that students won’t *stumble* over it when they see it in an upcoming passage.”

(Graves, 2006)



- It is more about attaching some meaning to a new word than enabling deep learning of words.



Student Rating of Word Knowledge

- Levels of word knowledge
 - 4 Know it well, can explain it, use it*
 - 3 Know something about it, can relate it to a situation*
 - 2 Have seen or heard the word*
 - 1 Do not know the word*
- Word Knowledge Checklists
- Raise your fingers





Practice Activity

- evidence
- rousing
- Allied Powers
- Mona Lisa
- internal clock
- in sync
- alertness
- residents

- subjects
- primes
- siesta
- furthermore
- blood pressure
- waves of weary teens
- motto



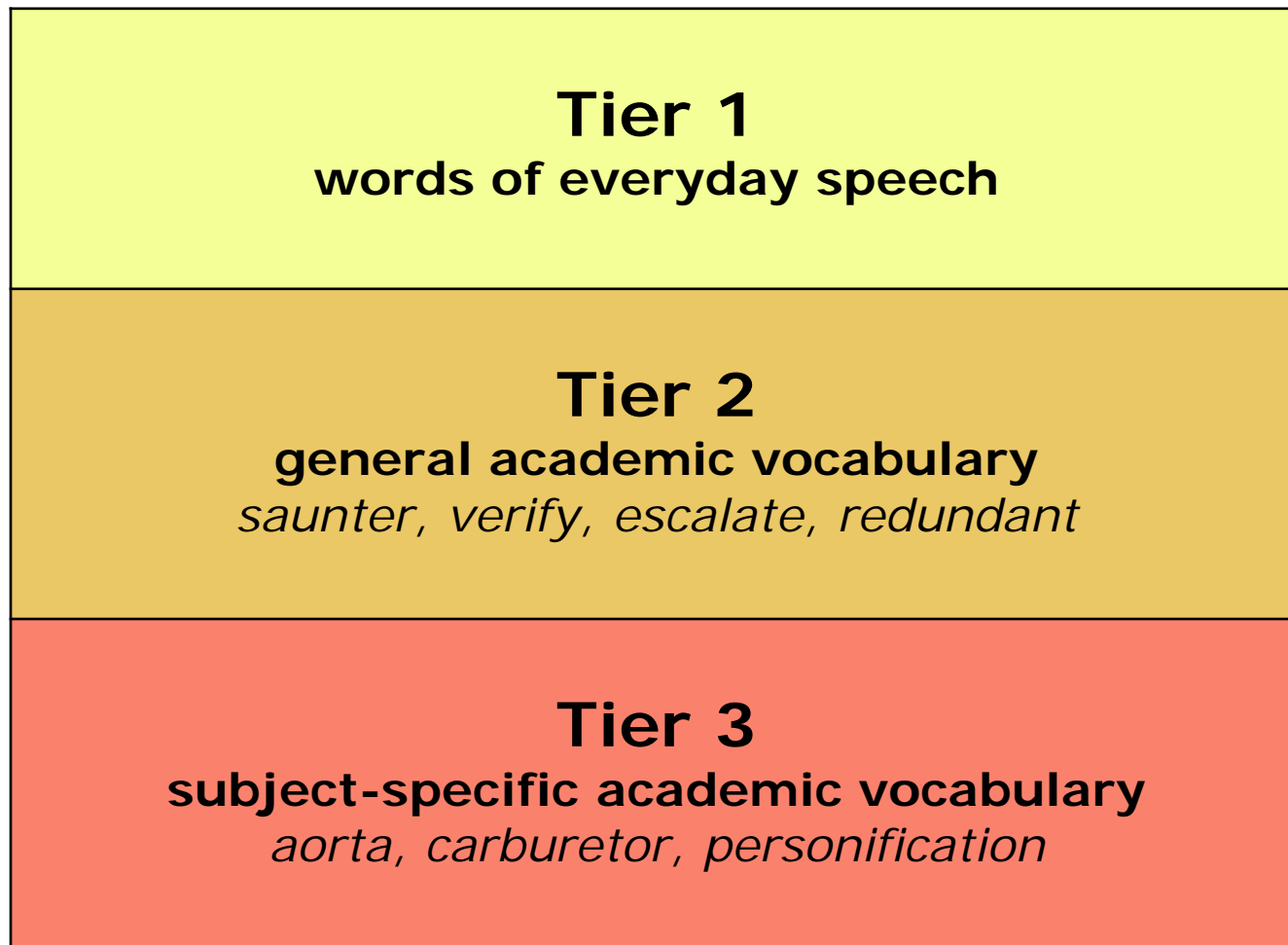
Why Go Deep With Some Words?



- Previewing vocabulary is different from directly teaching specific words.
- Essential content words must be taught in-depth.
- Students with weak vocabularies especially benefit from in-depth instruction for some words.



3 Tiers of Words



words for
in-depth
instruction

Adapted from Beck, McKeown & Kucan, 2002




Selecting Words

- **Consider words that are:**
 - *important to the text*
 - *useful to know in many situations*
 - *uncommon in everyday spoken language but recurrent in written text*
- Differentiate your choice of words based on needs of students
- Choose words yourself – don't rely on reading programs or textbooks to identify words
- Spelling lists are not the same as vocabulary lists



Practice Activity

- evidence 
- rousing
- Allied Powers
- Mona Lisa
- internal clock
- in sync
- alertness
- residents

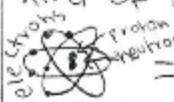


- subjects 
- primes 
- siesta
- furthermore
- blood pressure
- waves of weary teens
- motto

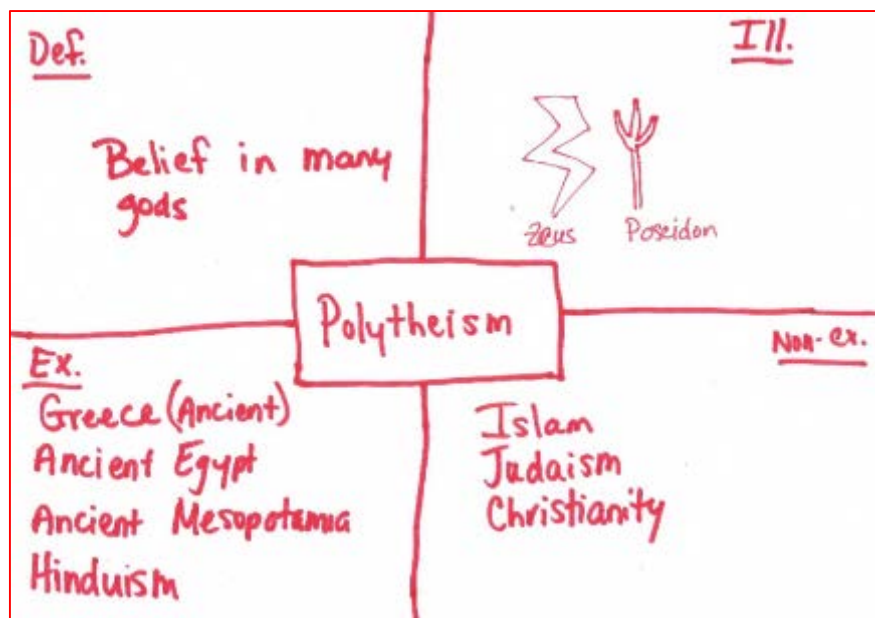


Frayer Template

Element

• building blocks of matter

<p>Definition with Picture All elements are different. Elements are matter that is made up of one kind of atom.</p>  <p>Carbon (an element)</p>	<p>Characteristics</p> <ul style="list-style-type: none"> • made up of one kind of atom • cannot be broken down • 118 different elements • different • made of protons, neutrons and electrons
<p>Example</p> 	<p>Non-example</p> <p>↓ made up of more than one different kind of atoms</p>  <p>Pizza</p>





congruent

≈

DEF. having the same measure

POS adjective

SYN. same, equal

ANT. noncongruent, unequal

CATEGORY angles, triangles, polygons

EX. equilateral triangle

NON-EX. scalene triangle

In an equilateral triangle, all angles are congruent.

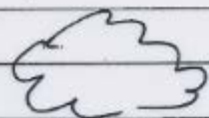
Melancholy

- a deep sadness

- synonyms: morose, depressed, in the dumps, downtrodden

- antonyms: happy, joyful, amiable, jubilant, exuberant

- categories: emotion, feelings, mood



After the death of his dog the boy was melancholy.

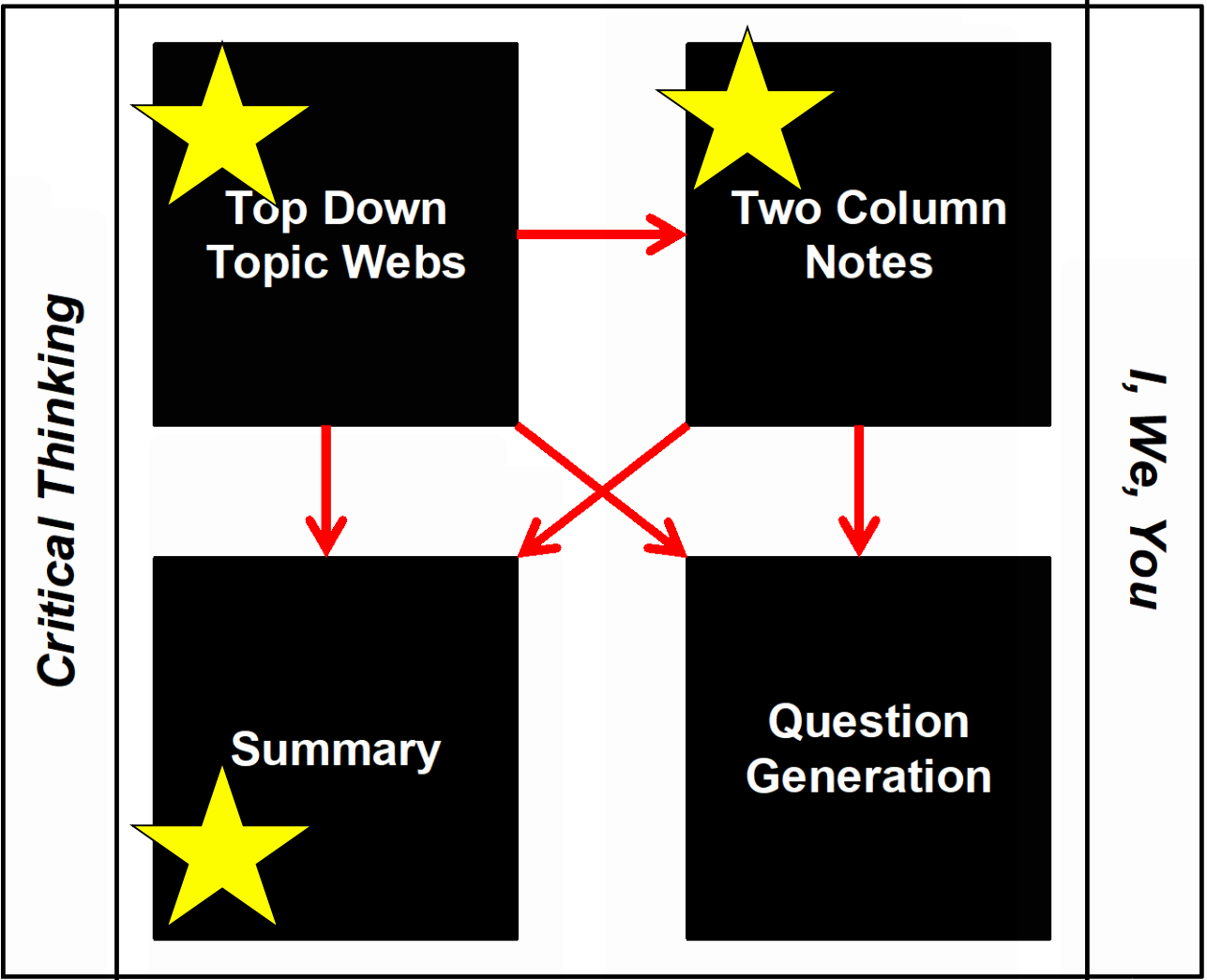


Part 2:

Comprehension Strategies



Main Idea Skills

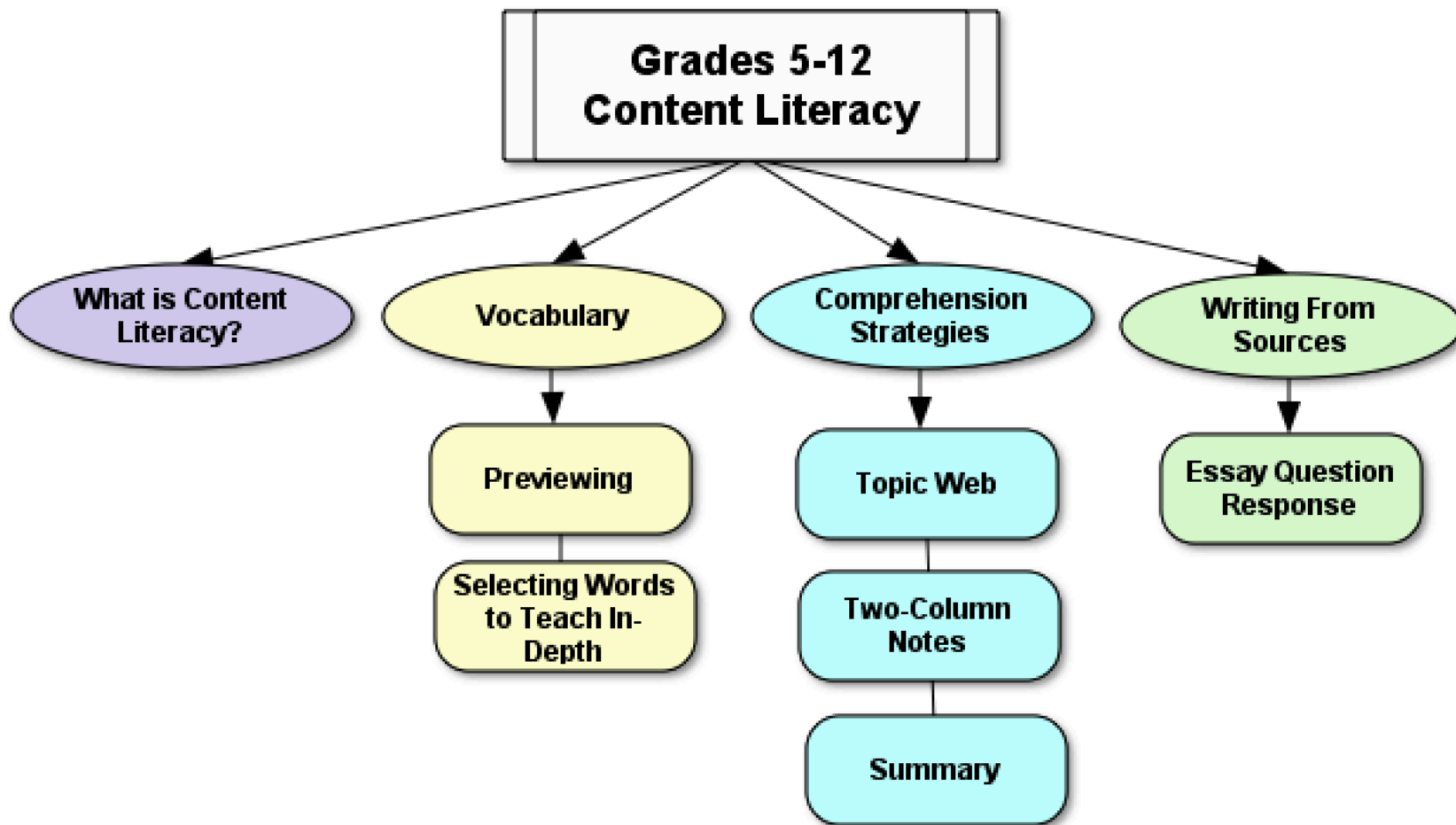


Text Structure



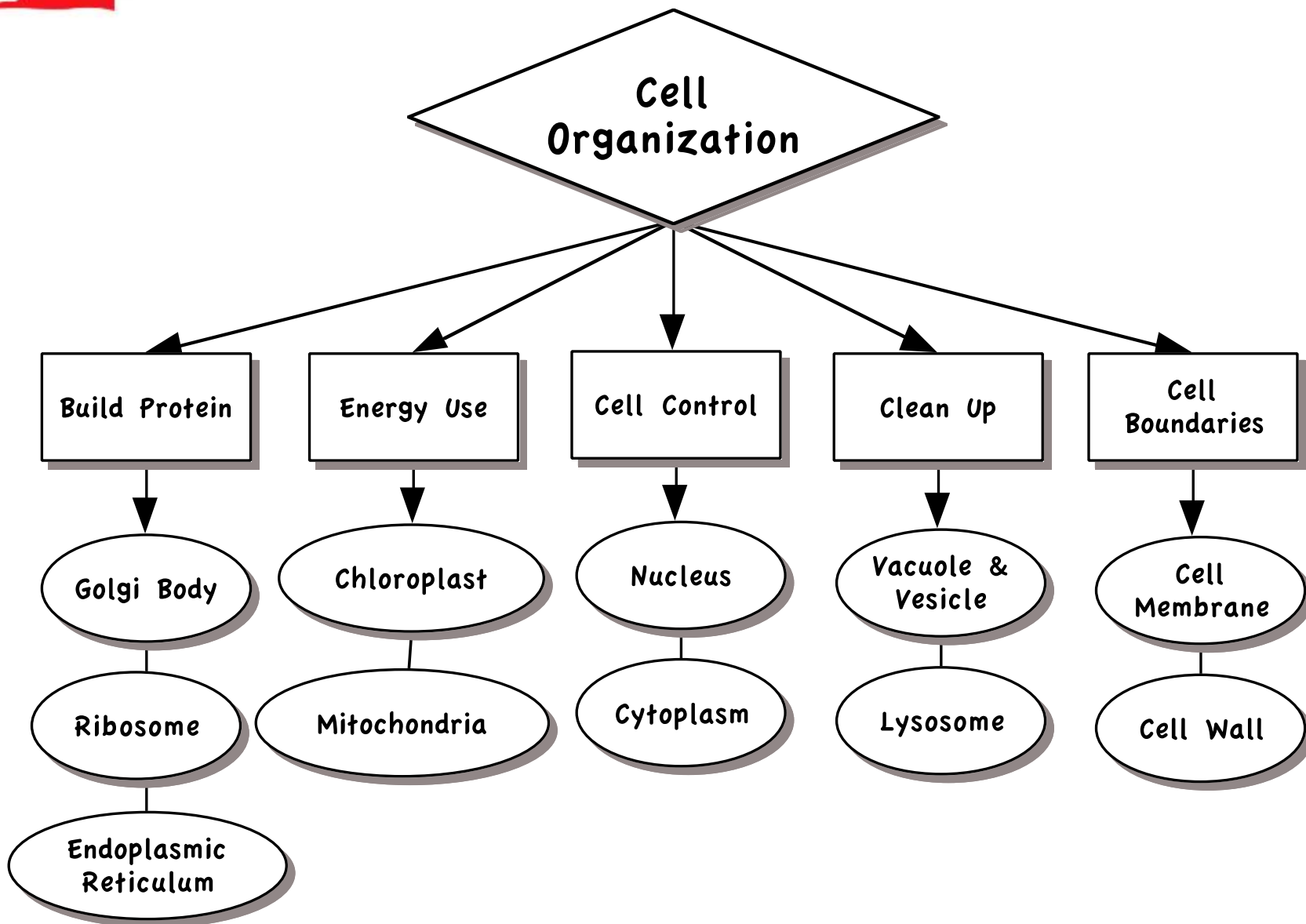


Top-Down Topic Web



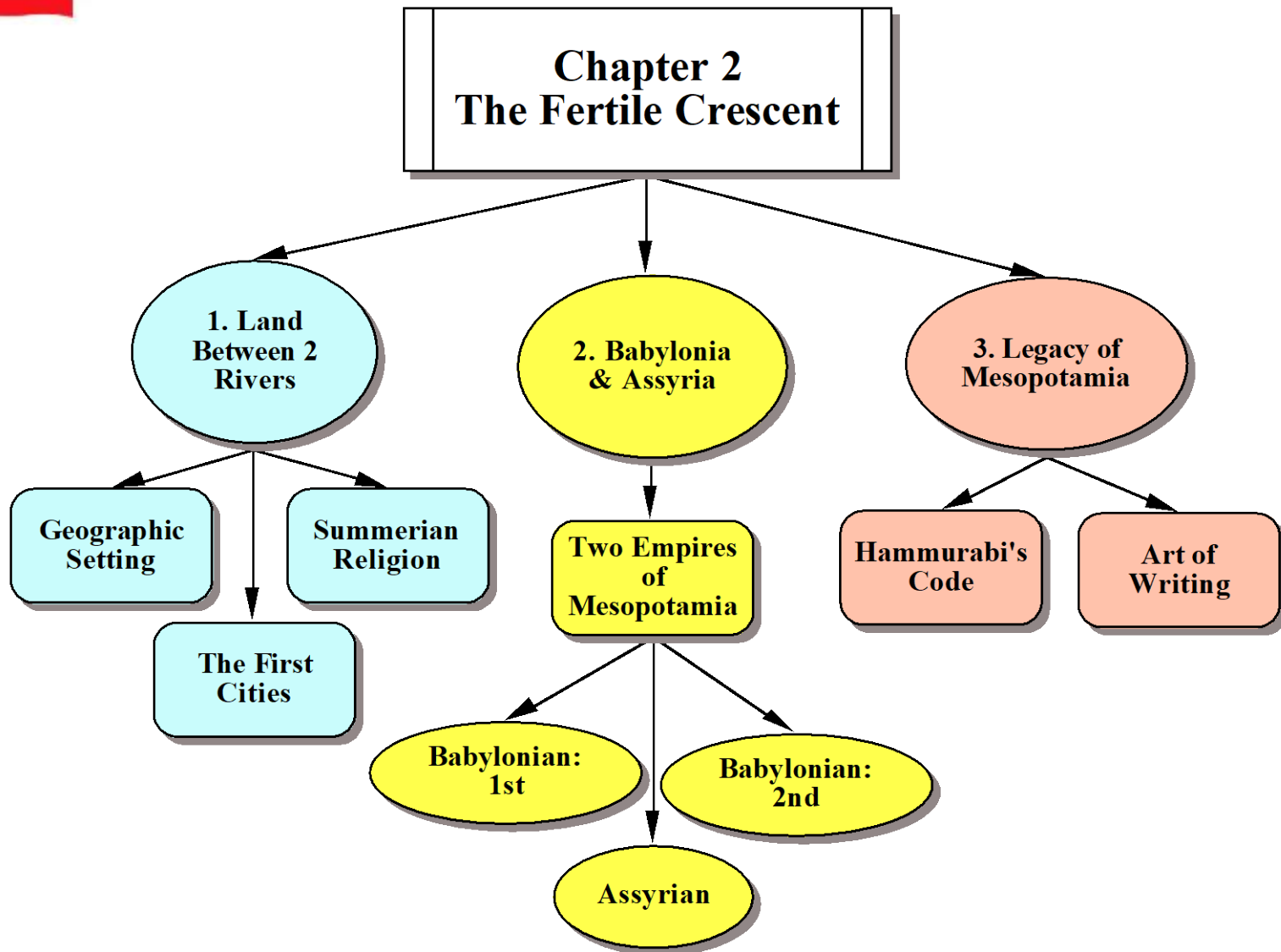


web of science textbook section



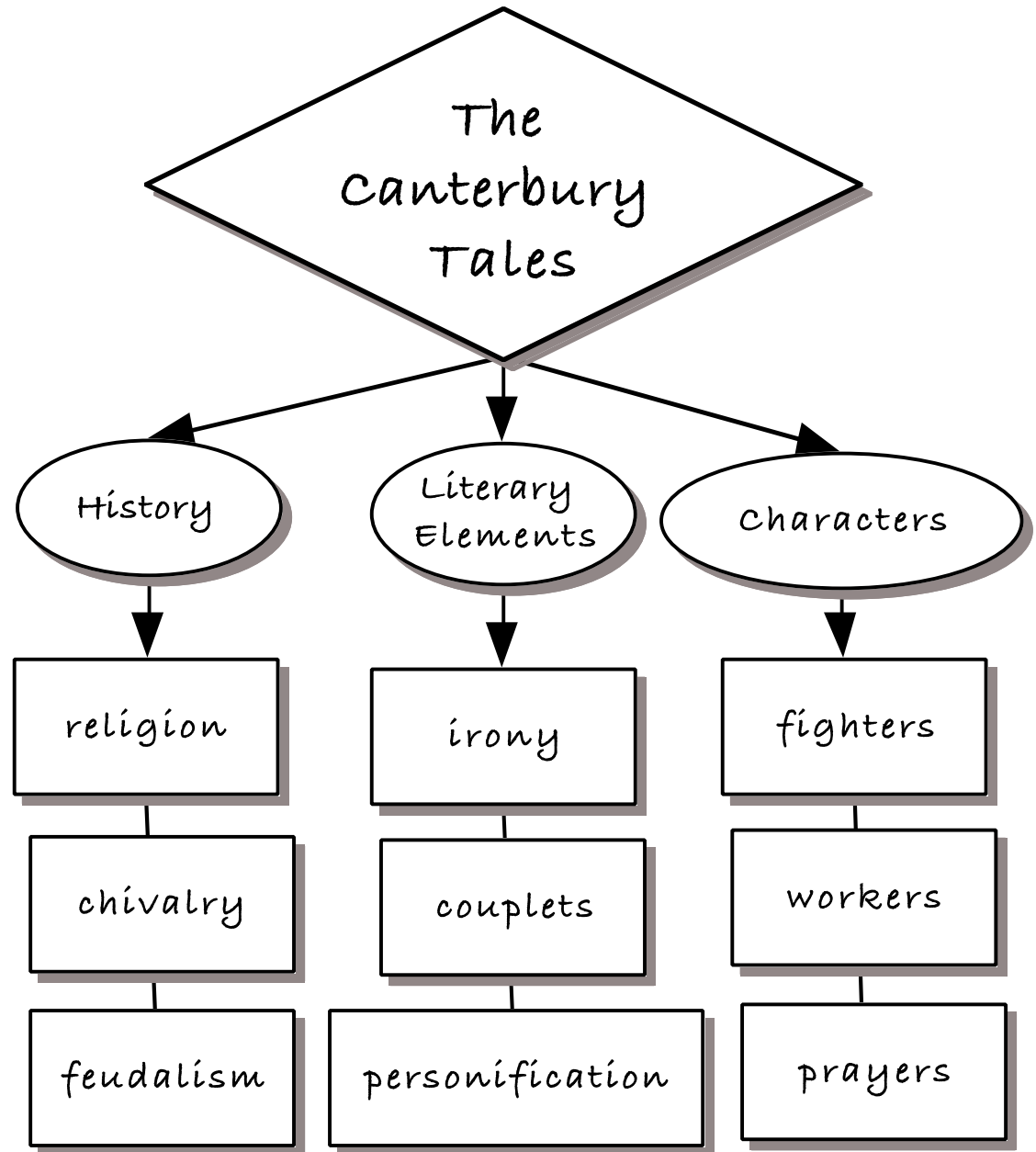


web for chapter of expository text (social studies)



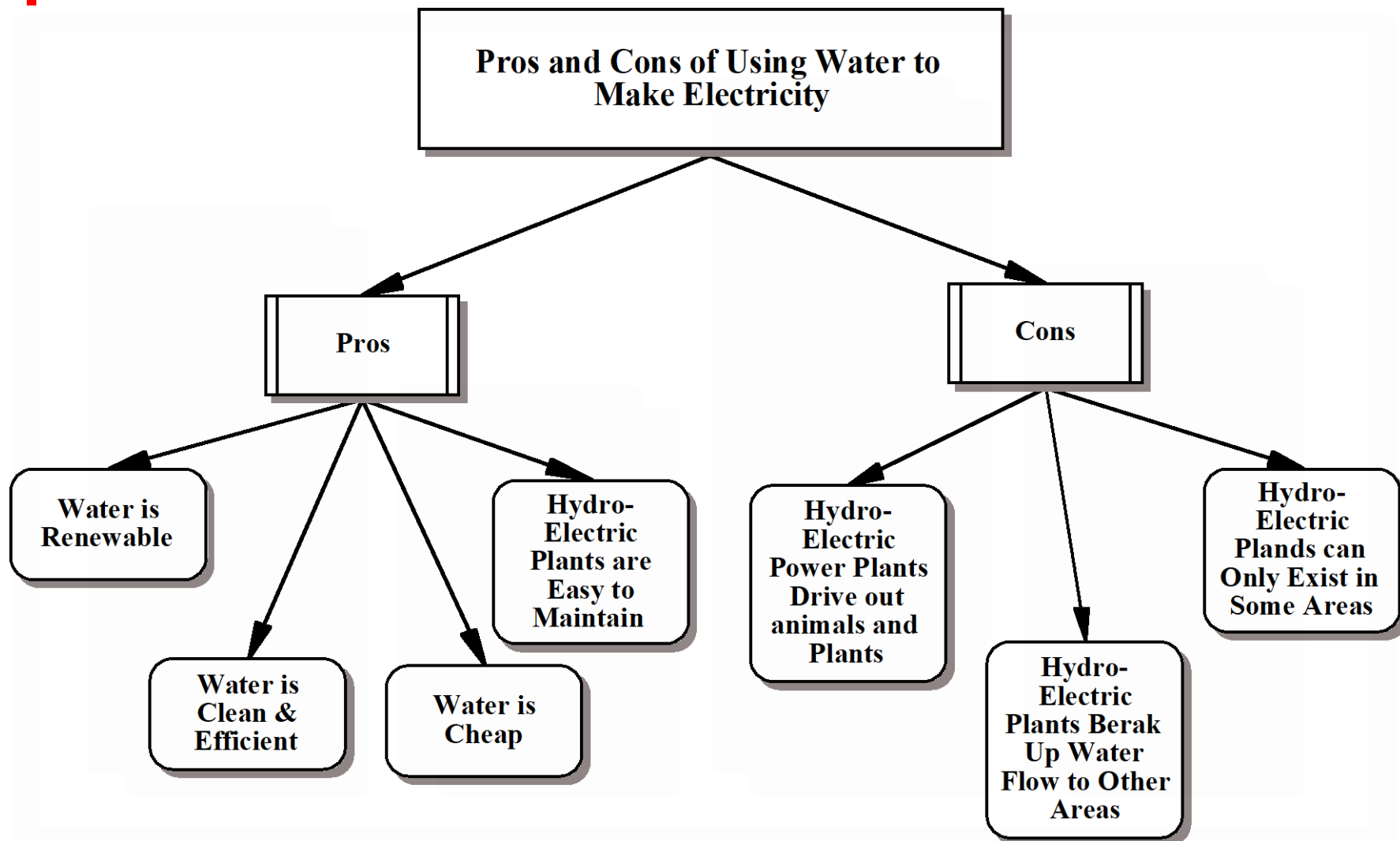


*English:
background
information*



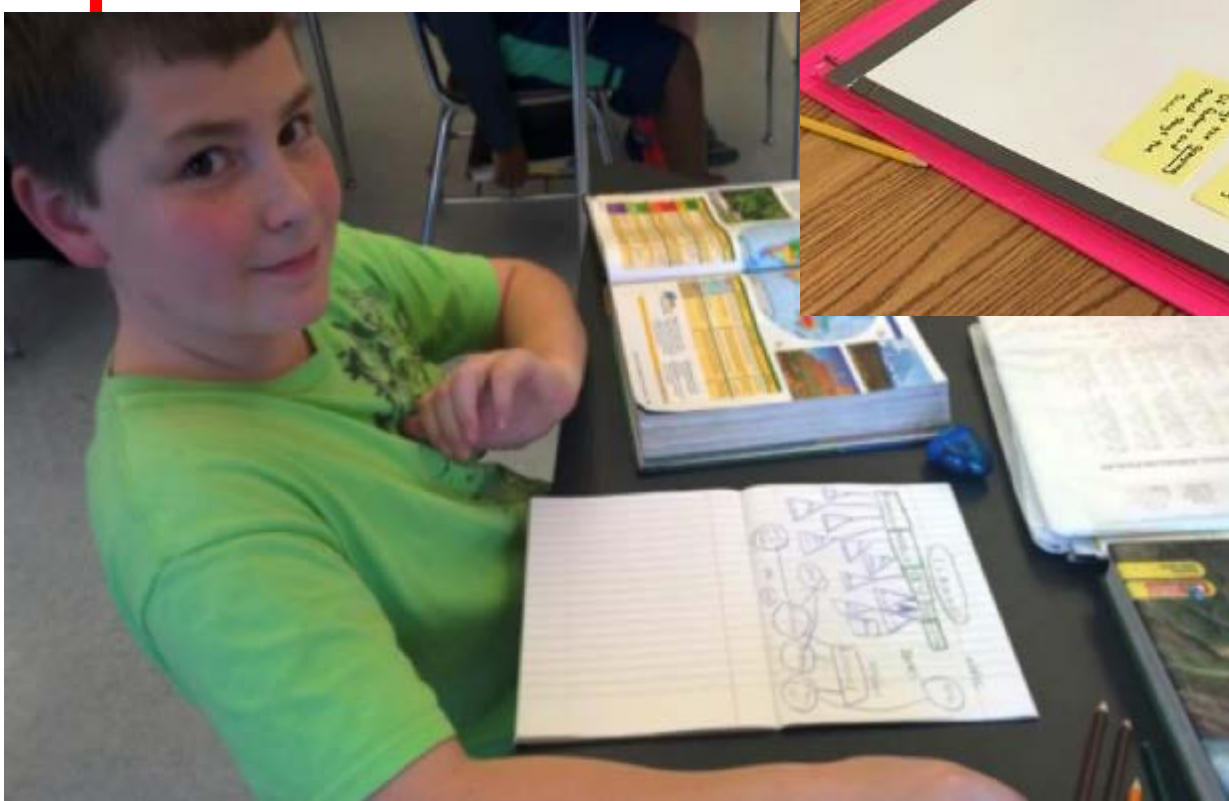
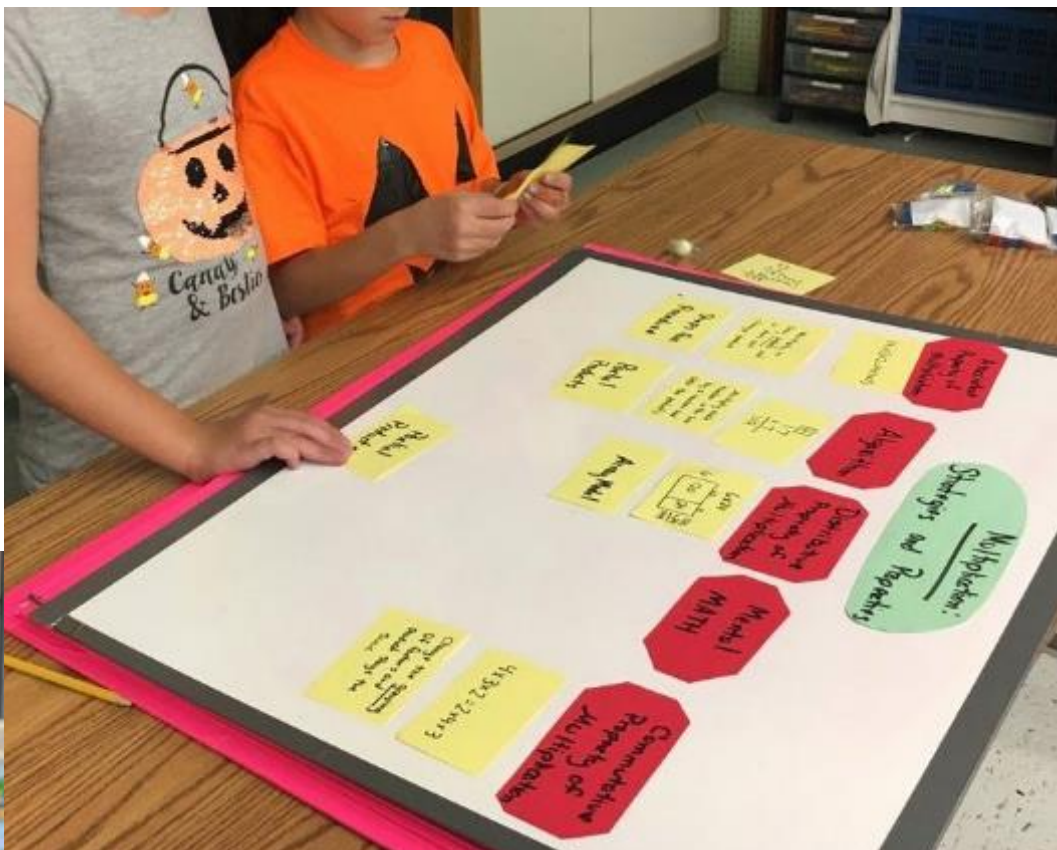


topics for a class debate





Making Topic Webs





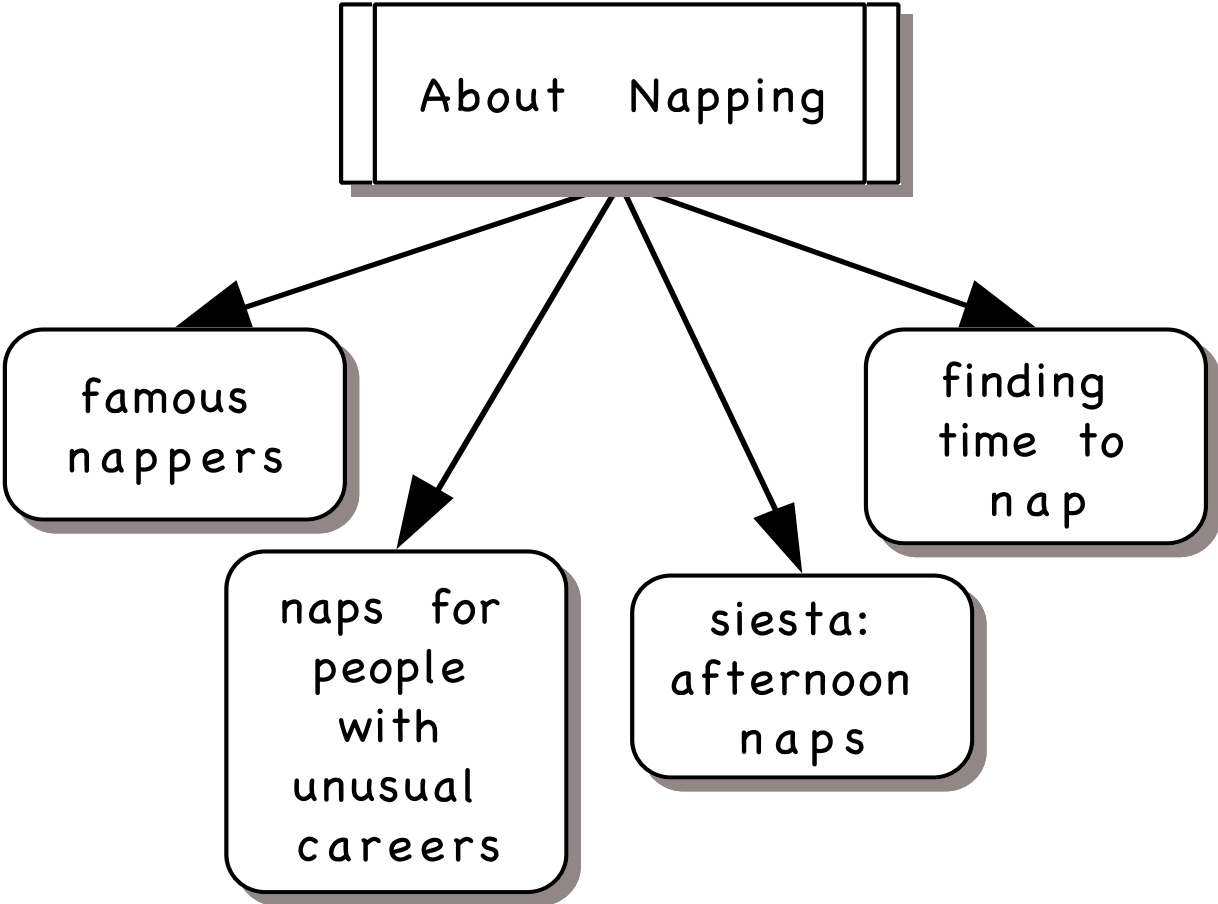
“We’re at the *you do it* stage!”





Practice Activity

What might a simple topic web look like for the article?





Practice Activity

Scaffolding Text Prior to Reading

- Students who struggle with reading may benefit from annotated text.
- Consider:
 - Identifying introduction and conclusion
 - Circle transitions
 - Insert guiding questions
 - Provide supports to identify paragraph main ideas
 - Insert simple definitions or synonyms

Look at the scaffolded source.



Two-Column Notes

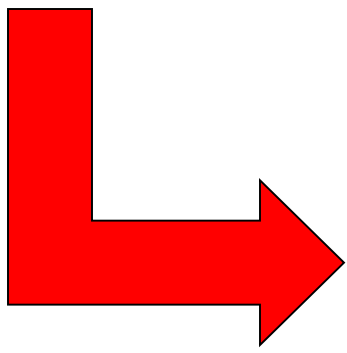
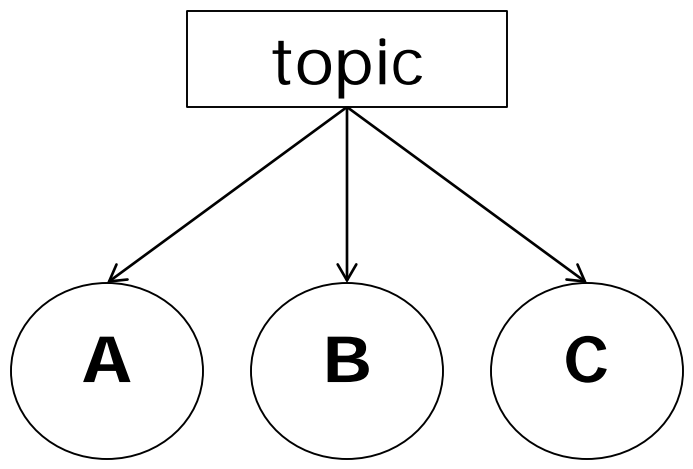
Topic _____

Big picture

Subordinate
information



Webs to Notes



topic	
A	details
B	details
C	details



Chapter 1
Matter in Motion

Measuring
Motion

reference
point

speed

velocity

acceleration

Force

newtons

net
force

Friction

sources

types

Gravity

Law of
Universal
Gravitation

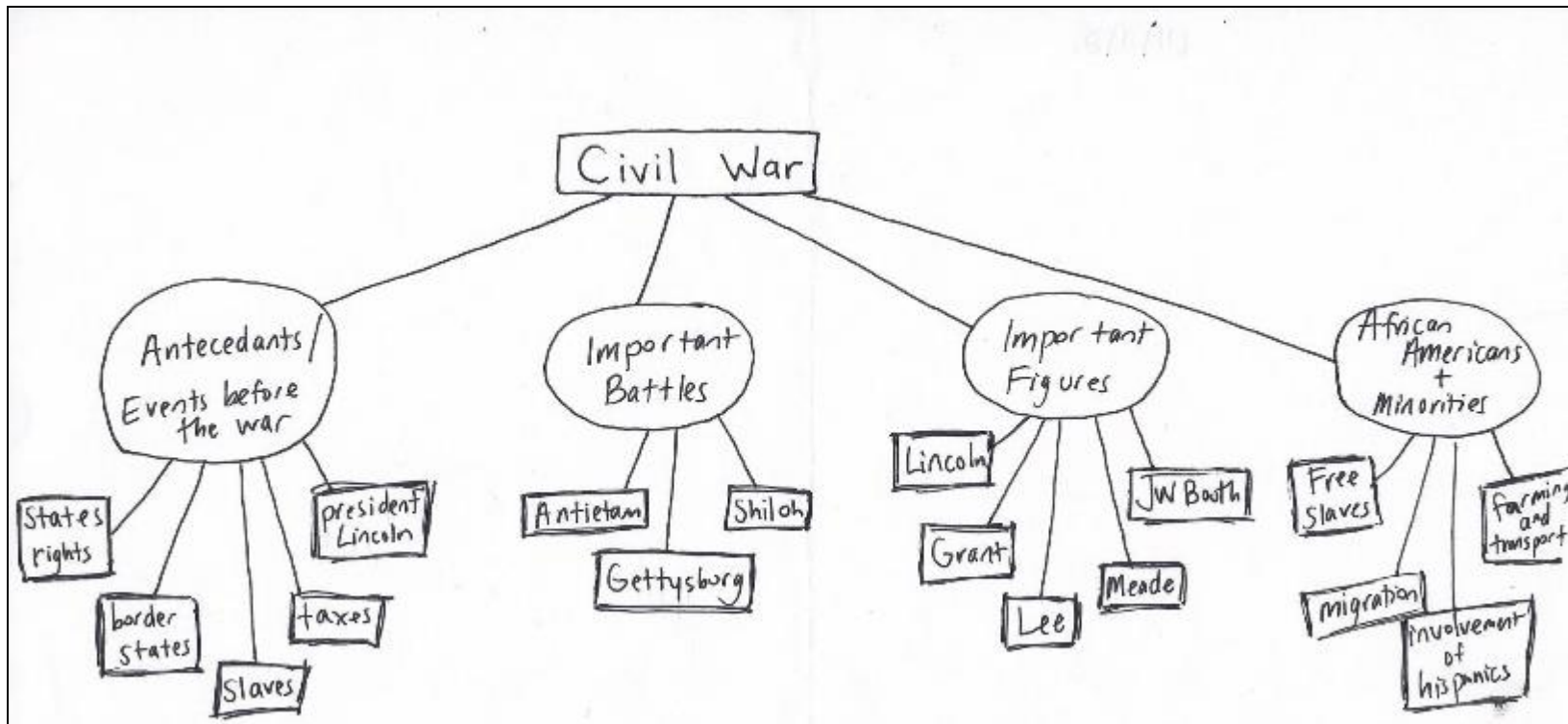
mass

distance



Measuring Motion

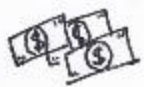
reference point	<ul style="list-style-type: none"> • an object that appears to stay in place compared to a moving object • we cannot observe motion without a reference point
speed	<ul style="list-style-type: none"> • the rate (how fast) which an object moves • need to know <u>total distance</u> and <u>total time</u> • $\text{avg. speed} = \frac{\text{total distance}}{\text{total time}}$
velocity	<ul style="list-style-type: none"> • an object's <u>speed</u> in a particular <u>direction</u> • a change in speed is a change in direction = a change in velocity • combining velocities <ul style="list-style-type: none"> • two velocities in same direction - <u>add</u> • two velocities in opposite directions - <u>subtract</u> AND take the direction of larger velocity
acceleration	<ul style="list-style-type: none"> • a change in velocity <ul style="list-style-type: none"> • a change in speed OR • a change in direction • $\text{acceleration} = \frac{\text{final velocity} - \text{starting velocity}}{\text{time it takes to change}}$





Civil War!

Events leading to the Civil War



Important Battles of the Civil War

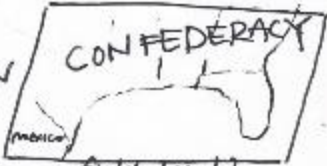
Important Figures of the Civil War



African Americans / minorities



- North and South argue about the STATES RIGHTS
- Expansion of territory, BORDER states and SLAVES
- Disputes over federal TAXATION
- Election of ABRAHAM LINCOLN
 - from same state as OBAMA
 - famous speech
 - Memorial in D.C. (we saw this on field trip!)
- Antietam was very bloody, we saw a video on this
- Gettysburg
 - turning point of Civil War
 - near to our school
- Shiloh
- Abraham Lincoln, president, wrote Emancipation Proc.
- Ulysses Grant, general for the Union,
 - president during reconstruction
- Robert E. Lee
 - general for the South / confederacy
- Meade, leader for the Union at Gettysburg
- J Wilkes Booth → arrested for assassination of Lincoln ←=?
 - co-conspirators?
- South dependent on Slaves for economy
- Freed slaves (Eman. Proc.) migrate to Northern Cities
- Struggles feeding troops and economic struggles is a major factor why the South LOST the war
- Hispanics were involved in both sides
- Were Native Americans involved? ←=?
- how did the South recover without slaves? (??)





notes from
textbook
chapter
(science)

Chapter 4.1- What Do Genes Look Like
The answers to the questions will serve as your details.

DNA

1. What is DNA?

1. DNA IS DEOXYRIBONUCLEIC ACID
2. THE BLUE PRINTS OF LIFE

Nucleotides-The Pieces of the Puzzle:

1. What is a nucleotide?

1. A NUCLEOTIDE IS A SUB-UNIT OF DNA THAT CONTAINS A PHOSPHATE, SUGAR ; A BASE PAIR

2. What are the four bases used in a nucleotide?

2. ADENINE / THYMINE
CYTOSINE / GUANINE

Chargaff's Rule:

1. Chargaff's rule states:

1. THAT THE AMOUNT OF ADENINE = THE AMOUNT OF THYMINE
2. THAT THE AMOUNT OF CYTOSINE = THE AMOUNT OF GUANINE

Eureka

1. Who are the two scientists that discovered the structure of DNA?

1. JAMES WATSON AND FRANCIS CRICK DISCOVERED THE STRUCTURE OF DNA

2. What did Watson and Crick conclude about DNA's structure?

2. DNA RESEMBLED A TWISTED LADDER CALLED A DOUBLE HELIX

DNA Structure

1. Describe the structure of DNA?

- (THINK OF A LADDER)
- THE SIDES OF DNA ARE ALTERNATING SUGARS & PHOSPHATES
2. THE RUNGS OF DNA ARE ALTERNATING BASE PAIRS.

Making Copies of DNA

1. What does the text mean by complementary?

1. IT MEANS THAT BASES WILL ONLY BOND W/ A SPECIFIC BASE
4. ADENINE IS COMPLEMENTARY TO THYMINE
5. GUANINE IS COMPLEMENTARY TO CYTOSINE.

2. What is meant by replication ?

2. REPLICATION IS WHEN DNA MAKES A COPY OF ITSELF.

3. Describe the replication process.

3. DNA UNZIPS DOWN THE MIDDLE. EACH SIDE CAN BE USED AS A PATTERN. THE BASES THEN BOND TO ITS COMPLEMENTARY BASE FORMING A COMPLEMENTARY STRAND CREATING 2 DNA MOLECULES.

From Trait to Gene

1. What exactly is a gene?

1. A GENE IS A STRING OF BASES (A SECTION OF DNA)



GRAPHING A LINE

FIND ORDERED PAIRS

1. choose x , find corresponding y in equation

2. form 3 ordered pairs

3. make a table

x	y

PLOT ORDERED PAIRS

1. draw x and y axes

2. label x -axis and y -axis

3. plot points and label ordered pairs



DRAW LINE

(How accurate is your line?)

1. use ruler to draw line through points

2. label line with equation

IDENTIFY X AND Y INTERCEPTS

(Will x and y always be integers (at intercepts)?)

1. find where graph intersects x -axis, label as ordered pair $(x,0)$

2. find where graph intersects y -axis, label as ordered pair $(0,y)$

*notes
about a
process
(math)*



notes from
textbook
chapter
(social studies)

Jason

Grade 4

Chapter 5 Lesson 1

The Narragansett
way of life

- the Narragansett people
hunted, fished, grow corn and vegetables
- They lived in round islands
 - survival cooperation
 - They lived in a wigwam
 - used some skills & tools
 - each territory had a ruler or a sachem
 - they traded with 3 neighbors

Changes in the
Narragansett way
of life

- Roger Williams visited the grand sachem
- they all got along then they went to battle
- alot of Narragansett died
- many moved to Canada or other groups
- Reservation is land that is set aside for native Americans
- a Powwow is a native American festival

Other Native American
in the north east

- The Iroquois were the strongest tribe
- a confederacy is a union of groups or states
- Seneca, Mohawk, Oneida, Onondaga, and Cayuga found the Iroquois 1722



WHAT is a summary?

- One of the most effective strategies
- A review of the main ideas or most important events

How is summarizing different from retelling or recounting?

Sponge Metaphor





How to Write a Summary

1. Distinguish main ideas from details.
2. Write in phrase form.
3. Begin with an introductory statement.
4. Turn main ideas into sentences, and include a few details.
5. Combine the sentences.
6. Incorporate transition words.
7. Proofread.

MIST

Main ideas listed

Introductory sentence

Sentences with main ideas

Transitions added



Transition Words

purpose

Transition Words and Phrases

<i>To indicate a time relationship</i>	after, afterward, after that, at first, at this time, before, beginning with, beyond, during, earlier, ending with, eventually, finally, following, from then on, in the meantime, last, later, meanwhile, next, now, since, soon, then, until, while
<i>To indicate spatial placement</i>	below, beside, between, beyond, farther on, here, next to, parallel with
<i>To list or present a series of ideas</i>	after, after that, finally, first, lastly, next, second, third
<i>To add information or continue a line of thought</i>	also, another, besides, further, furthermore, in addition, likewise, moreover, similarly
<i>To summarize or show conclusion</i>	accordingly, finally, in conclusion, in other words, in short, to conclude, to sum up, to summarize
<i>To show comparison</i>	by comparison, compared to, in like manner, likewise, similarly
<i>To show contrast</i>	although, but, however, in contrast, nevertheless, on the contrary, on the other hand, unlike
<i>To repeat information or stress a point</i>	above all, in fact, in other words, most important, once again, to repeat
<i>To provide an example or illustrate a point</i>	for example, for instance, such as, to illustrate, that is
<i>To show cause and effect</i>	as a result, because, because of, caused by, consequently, for that reason, that is why, therefore, thus
<i>To state the obvious</i>	certainly, granted that, in fact, most certainly, naturally, obviously, of course, surely, undoubtedly, without a doubt
©J. Sedita www.keystoliteracy.com	



Summary Template

Summary Template

1. List the main ideas in phrase form.
 - _____
 - _____
 - _____
 - _____
 - _____

2. Write an introductory sentence or topic sentence.

3. Write all the main ideas in sentences in order.

4. Add transition words: *first, next, last, finally, before, after.*

5. Proofread your summary.



Practice Activity

- Review the completed two-column notes and the summary.



Part 3:

Writing From Sources



Quick Writes	Content Learning Tasks	Formal Writing Tasks
<ul style="list-style-type: none"> • < 10 min • Related to content • Objective: process, reflect on, or assess content learning • No revision • Informally evaluated, not graded 	<ul style="list-style-type: none"> • 1 or more sessions • Related to content • Objective: deepen understanding & reflection, assess content learning • May be revised • May be informally evaluated, may be graded 	<p>A. Classroom</p> <ul style="list-style-type: none"> • Multiple sessions • Related to content • Objective: more deeply learn content, develop authentic writing skills, assess writing skills, prepare for on-demand writing • Revised, formally evaluated, graded <p>B. On-Demand Assessments</p> <ul style="list-style-type: none"> • Timed setting • Objective: assess comprehension & writing • Formally evaluated, Scored



Mini WAG: *Teacher & Student Planning Tool*

Writing Task:

Write a mini-article that answers this question:

"What are some effects of not getting enough sleep and advantages to taking naps?"

Audience:

Assume that your piece might go in the school newspaper – write it with students in mind.

Purpose:

To support your learning of the content for science class.

To practice your writing skills.

Length:

6 to 12 sentences organized into 1 or 2 paragraphs.

Directions & Requirements:

- *Include a 1 to 2 sentence introduction and a 1 sentence conclusion.*
- *Include at least 2 effects of not getting enough sleep, and at least 2 advantages of napping.*
- *Include at least 3 transition words/phrases, underline them.*

Additional Information:

- *You will have an opportunity to collaborate with a partner to develop notes prior to writing your piece.*
- *A list of transition words/phrases will be provided by the teacher.*



Review the Annotated Text

- Which paragraphs contain relevant information?
- Information is underlined.

effects of not getting sleep

benefits of napping



Provide blank notes as a scaffold.

sleep and napping

Effects of lack of sleep

- Interrupted sleep: confuses internal clock
- Causes trouble concentrating
- Makes you grumpy

Benefits of napping

- Helpful for people with unusual work schedules
- Improves memory & mental performance
- Can reduce # mistakes tired person makes
- Helps brain function at higher level = better ideas, solutions, recall
- Happier & more alert
- Less likely to die of heart disease, lowers blood pressure



Notes to Writing

Napping can counter the effects of not getting enough sleep. When sleep is interrupted it confuses a person's internal clock. **One** effect is to cause you to have trouble concentrating. **Another** effect is that it makes you grumpy! That is why napping is helpful for people who do not get enough sleep because of unusual work schedules. Napping improves memory and mental performance. **This results** in a tired person making fewer mistakes. Napping has **also** been found to help the brain function at a higher level. This **in turn** leads to better ideas, solutions, and recall of information. **In addition** to making you happier and more alert, napping will lower your blood pressure and make you less likely to die of heart disease. There certainly is a case to made for taking naps!



Practice Activity: "Napping"

- Vocabulary tasks
 - *Previewing*
 - *Selecting words to teach in-depth*
- Comprehension strategies:
 - *Topic web graphic organizer*
 - *Two-column notes*
 - *Summary*
- Writing from sources
 - *Essay question response*



Keys to Literacy

- *Keys to Beginning Reading*
- *The Key Comprehension Routine (4-12 and K-3)*
- *The Key Vocabulary Routine*
- *Keys to Close Reading*
- *Keys to Content Writing*
- *Keys to Argument Writing*
- *Keys to Early Writing*
- *The ANSWER Key Routine for Extended Response*
- *Letterland Phonics*

Literacy Lines Blog

<https://keystoliteracy.com/blog/>

Free Instructional Resources

<https://keystoliteracy.com/free-resources/>



@KeystoLiteracy

