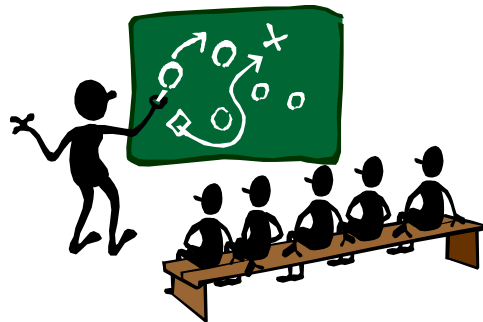


COMMON STRATEGIES, TIPS, IDEAS & INFORMATION TO ADDRESS PGMS SMART GOALS



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Analysis of NJASK 2011 Data

Grade 6:

- **Language Arts:** Students scored slightly **below** the DFG (district factor group) mean in all clusters.
- **Math:** Students scored slightly **below** the DFG mean in all clusters except in the area of data analysis, probability, and discrete math where they scored the **same**.

Grade 7:

- **Language Arts:** Students scored slightly **below** the DFG (district factor group) mean in all clusters except in the areas of reading, working with text, and analyzing text where they scored slightly **above** the DFG.
- **Math:** Students scored slightly **above** the DFG mean in all clusters except in the area of data analysis, probability, and discrete math where they scored the **same** and geometry & measurement where they scored **below**.

Grade 8:

- **Language Arts:** Students scored slightly **below** the DFG (district factor group) mean in all clusters except in the areas of reading, working with text, and analyzing text where they scored slightly **above** the DFG.
- **Math:** Students scored slightly **above** the DFG mean in all clusters except in the area of numbers & numerical sense where they scored **below**.

****Please note that in most cases the DFG mean is lower than the Just Proficient Mean (the number required to pass).***

Strategies That Most Impact Achievement

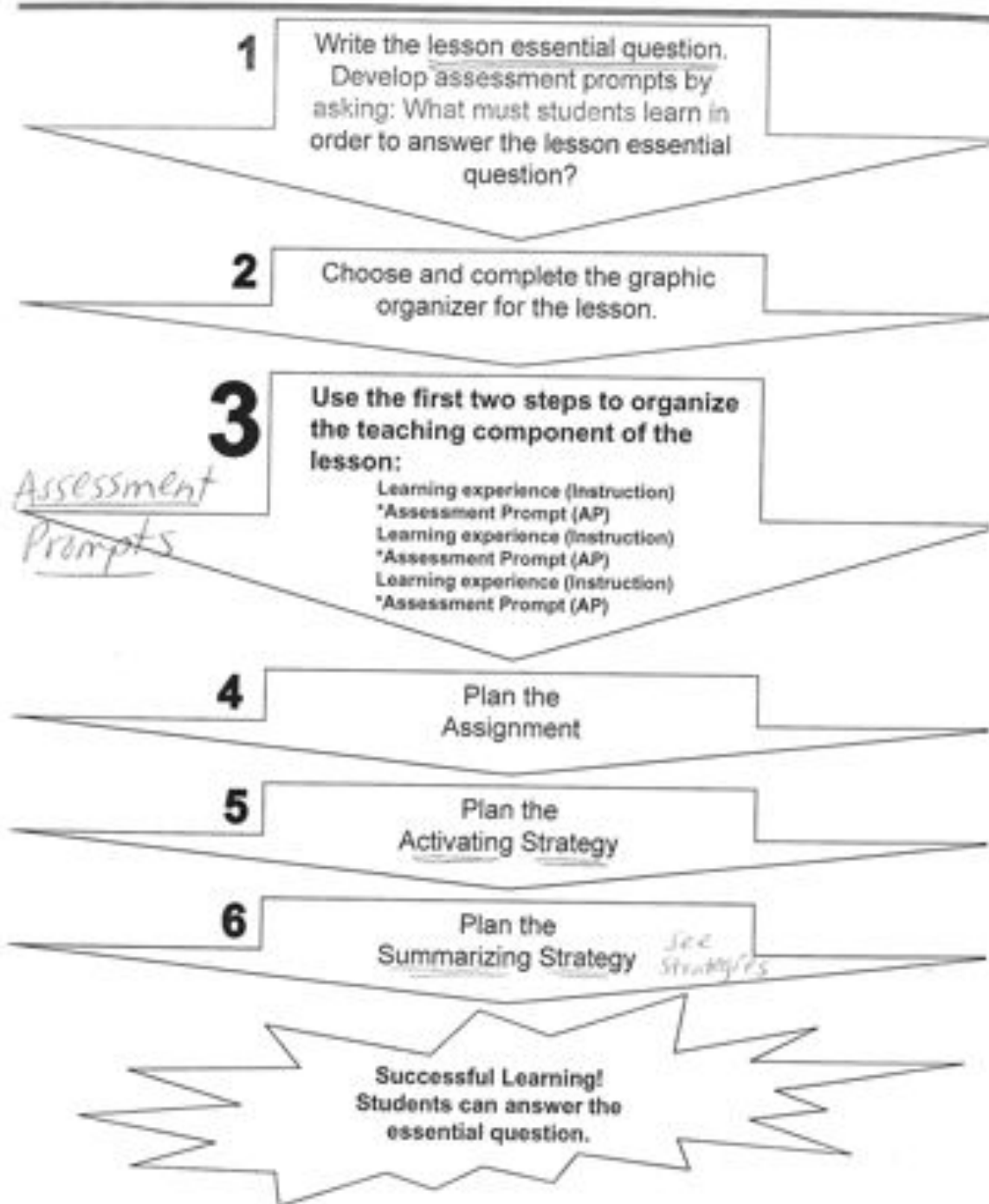
From a combination of meta-analysis research by Robert Marzano and MCREL and the U.S. Department of Education funded educational research, we now know the most important thinking strategies students should use to maximize their learning. Based on this research, over 30 strategies were found to influence learning and achievement, some in a very small way — some in a major way. These five strategies consistently show the strongest correlation between use and learning.

Rank of Effectiveness	Strategy	Percentile Gain in Learning With Application
1	Extending Thinking (compare/contrast, cause/effect, classifying, analogies/metaphors, error analysis)	45
2	Summarizing	34
3	Vocabulary In Context	33
4	Advance Organizers	28
5	Non-Verbal Representations	25

(Marzano and ASCD, 2001 & US Department of Education, 2002)

As you learn more about the LEARNING-FOCUSED Strategies Model, you will find that these five strategies are fundamental to the planning and implementation.

How do you plan an Acquisition Lesson?



Example Lesson Essential Questions

Science and Health

- How do I use the food pyramid to plan a meal?
- What forces contributed to the structure of Earth's surface?
- What happens to energy in a chemical process?
- How do factors contribute to _____?
- What is the difference in meiosis and mitosis?
- Why do people believe there is a "greenhouse" effect?
- How are elements arranged on the periodic table?
- How are _____ formed?
- How are energy and materials cycled through an ecosystem?
- In what ways does a _____ system change and evolve?

Social Studies

- What obstacles did the early settlers experience?
- Why did the Spanish establish settlements?
- Why did we call it the Cold War?
- What roles do individuals play in a free enterprise system?
- How is the American economy monitored and measured?
- What caused the race riots of the 1960s?
- What functions does a Spanish plaza serve in a Spanish society?
- What role did immigration play during the Industrial Revolution?
- What rights do we have today as a result of _____?
- Why did isolationism occur during the _____?
- How did the _____ Revolution affect people's lives?

Other Areas:

- How can increased flexibility increase physical performance?
- What is the difference in muscular and cardiovascular endurance?
- What are the characteristics of organic and inorganic fertilizers?
- What are the key signatures of minor keys?
- Who are the most prolific composers who laid the ground work for today's music?
- What is the difference in primary and secondary colors?

Assessment Prompts

What must students learn in order to answer the essential question?	What question or task will elicit evidence that they have learned it?
Distinguish goods and services	Sort word cards into goods and services
Identify human, natural, and capital resources	Identify the natural, human and capital resources in a photograph
Classify resources as human, natural or capital	Classify resources as human, natural, or capital on a graphic organizer

Assessment Prompts can be many formats:

<p>Written</p> <ul style="list-style-type: none"> Think-Ink-Share Quick Write Journal response Carousel brainstorm R.A.F.T. Math problems Error Analysis 	<p>Oral</p> <ul style="list-style-type: none"> Think-Pair-Share Numbered Heads
<p>Visual</p> <ul style="list-style-type: none"> Draw a diagram or sketch Create a visual symbol Complete a graphic organizer Think-Sketch-Share 	<p>Show Me</p> <ul style="list-style-type: none"> Word sort Classify items Mini-whiteboard ABCD cards Demonstrate



19 Hypothesis Guide

- ▶ Grades 4–12
- ▶ Social studies and science

Especially useful for the science classroom, the Hypothesis Guide is a visualization structure for the scientific method. Guiding the students through the process of formulating a hypothesis reinforces the main concepts that are integral to the creation of a question or idea. Once the students create the question or idea, which is a hypothesis, they can test and evaluate it. As always, it is beneficial to model the graphic organizer for the students. This graphic organizer can be especially useful for lab experiments.



Tips for Classroom Implementation

Name: Rita Smith
Date: 7-18-09

HYPOTHESIS GUIDE

Question How does water impact plant growth?
Information Food, sunlight and location can impact plant growth. Soil levels, nutrients and the amount of food information on plant growth.
Hypothesis I predict that if a plant does not get enough water, it will die.
Test the hypothesis/data Use plants in two different amounts of water. Control group: 3 plants with less than the required amount of water and 3 with more than the required amount of water.
Results The plants that received less water did not grow as well as the ones that received the correct and recommended amount of water.
Conclusions Plants need different amounts of water to grow well and the plants that received the recommended water grew the best.

A scientific experiment may comprise the following:

1. When you observe something, you may have questions about that phenomenon. State your **QUESTION**.
2. Gather as much **INFORMATION** as you can about your question.
3. Find out what information has already been discovered about your question.
4. Formulate a **HYPOTHESIS**. Write a statement that predicts what may happen in your experiment.
5. Test your hypothesis. Design an experiment to test your hypothesis.
6. Perform the experiment.
7. Collect **DATA**. Record the results of the investigation.
8. Summarize **RESULTS**. Analyze the data and note trends in your experimental results.
9. Draw **CONCLUSIONS**. Determine whether or not the data support the hypothesis of your experiment.

Name _____

Date _____

HYPOTHESIS GUIDE

Question

Information

Hypothesis

Test the hypothesis/data

Results

Conclusions

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Name _____

Date _____

ABC BRAINSTORM

Topic _____	
A _____	N _____
B _____	O _____
C _____	P _____
D _____	Q _____
E _____	R _____
F _____	S _____
G _____	T _____
H _____	U _____
I _____	V _____
K _____	X _____
L _____	Y _____
M _____	Z _____

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Graphic Organizers for Brainstorming and Idea Generation



Active

Brainstorm and Categorize

What Is It?

This strategy of brainstorming enhances typical brainstorming by creating categories of ideas. After brainstorming as many ideas as possible, students decide on main categories and sort the ideas into those categories. The categories and ideas should be charted and displayed during the lesson(s). Students should be encouraged to revise and add to the chart.

How Do We Get Started?

1. Introduce the new topic.
2. Have the students brainstorm ideas that they already know about the topic. One way to do this is to put the ideas on sticky notes or slips of paper.
3. After students have given all of their ideas, help them come up with categories.
 - After the categories are decided upon, list the categories on the board and have students put their ideas under the appropriate category (adhere the paper or notes to the board under the category).
4. Diagram what they have accomplished on chart paper or a whiteboard.
 - As students learn more about the topic, have them add more categories, ideas, and possibly revise the ones they started with.

Good ideas come from having many ideas.

It is no surprise that you cannot elaborate or revise an idea if there isn't one in the first place!

Brainstorm and Categorize Example

Rainforests		
Tropical	Parrots	Orchids
Trees	Rain	Canopy
Destruction	Amazon	Hot
Gorillas	Frogs	Medicines
South America	Reptiles	Equator

Rainforests		
Climate	Animals	Industry
Tropical	Gorillas	Destruction
Rain	Parrots	Medicines
Hot	Frogs	
Location	Reptiles	Plants
South America		Orchids
Amazon		Trees
Equator		Canopy

The Important Thing

Primary

The important thing about a map is that it shows where things are.

It shows land and water.

It shows highways and streets.

It shows cities and towns.

It shows the rides at Six Flags.

But the important thing about a map is that it shows where things are.

Secondary

The important thing about an element is that it cannot be broken down into other substances.

There are 109.

Some are in nature and some are man-made.

Scientists use chemical symbols made up of one or two letters to name them.

Some like curium are named for people.

But the important thing about an element is that it cannot be broken down into other substances.

The Absent Student

Dear _____,

Today we learned.....The most important thing we learned was.....

If you had been here you would have really enjoyed.... I hope that tomorrow we will learn

Your friend,

P.S. I'm wondering

The Important Thing

The important thing about

is

But, the most important thing about

is

Summarize



5-3-1

1. Write down five words (on your own):

2. The three words we decided on are:

3. The word our group decided on is:

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Activating Strategies, 16

Summarize

Summarize

3-2-1 Summarizer

A 3-2-1 Summarizer is a strategy for closure at the end of a lesson. The numbers refer to how many of each kind of summary statement or response you require students to provide. For example, you might ask students to record:

- **3 facts** they've learned
- **2 questions** they have or wonder about

- **1 personal connection** they can make to the information

As students pause for a few minutes to consider their learning, they are given a chance to reflect, organize their thoughts, summarize, prioritize important ideas, and, therefore, move the information into long-term memory.

Step-by-Step

1. At the end of your lesson, hand students a 3-2-1 Summarizer (page 24) or have them copy one from the board.
2. Ask students to reflect upon the lesson and respond to your prompts. The more focused the prompts, the better the assessment will be. A generic

prompt like "List three things you learned today" will not provide you with as good an assessment as "State three causes of the Civil War."

3. Collect the 3-2-1 Summarizer as students leave the classroom or ask students to deposit them in a box specifically marked "Exit Cards." (Tell students, "Today's Exit Card is your 3-2-1 Summarizer.")

Applications

The type of information that you ask for can be adapted to any topic or content area.

Social Studies:

- 3 Contributors of Greek civilization
- 2 Ways the Greek economy differed from the Egyptian economy
- 1 Way the geography of Greece influenced Greek life

English Language Arts:

- 3 Examples of prejudice in the book
- 2 Instances that show how the main character's prejudiced views have changed
- 1 Real-life situation in which you were affected by or witnessed prejudice

Science:

- 3 Parts (and functions) of a plant
- 2 Ways to keep plants healthy
- 1 Way Earth would be affected if there were no plants

Math:

- 3 Strategies for solving word problems
- 2 Important things to look for when solving word problems
- 1 Solution to a provided word problem

Teachers in one district I worked in modified this strategy to raise the level of thinking required. Integrating Bloom's Taxonomy into the three types of prompts, they suggested that "3" represent low-level knowledge/comprehension prompts, that "2" represent middle-level application/analysis prompts, and that "1" represent high-level synthesis/evaluation prompts. See page 23 for an example of integrating Bloom's Taxonomy into the 3-2-1 Summarizer.

3-2-1 Summarizer Using Bloom's Taxonomy

- 3 • Knowledge/Comprehension prompts:** "Provide 3"
(Examples, Facts, Ways, Reasons, Principles, Events, Characteristics, Features, etc.)
- 2 • Application/Analysis prompts:** "Provide 2"
(Causes/Effects, Comparisons (Similarities/Differences)
Steps in a Sequence, Connections, Advantages/Disadvantages, Benefits, etc.)
- 1 • Synthesis/Evaluation prompts:** "Provide 1":
What if ...? What is the significance of ...?
Which is better, ... or ...?
How would you prioritize ...?
Can you propose an alternative solution?
Can you create/design/invent a new ...?
Why is this important to know and understand?

Another variation of the 3-2-1 format is used in reading. Using the Question-Answer Relationship, or QAR (Raphael, 1986), teachers of reading can have students focus on four basic question-answer relationships: "Right There" questions (the answer is found in one sentence); "Think and Search" questions (the answer is found in more than one place; the reader needs to put ideas together); "Author and Me" questions (the answer is not in the text, but you need to think about what the author has said in order to respond); "On My Own" questions (the answer relies on your background knowledge of a topic, not the text).

A 3-2-1 Summarizer Using QAR

- **Provide 3** Right There questions for students to answer:
How many ...?
Who is ...?
Where did ...?
- **Provide 2** Think and Search questions for students to answer:
What is the main idea of this passage?
Why do you think ...?
What examples can you find of ...?
Compare and contrast ...
- **Provide 1** Author and Me or On My Own question for students to answer:
The author implies ...
The speaker's attitude is ...
In your opinion ...
Describe a time when you ...

3-2-1 Summarizer

Name _____ Date _____

3

■ _____

■ _____

■ _____

2

■ _____

■ _____

1

■ _____

Summarize

WriteAbout

Research has shown that summarization yields some of the greatest leaps in comprehension and long-term retention of information (Wormell, 2005). A WriteAbout is a concrete tool for summarization in which students use key vocabulary terms (the language of the content area) to synthesize their understanding in a paragraph as well as represent key ideas graphically. Combining both verbal-linguistic and spatial intelligences, this assessment tool is a favorite of many students.

Debra Steiner models a WriteAbout for her 5th-grade students using a poster-size version of a WriteAbout.



Step-by-Step

1. At the end of your lesson, provide a WriteAbout sheet to students (page 181). (TP: If you photocopy these pages on colored paper, they will be easy to find later when needed for studying.)
2. Model for the class how you would complete a WriteAbout. Depending upon the grade of your students, you may need to model several times. Brainstorm key words and draw a picture to represent the main idea.
3. Demonstrate how to write a summary using the key words on the list. Show students how you check off the terms as you use them and circle them in your writing.
4. Let partners talk and complete a WriteAbout together.
5. After a few practice opportunities with a partner, students should be ready to complete a WriteAbout on their own.
6. Collect this assessment and provide feedback to students. Provide a simple check or check-plus to indicate the individual's level of mastery. Share with your class what a check or check-plus means. (A check means that you understand most of the terms and ideas, but still have to master others. Please notice any circles, question marks, or questions that I have written on your paper to help guide your next steps in learning.)
7. Plan your instruction for the next day so that it fills any gaps in class understanding and/or includes flexible grouping for a follow-up tiered activity.

Applications

The WriteAbout is also a useful tool for homework. It provides an opportunity for students to synthesize the key understandings of the day's lesson.

Keep in mind, however, that this assessment is designed for a single concept within a larger unit. Don't use it, for example, to see what students have learned about the Civil War. Use it to see what they have learned about the Underground Railroad, the advantages held by the North or South, or Reconstruction after the war.

Teachers have used the WriteAbout paragraphs successfully with their "Expert Groups" in a Jigsaw review activity (See Dodge, 2006 for a more detailed

explanation about the Jigsaw Activity.) Briefly, students are assigned a Home Base Group and each is given a different subtopic, question, reading, or problem to complete. They then move into Expert Groups to work with others given the same assignment. There, each student completes his own WriteAbout. When he/she returns to the original Home Base Group, each Expert contributes his/her piece to the group's poster on the whole topic. This poster or product represents a group assessment. To check for individual understanding, follow up with several short-response questions.

TechConnect

Using a software program like Kid Pix or the free paint tool that comes with Windows, students can draw the pictures, symbols, or steps. Then, using the paint tool found in either program, they can write their paragraph.


Tips for Tiering!

In addition to the ideas on page 9, consider the following.

To support struggling learners: Duplicate the WriteAbout template with the vocabulary terms already printed on it. (Provide definitions, if you feel they are necessary.)

A WriteAbout: Animal Adaptations _____ Date _____

Draw a picture of each animal in the box to illustrate the term.



Write the vocabulary terms for adaptations.

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Paragraph: Summarize your learning by using the terms above. Be sure to check off the terms above as you use them. Circle terms below as you write.

(Adaptation) are a part of behavior and the ways animals survive in their environments like for (finding food). (Brown bear) adaptation for finding food is their sharp claws and big teeth. (Penguin) is the big flippers. Another adaptation is (having shelter). (Pocket gopher) get shelter by using its claws to dig holes.

Students use A WriteAbout to help them process the information they have been learning in a unit on animal adaptations. They check off the vocabulary terms and circle them in their writing as they use the key words in context. (This template is available on the CD.)

S-O-S Summary

An S-O-S Summary is an assessment that can be used at any point in a lesson. The teacher presents a statement (S), asks the student's opinion (O) (whether the student agrees or disagrees with the statement), and asks the student to support (S) his or her opinion with evidence. This summary can be used before or during a unit to assess student attitudes, beliefs, and knowledge about a topic. It can be used at points throughout a unit or lesson to assess what students are coming to understand about the topic. And it can be used at the end of a unit to see if attitudes and beliefs have been influenced or changed as a result of new learning.

S-O-S

- Read the following statement. _____
What does it mean?
- What's your opinion?
Circle one: I agree I disagree
- Support your opinion with evidence (facts, data, reasons, examples, etc.).

S-O-S Summary

Given the statement: Cara Fordy is a truthful reporter.

What does it mean? Cara Fordy only reports the truth.

What's your opinion? Circle one: I agree I disagree

Support your opinion with evidence (facts, reasons, examples, etc.)

- she was tagged on the topics before she puts it in the newspaper
- she has more information about the world's politics
- her newspaper never told a lie

S-O-S Summary

Given the statement: Mr. Larson is hard working.

What does it mean? Mr. Larson works hard.

What's your opinion? Circle one: I agree I disagree

Support your opinion with evidence (facts, reasons, examples, etc.)

- he didn't sleep
- he drinks coffee and sits at his desk
- doesn't care what the kids in his class are doing

This fifth grade student is using the S-O-S Summary to practice writing an English Language Arts essay on characterization—without all of the writing. Reacting to the given statement, she provides her opinion with brief, bulleted responses, supporting her opinion with evidence. (This template is available on the CD.)

Step-by-Step

1. Provide students with an S-O-S Summary sheet (page 21).
2. Write a statement (not a question) on the board for students to copy. This activity works best when the statement is one which can be argued from two points of view (see sample statements in box below).
3. Give students five minutes to agree or disagree with the statement by listing facts, data, reasons,

examples, and so on that they have learned from class discussion, reading, or media presentations.

4. Collect the S-O-S Summary sheet to assess student understanding.
5. Make decisions about the next day's instruction.

Applications

The S-O-S Summary is excellent practice for essay writing without all of the writing. It helps students choose a point of view and support it with evidence presented in brief bulleted points. Teachers can use it frequently because it requires much less time than an essay—both to write and to assess.

The S-O-S Summary is also good practice for students who are required to complete DBQs (document-based questions) in social studies, write critical-lens essays in English Language Arts, or ponder ethical dilemmas in science. Each of these tasks requires students to take a stand on a particular issue and support their point of view with evidence, facts, and examples.

Sample Statements

- The main character is a hero.
- Recycling is not necessary in our community.
- If you are young, it's not important to have good health habits.
- The city is the best place to live.
- The Industrial Revolution produced only positive effects on society.
- You don't need to know math to live comfortably in the world.

Tips for Tiering!

In addition to the ideas on page 9, consider the following:

To challenge advanced learners: If you have a mature class, capable of independent, critical thinking, you can make this activity more complex. Ask half of the class to agree with the statement and the other half to disagree with it; have students complete an S-O-S Summary from their assigned viewpoint. Then hold a debate. Have the two groups stand on

opposite sides of the room with their S-O-S Summary in hand and encourage the two sides to defend their opinions orally by using all of the facts, data, and examples they have written. Then, ask students to return to their seats and write the very best argument they can for the opposite viewpoint. This is an excellent exercise for developing listening skills, arguing from a particular viewpoint, and deconstructing conflicts in literature, history, and everyday life.

S-O-S Summary

Name _____ Date _____

Read the following statement: _____

What does it mean? _____

What's your opinion? Circle one: I agree I disagree

Support your opinion with evidence (facts, reasons, examples, etc.).

-
-
-

Name _____ Date _____

Read the following statement: _____

What does it mean? _____

What's your opinion? Circle one: I agree I disagree

Support your opinion with evidence (facts, reasons, examples, etc.).

-
-
-

33 Cyber Vocabulary Detective

- ▶ Grades 5–12
- ▶ Social studies, English, science, health, mathematics

Oftentimes vocabulary words are assigned to students at the beginning of an instructional unit. This organizer prompts the students to find the assigned words on the Internet and to use this information to determine the meanings of the assigned vocabulary.



Tips for Classroom Implementation

**CYBER
VOCABULARY
DETECTIVE**

Name: Elmer Kight
Date: Jan 29, 2009

DIRECTIONS: As you look for your vocabulary words in the assigned Web sites, it is helpful to use the (PDA) provided. For each of the assigned vocabulary words, write the definition from the Web site where you find the word. Circle what the word might mean.

Web Site Name: _____ Word: _____

Vocabulary word	Sentence that includes vocabulary word	What might the vocabulary word mean?
Confounding	The global <u>confounding</u> market accounted for 20 billion in retail sales last year.	All types of candy
Capita	Americans consume 21% of <u>capita</u> candy per capita annually.	A prominent part
Abolished	Abolishing <u>positively</u> with the average consumption of 16 lbs...	Abolished
Discretionary	The global economy declines may have caused many consumers to cut <u>discretionary</u> spending.	To see do what you want with it
Penetrate	Some teachers can <u>penetrate</u> word.	To go through
Recession	Recession begins when the stock market crashes.	When there is no growth in the economy
Minutemen	In our school there are very few <u>minutemen</u> .	Fight

Give the students a list of Internet sites that will assist them in researching the vocabulary. The students can work in pairs to complete the organizer.

Here are some sites that I recommend for vocabulary research.

Dictionary.com. This site offers a standard English language dictionary.

etymonline.com. This site describes the origins of words rather than supplying a traditional or straight definition.

Word.com. Sponsored by Merriam-Webster, this site offers complete information about words.

I am a big fan of this strategy for many reasons. Effectively using technology in classrooms helps all kinds of learners. Exploring Web sites to learn and study vocabulary is engaging because it is highly visual and resembles what people do in the "real world" to gather information; further, many Web sites provide audio support, which is particularly helpful for English language learners and students who have speech or language needs. The audio-supported Web sites often provide pronunciations of the words and have auditory files for definitions and sample sentences.

Voc

Name _____

Date _____

CYBER VOCABULARY DETECTIVE

DIRECTIONS: As you look for your vocabulary words in the assigned Web sites, it is helpful to use the FIND command. For each of the assigned vocabulary words, write the sentence from the Web site where you find the word. Guess what the word might mean.

Web Site Name: _____

Vocabulary word	Sentence that includes vocabulary word	What might the vocabulary word mean?

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Voc

25 Vocabulary Slide

- ▶ Grades 5–12
- ▶ Social studies, English, science, health, mathematics

It is quite likely that most of us were taught vocabulary by being given long lists of words; we were required to write down the definition for each word and write a sentence using the vocabulary word. Once we had memorized these words, they were given on a quiz, usually on a Friday. Today we know that this is not the most effective way to teach vocabulary. Instead, vocabulary lessons must be contextual.

Simply put: the more students manipulate and use a new word, the more likely it will become part of their vocabulary. Vocabulary slides prompt students to use and apply newly encountered words. When students study fewer words in greater depth, as they do with the vocabulary slide, they are learning how language works. The sections of the slide require the students to examine the etymology and the part of speech, to find a synonym and antonym, and to use the word in an original sentence. These applications enable students to connect to and process the word through several tasks.



Tips for Classroom Implementation

Name Ella Wright
Date 30-Oct-09

VOCABULARY SLIDE

Synonym
Disseminate

Antonym
Permeate

Picture or icon of vocabulary word

Vocabulary word
Disseminate

Part of speech
Verb

Sentence using the vocabulary word
I disseminated my friend who wanted to go to the beach to not go for it was raining.

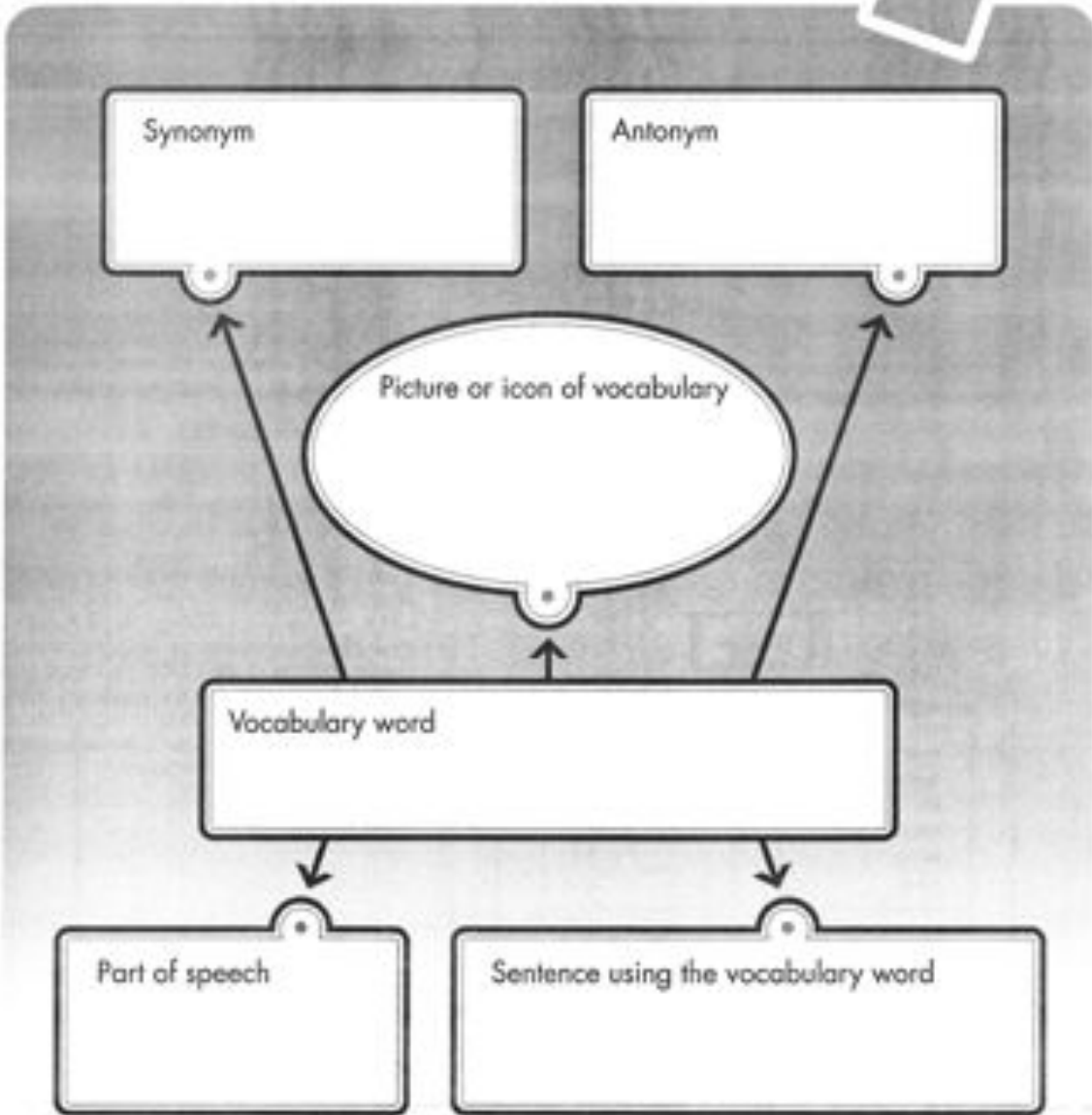
You can have students create vocabulary slides from self-identified words in the assigned reading, or you can assign words. You can also use the vocabulary slides as flash cards that the students use for review.

The first time that I required eleventh-grade students in a British literature class to create vocabulary slides, the students were a bit surprised when I asked them to draw pictures of the vocabulary words. What I noticed was that the students had to internally process the vocabulary in order to create visual representations of the words' meanings. As a result, I witnessed greater transference in the students' writing and improved ability to recognize the newly acquired vocabulary words.

Name _____

Date _____

VOCABULARY SLIDE



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Vac

32 Vocabulary Tree

- ▶ Grades 5–12
- ▶ Social studies, English, science, health, mathematics

This highly visual graphic organizer requires students to specify a root word and related words, a strategy that supports students in learning and understanding new vocabulary.



Tips for Classroom Implementation

Name _____ Write Below
Date _____

VOCABULARY TREE

Octogen Hexagen
Heptagen Pentagen
Decagen Tetradecagen
Polygen
Root Word

In addition to using this graphic organizer as a means to show how words can relate to a root word, I have also used this graphic organizer for expository writing. The students can use the main trunk for their thesis and the upper spaces to list details and evidence to prove the thesis.

I have also used the tree graphic organizer as a prereading activity. The students will write their main prediction about the text they are about to read on the trunk and then use the upper spaces for details and examples from the text to prove or disprove their prediction.

Voc

VOCABULARY **TREE**

Name _____

Date _____



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Graphic Organizers for Vocabulary Development



Voc

Vocabulary

HOW TO WRITE SENTENCES FOR YOUR WORDS THAT SHOW MEANING (CONTEXT CLUES)...

Follow these steps to do this correctly EVERY time!!!

1. First, look at the word and ask yourself, "Do I know what this means?"
2. If yes, go on to step 3. If no, please use a dictionary to look up the word! Make sure you know all the words in the definition.
3. Think of synonyms and/or antonyms for the word. You can use a thesaurus as a reference.
4. Use the synonyms to write a sentence that shows what the word means by using a word with similar meaning OR use an antonym in the sentence to show what the word doesn't mean. Underline the context clues that you've used to help you make sure you've used them. Remember, don't use any parts of the word in your context clues.

Ex. Doubtful...this word means full of doubt.

5. Have someone else read the sentence and see if they can figure out what the word means using context clues. If they can, you did a great job. If they can't, repeat steps 1-5.

Example: eccentric

1. This word means unique or different than others.

2/3. Synonyms would be unique, special, different.

Antonyms would be boring, same as, ordinary

4. The woman was eccentric when it came to her fashion sense; she always wore unique and different types of clothing.

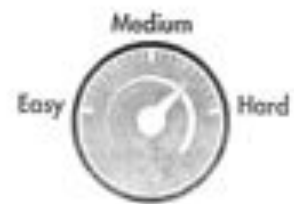
5. Based on my sentence, eccentric means unique and different.

74 The Five Ws

- ▶ Grades 5–12
- ▶ Social studies, English, science

Students will develop the following reading strategies:

- Connecting
- Using prior knowledge
- Predicting
- Monitoring
- Making inferences



Asking the five W questions is essential to any kind of inquiry. These are the five W questions:

1. What happened?
2. Who was there?
3. Why did it happen?
4. When did it happen?
5. Where did it happen?

These questions prompt students to explore the different elements of their reading. Through these questions, students will be able to identify the character and plot elements that will lead them to determine the author's major themes and ideas.



Tips for Classroom Implementation

Name: Ben Smith

Date: Jan 6, 2008

THE FIVE Ws

DIRECTIONS: Answer the following questions in the space provided.

"The Lucky and the Tame"

What happened?	A pig got 2 Aunt 1 = item, 1 = marriage, 3 more 1/2 = 1/2 for Aunt 1 & it pushed the pig out. He is open to the, very short unfaithful.
Who was there?	Wesley / Lady behind the door Pig
Why did it happen?	Because the pig found for Aunt 1 and a love together.
When did it happen?	Wednesd. Year / Spring Year
Where did it happen?	In a Newberkic country

Model how to answer the five W questions through a read-aloud with the students. This graphic organizer can be used by students individually, in pairs, or in groups.

Gr. Organ.

Name _____

Date _____

THE FIVE **Ws**

DIRECTIONS: Respond to the following questions in the spaces provided.

What happened?

Who was there?

Why did it happen?

When did it happen?

Where did it happen?

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Gr. Org.

94 What Happens?

- ▶ Grades 5–12
- ▶ All subjects

This graphic organizer supports students in outlining a narrative story.



Tips for Classroom Implementation

Name: Emily Ford
Date: Jan 8th

WHAT HAPPENS?

DIRECTIONS: Use this graphic organizer to organize the events that will take place in your story.

Draw a picture of the setting for your story. Make sure that you include WHO, WHAT, and WHERE.

What is the first event?
Alec boards aboard the pirate ship and is found by pirates and is taken to the bridge.

What is the next event?
The teacher (Alec) falls to rest (Alec is the large wooden) and the ship is taken by another pirate ship.

What is the last main event?
Alec and Alec escape and Alec has a treasure map.

Conclusion
They rescue the ship and the treasure supplies.

Model how to use this organizer; you might want to use a story that is the familiar to the students.



Gr. Org.

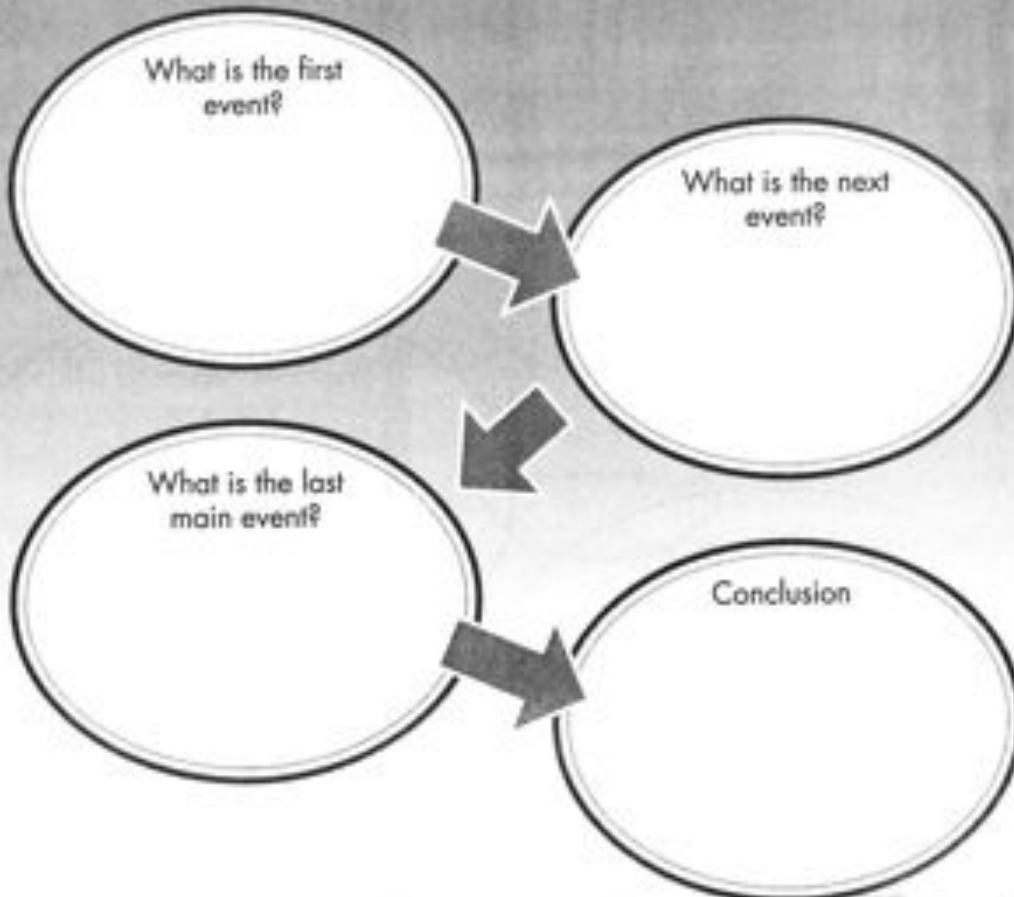
Name _____

Date _____

WHAT HAPPENS?

DIRECTIONS: Use this graphic organizer to organize the events that will take place in your story.

Draw a picture of the setting for your story. Make sure that you include WHO, WHAT, and WHERE.



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Gr. Org.

Noting What I've Learned

Noting What I've Learned is a simple note-taking strategy that can be used in all grade levels and across the curriculum. Adapted from my favorite new note-taking strategy, Column Note Taking, it utilizes the best element of this note-taking system popularized at Cornell University (Paik, 2000): two columns, one for main ideas and another for details. Keeping this basic format, I've added boxes so students can provide drawings and other nonlinguistic representations of the information, and I've enumerated the details to make outlining simple and inviting for beginning note takers (Dodge, 1994). This format of note taking with both

pictures and words is inviting to learners who are spatial and enjoy illustrating their ideas.

Used with struggling students or students new to note taking, Noting What I've Learned provides an introduction to a critical skill that students must master to be successful in school. Since students' organizational skills and ability to function independently vary greatly in a mixed-readiness classroom, you need to begin note-taking instruction with a very basic note-taking format and then offer alternative strategies and less structured formats when students seem ready (Dodge, 2005).

Step-by-Step

1. Provide students with a template of Noting What I've Learned to accompany a reading assignment (page 46).
2. If this is the first time your students are using this outline, provide them the Main Ideas, Questions, or Key Words for each of the boxes. (Each box should reflect one section of the reading.)
3. Read aloud one section from your textbook or other nonfiction text, and then pause. Give students two to three minutes to list details (facts, data, examples, evidence, and so on) supporting the main idea or to answer the question that is written in the box.
4. To provide students additional support with this note-taking instruction, you might allow partners first to talk for one minute to gather ideas before writing individually.
5. Have students share ideas as a whole class, so that all students can learn from one another.
6. Read the next textbook section aloud. Follow steps 4 and 5. Repeat until section is completed.
7. Show students how to use Noting What I've Learned as an effective study tool by folding the right side of the page over to meet the right side of the boxes. Students can then study by asking themselves questions and trying to answer them aloud without looking at the details underneath the folded paper. (See the sample on page 45.)
8. Change to a different activity for the rest of your lesson. You will want to practice this reading and note taking/sharing at least once a week for part of the class period. Over time, students will build their note-taking skills and will be able to read and take notes more independently.

Applications

This strategy can be used for listening comprehension, as well. As part of your lesson, you might give a PowerPoint presentation, show a video, or play a podcast (digital media files downloaded off the Internet). Every few minutes, stop for students to record what they have heard on their Noting What I've Learned organizer.

Once students have been given direct and guided instruction, as well as paired practice, they will be ready to use the Noting What I've Learned template on their own for homework. Frequent practice with this strategy will make better note takers of your students.

NOTING WHAT I'VE LEARNED
 Topic: A Time For Courage

DRAW IT Main Idea, Questions, Key Words	WRITE IT What I've Learned
	<ol style="list-style-type: none"> In the 1840s women ^{started} began to get the right to vote. Elizabeth Cady Stanton was one of the first people who organized the movement. In 1848 women started to get the right to vote.
<p style="text-align: center;">Abolition</p> 	<ol style="list-style-type: none"> Harriet Beecher Stowe and John Brown helped freedom of women. The American Revolution was the first time that women got the right to vote. Women just started to vote in April 18.
<p style="text-align: center;">Underground Railroad</p> 	<ol style="list-style-type: none"> William Lloyd Garrison was a leader in the abolition movement. It was not really a big railroad. Harriet Tubman escaped to freedom thanks to the Underground Railroad.
<p style="text-align: center;">The Civil War</p> 	<ol style="list-style-type: none"> The Civil War was another battle for freedom. The 13th Amendment was the first time that women got the right to vote. On April 15, the Confederacy surrendered to the Union.

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Students use the Noting What I've Learned outline to organize their notes for Social Studies. (This template is available on the CD.)

TechConnect

Have groups of students plan PowerPoint presentations using the Noting What I've Learned graphic organizer as their prewriting/organizational tool. During presentations, have other students listen and record their own notes on a blank Noting What I've Learned outline.

Tips for Tiering!

In addition to the ideas on page 9, consider the following.

To support struggling learners: Continue to provide the main ideas, questions, or key words for these students as long as needed.

Provide the page number, paragraph, or section where students will find the details they will need.

Highlight sections of the text to help English language learners focus on comprehending a smaller amount of text.

To challenge advanced learners: Encourage advanced note takers to take notes in whatever format works best for them.

Noting What I've Learned

Name _____ Date _____

Topic _____

Draw It!

Main Ideas, Questions, Key Words

Write It!

What I've Learned

1. _____

2. _____

3. _____

1. _____

2. _____

3. _____

1. _____

2. _____

3. _____

1. _____

2. _____

3. _____

Picture Note Making

The Picture Note Making strategy makes sense for our diverse learners. It is both active and motivating, and it appeals to students who have spatial learning preferences. Additionally, it supports the research that suggests ideas are stored in our brain both verbally and in nonverbal image forms (Paivio, 1986).

Although not all learners find visualizing helpful in their learning, there are many who would not have access to the flow of ideas if it were not for the concrete images they can see (McLaughlin & Vogt, 2000). Visualization activities like Picture Note Making provide new opportunities for students to communicate about their learning, which is critical


to the social construction of meaning.

Students are given a Picture Note Making template (see page 55) and asked to write three important ideas that they have learned. On the left side of the page they are asked to visualize and then draw a picture to help them remember as much as possible about the topic or concept, including big ideas as well as details. (See example below.)

The pictures can be shared and discussed in pairs or small groups. The conversation about the topic or concept is usually rich in detail because of the variety of illustrations. The images help visual learners retain the information better than simply discussing the concept orally.

Picture Note Making How does electricity get from a power plant to our house?

Draw a picture to help you remember as much as you can about the topic.



List 3 important ideas about the topic:

1. The generators in power plants push the electricity through heavy duty power lines that leave the plant. The house that makes electricity, also wires called voltage.
2. A transformer is a device that changes the voltage of a current. The voltage of the current coming from a power plant is too low to send long distances.
3. When you plug some thing in the wall or an outlet 120 volts is it plugged in.

Picture Note Making helps these students make sense of what they've learned in a unit on electricity. Using both linguistic and non-linguistic representations ensures better retention. (This template is available on the CD.)

Step-by-Step

1. After a learning experience (a class discussion, demonstration, reading assignment, research activity, and so on), have students reflect and write about three key understandings ("big ideas") that they have learned about on the Picture Note Making handout.
2. After the writing is complete, allow an additional few minutes for students to sketch images related to the big ideas. (If time is short, you can ask students to finish the drawings at home and hand in the paper the following day.)
3. Collect the papers to assess student learning about the topic or concept. Provide brief comments to students as feedback.
4. Have students engage in a strategy called *Sketch to Stretch* (Short, Harste, & Burke, 1996), in which they use their pictures to share in small groups. As each student in the group shows his or her Picture Note Making illustration, group members verbally describe what they see and interpret the drawing for themselves. Finally, the writer-artist elaborates and gives his or her own interpretation of the images.

Applications

If you use Picture Note Making several times throughout a particular unit of study, you can have students collate their pages afterwards and put them together to create a book on the topic.

Some teachers I have worked with use Picture Note Making as a follow-up to school-wide assembly programs, a visit from an author, or a field trip.

Other teachers use this strategy as a follow-up to a video or their own PowerPoint presentations to assess what their students have learned.

TechConnect

Have students use Kid Pix software or the free paint tool that comes with Windows to illustrate their understanding in a large box. Students can then give three facts, understandings, or conclusions about the image.

Tips for Tiering!

In addition to the ideas on page 9, consider the following.

To support struggling learners: Suggest that students list any details they can remember (rather than asking them to record the big ideas).

Provide a list of big ideas from which students can choose or from which students can choose one to elaborate upon.

Supply students with pictures to help spark their memories and make the writing flow more easily.

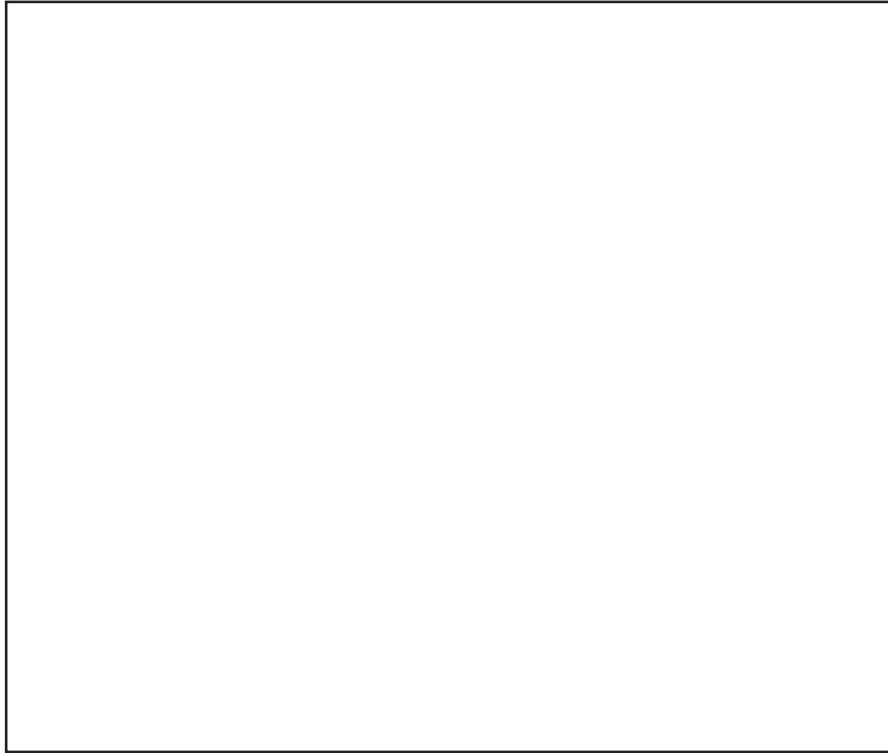
To challenge advanced learners: Ask students to use Picture Note Making to create a "how-to" booklet for other students to read and use (How to Be a Good Friend, How to Deal With a Bully, How to Keep Your Teeth Healthy, How to Recycle in Your Home, How to Solve Math Word Problems).

Picture Note Making

Name _____ Date _____

Topic _____

Draw a picture to help you remember as much as you can about the topic:



List three important ideas about the topic:

1.

2.

3.

QuickWrite/QuickDraw

QuickWrite/QuickDraw is an assessment tool that invites learners to explain their thinking through both writing and drawing. Because this assessment includes both linguistic (left-brain) and nonlinguistic (right-brain) representations, it offers teachers a view into the thinking of learners who might have a preference for one mode of thinking over the other. Matzano et al. advise us that the more we use both systems of representation, linguistic and nonlinguistic, the better we are able to think about and recall knowledge (2001).

On the right side of the page, students write as they analyze information and break it down to show their understanding. As students engage in this "quickwriting," they are able to develop their

ideas, reflect on what they know about a topic, and make connections (Tompkins, 1998). The writing side of the assessment engages learners in the process of *elaborative rehearsal*, which is necessary to increase the meaning of semantic information, as well as the likelihood of its retention (Wolfe, 2001). On the left side of the page, students draw symbols or images to synthesize what they know and to show relationships among the information. I find most students enjoy completing this assessment because there is a drawing component to it. The complete QuickWrite/QuickDraw serves as a good study tool later on for students with its memorable images and brief explanations.

Step-by-Step

1. Duplicate the QuickWrite/QuickDraw template on page 58; give one to each student.
2. Allow students to write and draw for between five and ten minutes to show their understanding of a particular concept you have identified. (It is interesting to note whether students write or draw first, as this is probably an indication of their preferred mode of expression. You can keep this in mind when, in the future, you're deciding which assessment strategies to offer students.)
3. Allow students to share their QuickWrite/QuickDraw assessments with one another in small groups as you circulate to listen in on the conversations. Encourage them to add to their own papers after listening to the ideas of their classmates (Tompkins, 1998). Ask them to include this additional information in another color, so they can see the process of their learning and the value of sharing ideas.
4. Collect this completed QuickWrite/QuickDraw and make notes about any misunderstandings or gaps in student understanding. Form a needs-based group to follow up the next day, if necessary.

Tips for Tiering!

In addition to the ideas on page 9, consider the following.

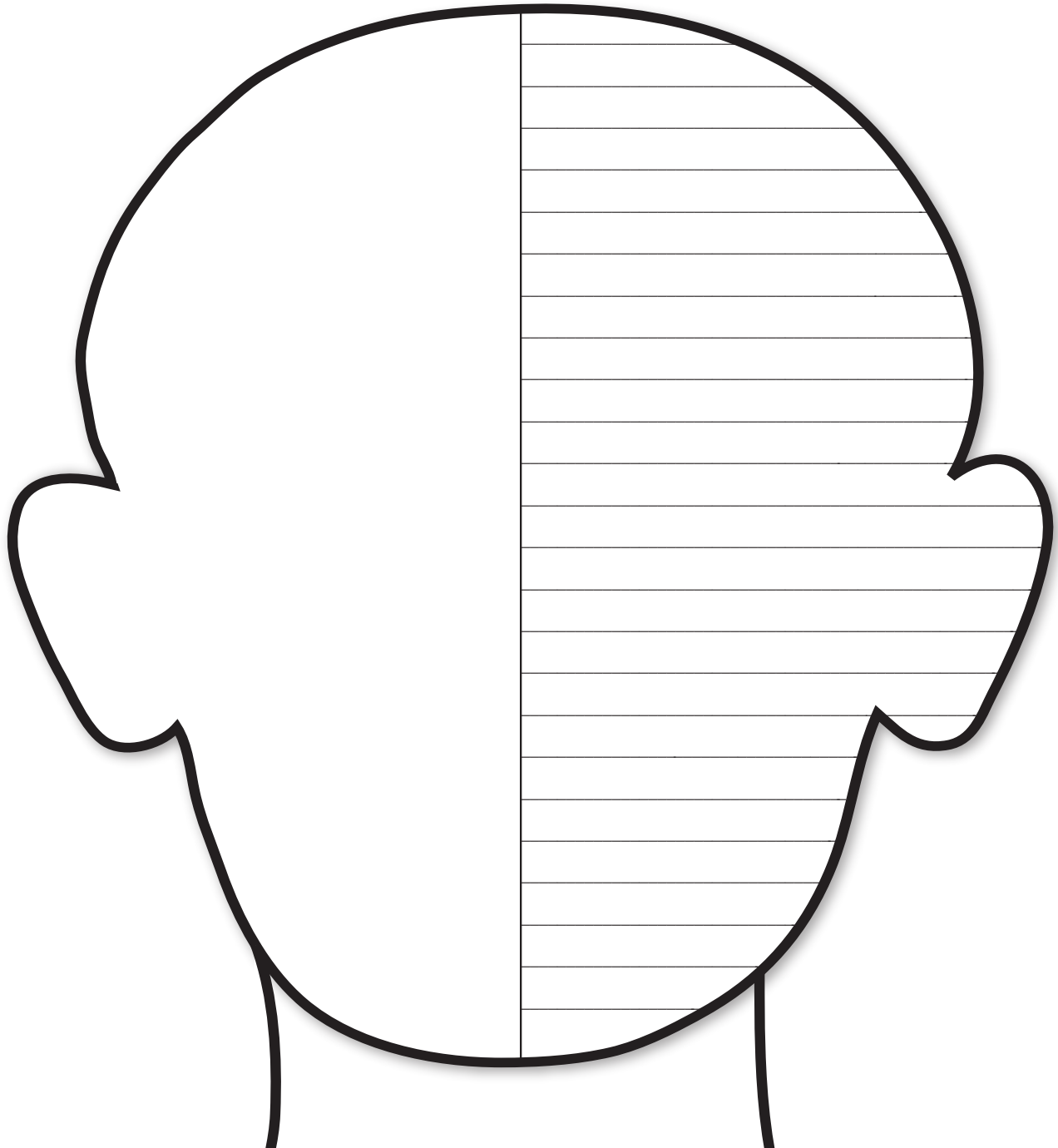
To support struggling learners: Provide written steps or explanations and ask that students create an illustration to represent the information nonlinguistically.

Provide the illustrations and ask that students describe them in words.

Allow two students to work together on a QuickWrite/QuickDraw, with one student writing and the other illustrating.

Quick Write/Quick Draw

Name _____ Date _____



Unit Collage



A Unit Collage is a student-generated, ongoing, visual synthesis of a topic studied in class. It includes on one page a group of eight to ten drawings, symbols, captions, and so forth that capture the essence of a unit of study. Creating individual unit collages allows students to process information more deeply through their own synthesis of ideas, both visual and linguistic. The benefits of completing a Unit Collage are many. Because the collages are fairly open-ended, they

appeal to learners of different strengths and intelligences. Along the way, these collages serve as a check for student understanding and an opportunity for informal assessment. These collages will later serve as effective study tools and triggers for student memory. Some students choose to save the collages for years, keeping a visual record of some of the most important ideas, principles, and key concepts that they have studied in a particular class.



This teacher's colorful display of students' Unit Collages about the regions of the United States allows students to reference the information learned in past units as they work to make sense of new units of study. (This template is available on the CD.)

Step-by-Step

1. It is important to model for the class how to create a Unit Collage. If you are not comfortable with illustrating ideas yourself, engage one of your student artists to create the first one with you.
2. Take a poster-size sheet of paper and divide it into at least six boxes. Place the heading, topic, or title of the unit at the top of the page.
3. Throughout the unit, stop after discussing an important concept/subtopic and brainstorm with the entire class how you could illustrate the concept to make it memorable. Together, decide what vocabulary terms, phrases, or quotes should be included in addition to the picture or drawing.
4. Illustrate the particular concept you're working on, adding any important content-specific language that the class has decided is necessary to describe the concept accurately.
5. Continue with the study of the unit, which may take several more days, or even weeks, until its conclusion. Along the way, stop periodically to create a new block when you determine that it would be helpful to increase retention.
6. At the end of the unit, use the class-generated Unit Collage to help review the unit. (You may decide to have more than one poster page, depending upon the complexity of the unit.)
7. Students should now be ready to create their own individual Unit Collages for the next unit.
8. Before you photocopy the reproducible on page 62 for students to use, decide whether you want to run off the copies with subtopics or questions printed in each box. This is usually helpful for younger students or those with weak organizational skills.
9. Stop periodically throughout the unit for students to fill in a box on their collage. Midway through a lesson, brainstorm ideas with the class and then provide five minutes or so for students to individually complete the box as a check for understanding. Or you might give students five minutes at the end of the lesson as closure. Alternatively, you can assign one box for homework and have students share their collage the next day with a partner.

Types of Information/Visuals to Include on a Unit Collage

- Key understandings or concepts
- Formulas
- Principles
- Parts and functions
- Examples
- Pictures
- Symbols
- Themes
- Story elements
- Literary devices
- Quotes
- Tips and hints
- Key figures
- Turning points
- Major contributions
- Legacies
- Important events
- Content vocabulary terms

Tips for Tiering!

In addition to the ideas on page 9, consider the following:

To support struggling learners: Label each box on the unit collage with a key concept, quote, or example to guide students.

To challenge advanced learners: Leave the task more open-ended, allowing these students to determine what is important in the unit and how they should synthesize and record the information.

Have students make a connection that you did not discuss in class between two ideas in this unit, or have students compare something they learned in this unit with something they learned previously. Ask students to write each connection or comparison in one of the boxes on the Unit Collage.

(Eliminate this activity completely for this group of learners and substitute a more complex, higher-level task (see ideas for FactStorming on page 32 for more rigorous thinking activities).)

Applications

Group Unit Collages: While students will enjoy keeping their own individual Unit Collages, periodically place students in heterogeneous groups to complete a Group Unit Collage as a review for an entire unit. Provide a list of key elements that must be included in each of the groups' collages. Allow 20–30 minutes for groups to complete the task using any resources they have (textbook, notebooks, handouts, and so on). During the last few minutes of class, conduct a gallery walk for students to visit all of the posters.

If you are willing to let this activity take a little more time, it can be even more effective. Let student groups present the information on their

collages to the rest of the class. Then distribute a practice assessment with short response questions to each student. Allow students to take a "gallery walk," return to their seats, and complete the assessment individually. Permit students to go back to any collage for additional help in completing the assessment. This is, after all, a formative assessment, not a summative assessment. This practice strategy is for learning. The questions will help students continue to process more deeply the information they have been studying.

(On the CD, you will find another version of the Unit Collage.)

TechConnect

To create a digital Unit Collage, students can use PowerPoint to create one slide with seven or eight images. First, students will create a folder and save pictures as they scan them from their own drawings or download them from the Internet. Then, they will

create a background for their slide and insert onto the slide each picture that they've saved. Finally, students will insert a text box next to each image for description, summary, or analysis.



A science student uses the Unit Collage to create a visual summary on the topic of Matter.

Unit Collage

Name _____ Date _____









Subtopic/Question:	Subtopic/Question:
Subtopic/Question:	Subtopic/Question:
Topic	
Subtopic/Question:	Subtopic/Question:
Subtopic/Question:	Subtopic/Question:

Photo Finish



Photo Finish is a series of snapshot visuals that captures the essence of a topic. Spatial learners will welcome the

occasional opportunity to show you what they know through their own illustrations.

In the 1800's people used saddles and horses to travel.	In the 1800's the train was used to travel.	In the 1800's the Erie Canal helped people travel.	In the 1800's they rode on coaches pulled by horses.
			
Now 	Now 	Now 	Now 
Now we go on cars to get from one place to another.	Now we can go to any place we want to go.	Now we can travel so fast that we can go to any place in the world.	Now we ride buses to get from one place to another.

Through drawing and writing a Photo Finish, this student compares transportation in the 1800s with transportation now. (This template is available on the CD.)

I remember one fourth-grade student who was classified as learning disabled because of his difficulty with writing. I was visiting his class, and they had just finished a unit of study about communities. Knowing his strength was drawing, I asked him to make an illustration to show me his understanding of how the suburban, urban, and rural communities compared to one another. Had I asked him instead to write about those differences, I would have been

inaccurate in my assessment of what he understood conceptually. His very detailed sketches showed me his understanding of the different homes, jobs, lifestyles, and physical features found in each type of community. I remember how proud he was as I praised his deep knowledge and understanding. I decided to tell his teacher to work on his writing skills the following day, allowing him to bask in the good feelings he was experiencing during this moment.

Step-by-Step

1. As always, it is important to model for the class how to complete any new strategy. If you are not comfortable with illustrating ideas yourself, engage one of your student artists to create the first one with you.

2. Copy and distribute the Photo Finish reproducible on page 66. This version has eight boxes for illustration; you'll find alternative versions on the CD, or you may make your own.

3. Throughout the unit, stop after discussing an important concept and brainstorm with the entire class how you could illustrate the concept to make it memorable. Together, decide what vocabulary terms, phrases, or quotes should be recorded in addition to the picture or drawing.

4. Model your thinking about how you choose what key ideas to illustrate and how you will represent them. For example, after a unit on the three branches of government, I begin my modeling like this:

We have been studying the three branches of government, and I remember that the legislative branch makes the laws about trading, money making, and paying taxes. So, in the first box, I will write "legislative branch" and "laws." Then, in the second snapshot box, I'll sketch outline maps of the

United States and England with arrows indicating their trade. In the third box, I'll draw a picture of several bills (\$1, \$5, \$10, and \$20) and write "money making." Finally, I'll draw the dollar symbol with an arrow pointing to the word "government" to show that the legislative branch makes the laws about paying taxes.

5. Continue to model your thinking process as you complete a Photo Finish to show what you know about the executive and judicial branches of government.

6. Once you have guided students in developing meaningful nonlinguistic representations of information, you can give them practice doing this on their own. You might list four key ideas for students and allow them to brainstorm with partners for two or three minutes about which symbols or illustrations they could draw to represent the concepts. Then, give students just a few minutes to complete their individual drawings. (Some students could go on drawing forever, so be sure to advise them that these sketches should be brief and include simple art work, such as stick figures.) If you use a timer and say, "Pencils down!" at a given point, your slowest artists will soon understand that they have to start immediately and keep it simple. If drawing is difficult for some students, encourage them to try, but allow them to write about their understanding instead.

Applications

Give students the Photo Finish template (page 66) to assess their understanding of:

- Major contributions
- Characters/key figures
- Turning points
- Important events
- Examples of ... themes/story elements/literary devices/conflicts

- Different groups or categories
- Cause and effect
- Change over time
- Before and after
- Sequence/important events/steps
- Compare and contrast
- Beginning, middle, end

Tips for Tiering

In addition to the ideas on page 9, consider the following.

To support struggling learners: Provide students with a cause (in writing) and have them illustrate this cause and one effect. Or provide students with four pictures (four causes) and let them illustrate an appropriate effect for each.

Provide students with out-of-sequence sentence strips indicating steps, sequence, or change over time. Have them sequence the ideas and then draw an illustration to represent each of the ideas.

Provide students with several pictures. Have them sort the pictures to compare and contrast concepts. Explain to them that some of the pictures will not be used (this will encourage the students to think more critically than if they were engaged in a simple matching exercise). When they have chosen from among the pictures, let them paste the illustrations onto the Photo Finish template to show the comparisons.

To challenge advanced learners: Ask these students to use Photo Finish to show higher-level thinking by illustrating:

- Cause and effect
- Change over time
- Before and after
- Sequence/steps
- Compare and contrast

Kee in mind that some students will simply be unable to illustrate as a way of showing understanding. A Photo Finish, therefore, is not an effective assessment tool for everyone. When some students do poorly on this activity, it does not imply lack of understanding about concepts, but rather a discomfort with drawing. Since we are not trying to measure artistic skills in the content-area classroom, we should be prepared to provide these students with an alternate assessment strategy that requires writing instead of drawing, or one that provides the pictures for students to describe. Remember, it is important to have a repertoire of assessment tools so that over time you can gather accurate evidence of understanding from your diverse learners.

TechConnect

Using Photo Story (a free download from Microsoft.com), you can have students create a slide show by choosing digital photos and creating a descriptive audio track to run concurrently. If you want to add music, as well as audio, you can pull Photo Story into Movie Maker (it comes free with Windows XP and Vista) and add a music track to the background. For more info: <http://www.microsoft.com>.

Incorporating Writing into All Classrooms!



- **Incorporate all genres of writing into your lessons**
 - **Narrative-tell a story**
 - **Expository**
 - **Descriptive-describe things, events, people**
 - **Sequential/Process-describe things in the order that they happen or give step by step directions**
 - **Cause & Effect**
 - **Problem/Solution**
 - **Compare & Contrast**
 - **Persuasive**
- **Shared writing**
 - **As a class, compose a written response to a prompt together to model effective writing**
 - **Think-Write-Pair-Share-Compare:** present students with a question or topic, give them a few minutes to think about and write a response about the question or topic, match them with a partner to give them the opportunity to share what they've written and compare with their partner and come up with a collaborative response.
 - **Post-It Note Peer Share:** students work is posted or passed around the classroom with two different colored post-it notes attached (one color for positives, one color for suggestions for improvement). Each student in the class should read or review the work and provide their classmate with one positive comment about the work and one suggestion for how it can be improved.
 - **Round Robin Writing:** the teacher starts off the writing with an introductory/main idea sentence and then passes the page off to a student in the class who adds additional information/ideas and then passes it on to the next student. This continues until all students have had a chance to add to the document.
 - **Response Journals:** While students are reading (text, chapter, novel, article, etc.) give them a topic or idea to focus on while reading. Students should jot down any ideas, notes, details, etc. from what they are reading that they feel relates to the topic presented in their journals. When done reading, students will work in groups to share what they've written in their journals with each other and synthesize the information to compose a group response that will be shared with the class.

- **Write Around:** on blank sheets of paper write the topics/main ideas of the content students will be learning about. Group students in pairs, threes, or fours and provide each group with a different color marker or pen. Start each group out with one of the topic sheets and give them 1-2 minutes to jot down anything that they know, think they know, etc. about the topic. When time is up, topic sheets are rotated around the room. If students agree with something that was previously written by another group they should star it, if they disagree they should put an X or frown face and then explain their disagreement. When all sheets have been to all groups, class should discuss each sheet.
- **Remember to expect students' writing to be the same as if they were writing for language arts.**
- **Utilize the same rubrics for grading**
 - **6 point rubric for longer writing pieces**
 - **4 point rubric for open ended questions**
- **Work collaboratively with the language arts teachers on your team to grade student work.**
- **Use students' exemplary work as models for other students to use**
- **Provide writing scaffolds for struggling students: give students the introduction and conclusion sentences for each paragraph or fill in the blank sentences and have them write the rest of the essay. Slowly give them less help and eventually they will be writing on their own!**
- **Encourage students to use RACER when answering open ended questions. This is a strategy that they will be using throughout their school years.**
- **Provide students with varied supplemental reading material that supports the content they are learning about. Research has shown that students who are readers are better writers. Providing students with as much additional material as possible will help them to better learn the content and give them models of professional writing.**

Suggested Activities and Ideas for Writing Across the Curriculum

- Have students answer the lesson essential questions each day (summarizer) and the over-arching essential question at the end of the unit (OEQ)
- Create a balance between short informal responses (where spelling and grammar do not count), open-ended responses (timed and tested), and essay writing (lengthy multi-day responses that are edited and improved)
- Assign different writing genres: narrative, expository, descriptive, and persuasive
- Students should write to PUBLISH and display writing
- Have students use technology for writing and editing whenever possible
- Focus on HOW or WHY questions
- Use RAP and RACER format for open-ended questions; Use RAFT to analyze prompts
- Use state rubrics and give frequent feedback
- Use materials outside of textbooks (movies/films, webcasts, literature, paintings, music...) as inspiration for writing
- Give students a list several options of ways to prove competency/Provide choices within the parameters of the unit
- Decide on a note-taking method in your PLC and use it for all core classes
- Design multi-disciplinary units with PLCs and share the responsibilities of teaching and grading complex writing tasks (Ex: research projects, websites, or other multi-step project)
- Consider a NO-EXCUSE word list for all core subjects
- Special Education teachers can break larger writing assignments into smaller chunks and use task analysis

IDEAS for Informal responses:

- journals
- learning logs
- note-taking
- summarizers

IDEAS for OEQ:

Social Studies You are a **newspaper reporter** from the Atlanta Constitution covering the battle of Gettysburg. You have followed the battle and have now just listened to Lincoln's Gettysburg Address. Write a newspaper article for the people of Atlanta that will inform them of the results of the battle and its impact on the Confederate war effort. Describe the battle and its aftermath. Analyze the balance of power between the two sides as a result of the battle. Reflect on the sentiments of Unionists before and after Lincoln's speech.

Science You are a **biologist** hired as a consultant to The Nature Conservancy. Create a brochure for the general public that explains the Greenhouse Effect and its impact on worldwide climatic conditions. Analyze current data on the effects of greenhouse gases and predict the consequences of widespread global warming. Propose alternatives to improve the situation that are consistent with current positions held by The Nature Conservancy.

Math You are an **expert in fractions**. Create a chapter for a textbook to be used by 6th grade students that will instruct them in adding, subtracting, multiplying, and dividing fractions. Include an introduction that justifies the instructional method you chose.

Connect to the Real World:

Social Studies/Historian/Original research; Annotations for the publication of authentic historical documents; Catalogs of documents; Biographies; Interviews; Documentaries; Letters; Journals; Research grant proposals; Textbooks, Analyses of current events for policy consultations; etc...

Science/Biologist/ Lab reports; Descriptions of processes; Observations; Experiments; Letters; Journals; Environmental impact studies; Environmental policy "White Papers"; Research grant proposals; Original research; Magazine articles; Materials requests; Business presentations; etc...

Math/Computer Scientist/ Descriptions of mathematical theories; Technical documentation; Descriptions of computer languages; Letters; E-mail; Statistical analyses; Descriptions of algorithms; Project plans; Budget proposals; Business plans; Magazine articles; FAQs; New product ideas; Product specifications; Tutorials, etc...

Language Arts Literacy						
Writing						
New Jersey Holistic Scoring Rubric - Grades 6 and 7						
In scoring, consider the grid of written language	Inadequate Command	Limited Command	Partial Command	Adequate Command	Strong Command	Superior Command
Score	1	2	3	4	5	6
Content & Organization	"May lack opening and/or closing"	"May lack opening and/or closing"	"May lack opening and/or closing"	"Generally has opening and/or closing"	"Opening and closing"	"Opening and closing"
	"Minimal response to topic; uncertain focus"	"Attempts to focus" "May drift or shift focus"	"Usually has single focus"	"Single focus"	"Single focus"	"Single, distinct focus"
	"No planning evident; disorganized"	"Attempts organization"	"Some lapses or flaws in organization"	"Ideas loosely connected"	"Logical progression of ideas"	"Logical progression of ideas"
		"Few, if any, transitions between ideas"	"May lack some transitions between ideas"	"Transition evident"	"Moderately fluent"	"Attempts compositional risks"
"Details random, inappropriate, or barely apparent"	"Details lack elaboration that could highlight paper"	"Repetitious details" "Several unelaborated details"	"Uneven development of details"	"Details appropriate and varied"	"Details effective, vivid, explicit, and/or pertinent"	
Usage	"No apparent control"	"Numerous errors"	"Errors/patterns of errors may be evident"	"Some errors that do not interfere with meaning"	"Few errors"	"Very few, if any, errors"
	"Severe/numerous errors"		"Little variety in syntax"	"Some errors that do not interfere with meaning"		
Sentence Construction	"Assortment of incomplete and/or incorrect sentences"	"Excessive monotony/same structure"	"Some errors"	"Some errors that do not interfere with meaning"	"Few errors"	"Very few, if any, errors"
		"Numerous errors"				
Mechanics	"Errors so severe they detract from meaning"	"Numerous serious errors"	"Patterns of errors evident"	"No consistent pattern of errors"	"Few errors"	"Very few, if any, errors"
				"Some errors that do not interfere with meaning"		
Nonscorable Responses	NR = No Response		Student wrote too little to allow reliable judgment of his/her writing.			
	OT = Off Topic/Off Task		Student did not write on the assigned topic/task, or the student attempted to copy the prompt.			
	NE = Not English		Student wrote in a language other than English.			
	WF = Wrong Format		Student refused to write on the topic, or the writing task folder was blank.			

Language Arts Literacy	
Open-Ended Scoring Rubric for Reading, Listening, and Viewing	
Sample Task: The author takes a strong position on voting rights for young people. Use information from the text to support your response to the following.	
*Requirements: Explain the author's position on voting. Explain how adopting such a position would affect young people like you.	
Points	Criteria
4	A 4-point response clearly demonstrates understanding of the task, completes all requirements, and provides an insightful explanation/opinion that links to or extends aspects of the text.
3	A 3-point response demonstrates an understanding of the task, completes all requirements, and provides some explanation/opinion using situations or ideas from the text as support.
2	A 2-point response may address all of the requirements, but demonstrates a partial understanding of the task, and uses text incorrectly or with limited success resulting in an inconsistent or flawed explanation.
1	A 1-point response demonstrates minimal understanding of the task, does not complete the requirements, and provides only a vague reference to or no use of the text.
0	A 0-point response is irrelevant or off-topic.

*Requirements for these items will vary according to the task.

Mathematics Scoring rubric for summative assessment

Holistic Scoring Guide for Mathematics Open-Ended (OE) Items
(Generic Rubric)

3-Point Response

The response shows complete understanding of the problem's essential mathematical concepts. The student executes procedures completely and gives relevant responses to all parts of the task. The response contains few minor errors, if any. The response contains a clear, effective explanation detailing how the problem was solved so that the reader does not need to infer how and why decisions were made.

2-Point Response

The response shows nearly complete understanding of the problem's essential mathematical concepts. The student executes nearly all procedures and gives relevant responses to most parts of the task. The response may have minor errors. The explanation detailing how the problem was solved may not be clear, causing the reader to make some inferences.

1-Point Response

The response shows limited understanding of the problem's essential mathematical concepts. The response and procedures may be incomplete and/or may contain major errors. An incomplete explanation of how the problem was solved may contribute to questions as to how and why decisions were made.

0-Point Response

The response shows insufficient understanding of the problem's essential mathematical concepts. The procedures, if any, contain major errors. There may be no explanation of the solution or the reader may not be able to understand the explanation. The reader may not be able to understand how and why decisions were made.

Re-writing the rubric for analytic/formative use

3-Point Response

- a) complete understanding of the problem's essential mathematical concepts
- b) executes procedures completely and
- c) gives relevant responses to all parts of the task.
- d) few minor errors, if any.
- e) clear, effective explanation detailing how the problem was solved showing how and why decisions were made.

2-Point Response

- a) nearly complete understanding of the problem's essential mathematical concepts
- b) executes nearly all procedures
- c) gives relevant responses to most parts of the task
- d) may have minor errors
- e) explanation detailing how the problem was solved may not be clear causing the reader to make some inferences.

1-Point Response

- a) limited understanding of the problem's essential mathematical concepts
- b) procedures may be incomplete
- c)
- d) may contain major errors
- e) incomplete explanation of how the problem was solved
reader may not be able to understand how and why decisions were made

0-Point Response

- a) insufficient understanding of the problem's essential mathematical concepts
- b) procedures, if any, contain major errors
- c)
- d) may contain major errors
- e) the explanation not understandable
reader may not be able to understand how and why decisions were made

Re-casting the rubric for analytic/formative use only

	0	1	2	3
a) understanding of the problem's essential mathematical concepts	insufficient	limited	nearly complete	complete
b) procedures	if any, contain major errors	may be incomplete	executes nearly all	executes completely
c) relevant responses			to most parts of the task	to all parts of the task
d) errors	major	major	minor	minor, if any
e) how the problem was solved	<ul style="list-style-type: none"> • explanation not understandable • reader may not understand how and why decisions were made 	<ul style="list-style-type: none"> • incomplete explanation • reader may not understand how and why decisions were made 	<ul style="list-style-type: none"> • explanation not clear • reader may need to make some inferences 	<ul style="list-style-type: none"> • clear, effective explanation • shows how and why decisions were made

Using RACER to Answer Open-Ended Questions:

What is RACER? It is an acronym that will help you remember how to properly answer Open-Ended Questions.

RACER stands for:



RESTATE the question or prompt in your own words. This should be your first or introduction sentence. **DO NOT** just rewrite the question and put a period at the end!!! **DO NOT** use the word "because" in this sentence and **DO NOT** begin answering the question yet!



ANSWER the question. Start elaborating and explaining in the second sentence. Be sure to use transition words such as first, second, next, finally, etc. to show when you begin a new thought.



CITE: after you give your explanation, use examples from what you've read to support your answer. Look back at the text and find at least two details that support your opinion (your answer or the point you are trying to make).



EXAMPLES and ENDING: if you can, give EXAMPLES from your own life or from things going on in the world today (make connections) to support your answer. Make sure you END your paragraph with a closing sentence that will get the readers attention and wrap up your answer. **DO NOT** leave your answer without a proper ending. This is like forgetting to put the bread on your sandwich—all the good stuff will fall out and be a mess.



REMEMBER: reread your answer and check for any mistakes. This includes spelling, grammar, and punctuation. **DO NOT** start a sentence with words such as "AND", "BUT", "OR", "BECAUSE", or "SO". Use a separate paragraph to answer each question (one paragraph per bullet point).

A paragraph is a minimum of 5 sentences. NO EXCEPTIONS!!!



Following this format is a sure way to find yourself a winner at the finish line!!!

Using RAP to Answer Open-Ended Questions:

What is RAP? It is an acronym that will help you remember how to properly answer Open-Ended Questions.

RAP stands for:

R RESTATE the question in your own words. This should be your first introduction sentence. DO NOT use the word "because" in this sentence.

A ANSWER the question. Start explaining the answer to each question or bullet being asked. Be sure to use transition words such as first, second, next, finally, etc. to show when you begin a thought.

P PROVIDE EXAMPLES for all of the mathematical operation that you performed. Show all of your work. Make sure that show every step that you used in the process.

RAP

R Restate the question in your own words.

A Answer the question.

P Provide examples of your work.

RAFT

What is RAFT? RAFT is an acronym that stands for Role of the writer, intended Audience, Format, Topic.

1st-You will choose which role you will take when writing. What perspective will you write your piece from?

2nd-You will choose who your audience will be. Who will you be writing the piece for and who will be reading what you have written?

3rd-You will choose what type of format you will use to present your information. How will you organize your thoughts and present them to your audience? Remember, you must choose a format appropriate for the audience you are writing for.

4th-You will write your piece on a certain topic. What will you be writing about? This will most likely be provided for you.



The Elements of THIEVES

Title

- What is the title?
- What do I already know about this topic?
- What does this topic have to do with the preceding chapter?
- Does the title express a point of view?
- What do I think I will be reading about?

Headings

- What does this heading tell me I will be reading about?
- What is the topic of the paragraph beneath it?
- How can I turn this heading into a question that is likely to be answered in the text?

Introduction

- Is there an opening paragraph, perhaps italicized?
- Does the first paragraph introduce the chapter?
- What does the introduction tell me I will be reading about?
- Do I know anything about this topic already?

Every first sentence in a paragraph

- What do I think this chapter is going to be about based on the first sentence in each paragraph?

Visuals and vocabulary

- Does the chapter include photographs, drawings, maps, charts, or graphs?
- What can I learn from the visuals in a chapter?
- How do captions help me better understand the meaning?
- Is there a list of key vocabulary terms and definitions?
- Are there important words in boldface type throughout the chapter?
- Do I know what the boldfaced words mean?
- Can I tell the meaning of the boldfaced words from the sentences in which they are embedded?

End-of-chapter questions

- What do the questions ask?
- What information do they earmark as important?
- What information do I learn from the questions?
- Let me keep in mind the end-of-chapter questions so that I may annotate my text where pertinent information is located.

Summary

- What do I understand and recall about the topics covered in the summary?



THIEVES Bookmarks (front/back)

T.H.I.E.V.E.S.

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T.H.I.E.V.E.S. Practice

T: Read the title, and predict what the text will be about:

H: Look at all headings (& table of contents) and then turn two of them into important questions that you think the text will answer: (Why,...How...Explain...)

I: Use the introduction and first paragraph to predict the main idea.

E: Write down everything you know about the topic. Use additional pages, if necessary.

V: List three important visuals and predict how they will help you understand the text.

E: Read the end-of-chapter questions. What information do you think is important?

S: Summary – so what? Why do you think the author wrote this?



Resources

Dodge, Judith. 25 quick formative assessments for a differentiated classroom (2009). Scholastic: New York.

McKnight, Katherine. The teacher's big book of graphic organizers (2010). Jossey-Bass: San Francisco.

Learning Focused Materials

Read Write Think Website: www.readwritethink.org