

Critical Reading Lesson

Expanding (Foundations 3–6)

Instructional Model for AVID Elementary Teachers

First comet remains ever found

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Published 2013

AVID's Critical Reading Process

This lesson will follow AVID's critical reading process and will utilize the following strategies:

- 1.) Pre-reading
- 2.) Interacting with the text
- 3.) Extending beyond the text

AVID's WICOR Methodology

This lesson utilizes the WICOR methodology. The WICOR icon will be used throughout the lesson to communicate when an activity is using WICOR methods.

Writing

Inquiry

Collaboration

Organization

Reading

Critical Reading Strategy Focus:

Log in to avidweekly.org and click on the strategy buttons above this lesson on the monthly grid to access descriptions of the Critical Reading Strategies.

First and Second Reading

- "Marking the Text: Circling and Underlining Essential Information"
 - Identify and underline information relevant to the writing task.

- Common Core College and Career Readiness Standards
 - CCRA.R.1: Read closely to determine what the text says explicitly and to make logical inferences from it; and cite specific evidence when writing or speaking to support conclusions drawn from the text.
 - CCRA.R.8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

Third Reading

- "Charting the Text"
 - Describe (or chart) what the author is doing in a paragraph or set of paragraphs.
- Common Core College and Career Readiness Standard
 - CCRA.R.5: Analyze the structure of texts, including how specific sentences, paragraphs, and large portions of the text relate to each other and the whole.

Reading Prompt: In the graphic "First comet remains ever found," Kramers and Block describe a black pebble as evidence of the first comet remnant ever found. As you read the graphic:

- 1.) Underline key vocabulary words.
- 2.) Circle the significant facts about the comet.
- 3.) As you reread, use the Charting the Text: Three-Column Notes handout (attached to this AVID Elementary Weekly lesson) to record the following: In the first column, answer the text-dependent questions in order to summarize what the authors are saying in a selected section of the text, and in the third column, use the sentence frames to identify the authors' purpose in writing the selected section of the text.

Estimated Preparation Time: 30 minutes

Estimated Instructional Time: 150 minutes

Recommended Pacing: 3 days

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Pre-Reading

Developing Students' Understanding of the Subject (approximately 20 minutes)

List-Group-Label: This strategy allows students to build vocabulary knowledge as they label and categorize key words for a lesson or unit of study. *An option here is to provide students with a pre-determined list of vocabulary words or photographs related to comets.*

Select an important concept related to the graphic or unit of study. *Example: Comets*

- **List:**
 - Students brainstorm all the words that they think relate to the topic.
 - Display student responses on chart paper or sticky notes.
 - Add words to the list to deepen students' thinking.
- **Group:**
 - Divide the class into small groups. Groups sort words into categories based on important relationships.
 - Ask students to explain their reasoning.
 - Groups may ask each other questions and change their grouping based on new learning.
- **Label:**
 - Invite students to suggest a category label for the groups of words.
 - Discuss grouping strategies across small groups of students and then facilitate a whole group discussion.
 - Correct any student misperceptions while debriefing.

Drumright, M., Pengra-Anderson, K., Potts, T. (2016). *AVID Elementary Foundations: A Schoolwide Implementation Resource* (p. 350). San Diego, CA: AVID Press.

Building Vocabulary

(approximately 15 minutes)

Picture Dictionary:

- 1.) Preview the following concepts and vocabulary words, as well as any other words you find in the text that might be unfamiliar to your students. An option here is to pre-teach vocabulary and concepts to ELL students.

- 2.) Students make their own picture dictionaries. Each page has four sections.
 - a. Students create an illustration in the upper left corner.
 - b. Students write the definition in the upper right corner.
 - c. Students add a sentence using the word in the lower left corner.
 - d. Students write a familiar synonym in the lower right corner.

Key Concept:

- comet

Key Vocabulary:

- comet (section 1)
- remains (section 1)
- pebble (section 1)
- fragment (section 1)
- atmosphere (section 2)
- shock wave (section 2)
- silica glass (section 2)
- centuries (section 2)
- nucleus (section 2)
- orbiting (section 3)
- Meteorite (section 3)
- meteor (section 3)
- analysis (section 4)
- brooch (section 4)

ElWardi, R., Butler, M., Madigan, B., & Malo, C. (2006). *The Write Path English Language Learners Teacher Guide*. (p. 54). San Diego, CA: AVID Press.

Making Predictions (approximately 10 minutes)

Once students have had an opportunity to build prior knowledge through writing and speaking, they are ready to make some predictions.

- Hand out a copy of the graphic. Ask students to **survey the text** in order to determine the type and the purpose of the text.
 - Review Text Structure:
 - Fiction: Characters, setting, problem/solution, and plot
 - Non-fiction:
 - 1.) Cause and Effect: Discusses something that happened and why.

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- 2.) Sequence: Describes items, events, or steps to follow.
- 3.) Problem/Solution: Tells about a problem, identifies why the problem exists, and then gives one or more possible solutions.
- 4.) Description: Topic, idea, person, place, or thing is described by listing its characteristics, features, or examples.
- 5.) Compare and Contrast: Shows how two or more things are alike and/or how they are different.

• Review Text Features:

- Fiction: Title, illustrations, continuous text, paragraphing, and dialogue
- Non-fiction: Title, subtitle, photos, captions, diagrams, dateline, bold print, and headings

• Have students report on what they see. Ask them to scan the whole text in order to get an idea of its length. You could ask the following questions:

- What is the title of the text?
- Who is the source of the text?
- When was the text published?
- Are there subtitles?
- Is the text divided into sections? What is the length of the individual paragraphs?

• It's a good idea to have students **make predictions** before they read. Ask students to do the following:

- Read the title of the text and make predictions about the main idea.
- What will the text be about?
- Listen to at least one section of the text, as it is read aloud. What do we know about the text that we did not know before?

• After spending some time looking over the text, **ask students questions that will help prepare them as readers.**

- What am I being asked to do while I read?
- What is my reading purpose?
- Can I write on my text?
- How much time will I have to read?
- What will I be doing with this information?

LeMaster, J. (2011). *Critical Reading: Deep Reading Strategies for Expository Texts* (pp. 14–17). San Diego, CA: AVID Press.

Interacting with the Text



Instructions for the lesson are provided in this section. Project or display the lesson in front of the room to model and support the following activities.

Reading Rates:

What are they?	When do I vary them?
Scanning (looking for main ideas)	This strategy works best when you are looking for key words, vocabulary, or items of interest, such as an overview or a specific bit of information. It is not essential to read every word.
Skimming (pre-reading)	This strategy works best when you want to identify a main topic, identify key relationships within a topic, or grasp the general idea of the reading. While every word is not read, wording around key topics is read quickly to capture the gist of the information.
Rapid Reading (speed reading)	This strategy works best when you are looking for main ideas and the supporting details, or for specific information. Read all words at an extremely fast pace.
Slow Reading (reading for note-taking)	This strategy works best when you are taking notes or reading material for the first time. Read all words, checking for understanding of the information.
Careful Reading (reading for precision)	This strategy works best when you are taking detailed notes, learning specific steps or procedures, or critiquing a work. Read all words to absorb details and understand content.

McAndrews, S. (2013). *AVID Elementary: Bridges Implementation Resource* (p. 196). San Diego, CA: AVID Press.

First Read: Numbering Sections

(approximately 15 minutes)

Suggested Reading Rate: Skimming

- 1.) Have students read the text once without marking or writing in the margins.
- 2.) Following the initial read, go over the “Marking the Text” strategy with your students. (To access the “Marking the Text” resource, log in to avidweekly.org and click on the corresponding strategy button above

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this lesson on the monthly grid.) Students should have copies of this handout on their desks or the ideas from this handout should be available to them in some other way.

- 3.) Have students **number the sections**. If students are not familiar with numbering paragraphs/sections, we will want to help them number the individual sections. Be sure to number photographs, illustrations, maps, and graphs when numbering sections of an informational graphic.

Second Read: Circling and Underlining Essential Information (approximately 20 minutes)

Suggested Reading Rate: Slow Reading

Note: Depending on your students' skill level, you may want to work through a few sections as a class. You might also reduce the amount of rereading students do by directing them to specific sections that contain essential information. Consider having your students work in pairs as they learn how to circle and underline essential ideas in a text.

Circling Key Terms

- 4.) Here are a few key words that students should identify and circle.
 - a. Section 1: "comet" and "black pebble"
 - b. Section 2: "yellow silica glass" and "Rocky nucleus"
 - c. Section 4: "glass deposit"

You may be able to find additional key terms in the text that are not included in the list above. Identifying these words will help students summarize the text either verbally or in writing.

Underlining Essential Ideas

- 5.) Here are some essential ideas that students should identify and circle.
 - a. Section 1: "first definitive fragment ever found of a comet"
 - b. Section 2: "Comet entered atmosphere"; "shock wave heated sand"; "Sand melted into yellow silica glass"; and "Rocky nucleus of comet melted"
 - c. Section 3: "Comet – ice and dust ball orbiting sun" and "Meteorite – Rocky or metal fragment from meteor impact"

- d. Section 4: "New analysis of a black pebble... determined that it was the comet's nucleus..."

You may want students to underline additional ideas that are not included in the list above.

Third Read: Charting the Text

(approximately 30 minutes)

Note: Engage your students in pair-share and small group activities as they work through the sections. Analysis of individual paragraphs may vary.

- 6.) For this third read, have students use the Charting the Text: Three-Column Notes graphic organizer. The graphic organizer includes built-in scaffolds to help students organize their charting statements.
- 7.) In the first column, summarize what the author is saying in each section of the text. In the third column, identify the author's purpose. The middle column is used to display a selected text or passage.
 - a. Scaffolding for Emerging (Foundations K–2) learners: Chart the text as a whole group during read-aloud time.
 - b. Scaffolding for Expanding (Foundations 3–6) learners: Jigsaw activity: Break the class into collaborative of groups of 2–4 and assign select sections to each group. Students work within groups, using the "Charting the Text" strategy for their assigned section(s) of the graphic. Groups share their "Charting the Text" responses with the other groups in the class.
 - c. To learn more about "Charting the Text," refer to the "Charting the Text" strategy resource. To access this and other Critical Reading Strategies resources, log in to avidweekly.org and click on the strategy buttons above this lesson on the monthly grid.

Extending Beyond the Text



Closing activities do not need to be process papers, or writing assignments that go through multiple drafts. As students learn how to read more critically, we should give them opportunities to write brief analyses of what they read. These focused responses will help deepen their understanding of the texts they read while developing their academic writing skills. Writing or speaking exercises

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like the ones listed here can also serve as formative assessments, providing valuable feedback about what your students know and what they still need to learn.

- Have students write a paragraph that addresses the writing prompt. (*approximately 40 minutes*)

Writing Prompt: *In the graphic "First comet remains ever found," Kramers and Block describe the discovery of how a comet exploded over the Sahara Desert 28 million years ago.*

- *Identify the main idea of the graphic.*
- *Describe the process of how the comet entered the atmosphere and resulted in the formation of diamond crystals.*
- *Provide an example from the text to support your opinion.*
- Engage students in a "3-Part Source Integration" writing exercise. A 3-Part Source Integration is a statement that includes the title of the text, the author's name, author information, source material that is either paraphrased or directly quoted, and a brief statement explaining the significance of the paraphrase or quotation. The following is an example of a 3-Part Source Integration. (*approximately 15 minutes*)

Sample 3-Part Source Integration: *In "Ethanol's Failed Promise," Lester Brown and Jonathan Lewis, two environmental activists, claim that food-to-fuel mandates are causing damage to our environment (par. 3). This is important because as America moves toward energy independence, it must be vigilant to ensure that new energy sources do not cause new problems.*

LeMaster, J. (2011). *Critical Reading: Deep Reading Strategies for Expository Texts* (p. 170). San Diego, CA: AVID Press.

- **Stretch Journal:** Have students conclude the lesson with a personalized, written reflection. Engage students in a Stretch Journal activity to make connections to new learning and process what they learned through note-taking in a 3-column chart.

- First Column: What did we do?
- Second Column: How did we use it?
- Third Column: How will I use it in the real world?

Drumright, M., Pengra-Anderson, K., Potts, T. (2016). *AVID Elementary Foundations: A Schoolwide Implementation Resource* (p. 48). San Diego, CA: AVID Press.

Using the AVID Elementary Weekly Resources

Log in to avidweekly.org and visit the Teacher Resources page to access additional teaching tools.

Charting the Text: Three-Column Notes

Paragraphs	What is the author saying in the text?	Text or Passage	What is the author doing in the text?
1	What is the main idea of this section?	"... a black pebble from the Sahara Desert is the first definitive fragment ever found..."	The author summarizes the main idea of the text in the first section in order to...
2	What information is being described?	"Comet entered... hot shock wave heated... Sand melted... nucleus of comet melted..."	The author includes four supportive facts for the reader as a way of...
3	What did you learn about comets and meteorites in this section?	<p>"Comet – Ice and dust ball orbiting sun..."</p> <p>"Meteorite – Rocky or metal fragment from meteor impact..."</p>	The author contrasts a comet and meteorite in this section because...
4	What is the significance of the gold brooch?	"A gold brooch found in 1922 in the tomb of Pharaoh Tutankhamun has a polished yellow stone in its center..."	The author includes a photograph of the golden brooch in order to...

Science Matters

First comet remains ever found

A black pebble from the Sahara Desert is the first definitive fragment ever found of a comet that hit the Earth, according to a research team.

1

Comet entered atmosphere about 28 million years ago, exploded over Sahara Desert

2

Hot shock wave heated sand below to 3,600 F (2,000 C)

3

Sand melted into yellow silica glass over 2,300 sq. miles (6,000 sq. km)

The glass deposit has been known for centuries

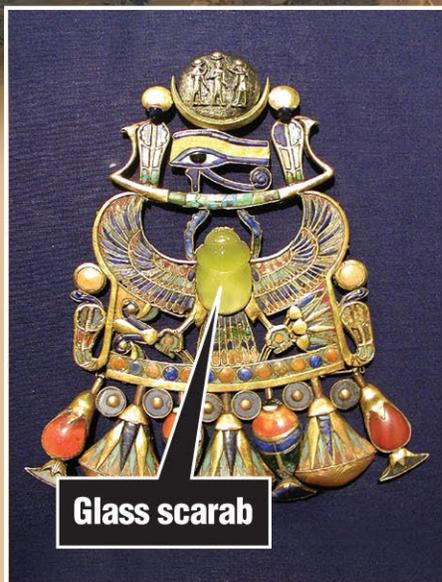
4

Rocky nucleus of comet melted; carbon in it formed diamond crystals

Comet Ice and dust ball orbiting sun; some hit Earth; no fragment has ever been found

Meteorite Rocky or metal fragment from meteor impact; many have been found

Sahara Desert



Glass scarab

Brooch found in the tomb of Tutankhamun

New analysis of a black pebble, collected years ago in the glass deposit, determined that it was the comet's nucleus – the first comet remnant ever found

What else the comet left

A gold brooch found in 1922 in the tomb of Pharaoh Tutankhamun (left) has a polished yellow stone in its center – part of the desert sand that was melted by the comet impact

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Source: Jan Kramers of the University of Johannesburg, David Block of Wits University (South Africa) Graphic: Helen Lee McComas