



Literacy Task Question Cards

Critical Reading in Mathematics

Instructions:

- The Group Facilitator reads the questions listed below to the group members.
- Each member silently reads the selected task.
- While members read, each makes notes of any suggested answers to the questions.
- After the allotted time, group members share and discuss their findings.

1. What does the title tell you?
2. What does the illustration/graph/chart tell you?
3. What are the mathematical terms?
4. What are the important facts and numbers?
5. How could you translate the written *story* into equations?

Literacy Task Question Cards

Close/Critical Reading in Mathematics

Instructions:

- The Group Facilitator reads the questions listed below to the group members.
- Each member silently reads the selected task.
- While members read, each makes notes of any suggested answers to the questions.
- After the allotted time, group members share and discuss their findings.

1. What do you already know about the topic?
2. What vocabulary is fairly new?
3. Does the context of the questions affect any *small words* in the task?
4. What graphics are included that may provide hints to the solution?
5. What are important facts and numbers?



Close Reading Defined

- Close Reading of text is an investigation of a short piece of text.
- Through **text-based questions** and discussion, students, are guided to:
 - ♦ Deeply analyze the text or written task
 - ♦ Create deep meaning for vocabulary
- The student's goal to gradually increase their own responsibility for learning.

Mathematics and Reading Martinez and Martinez (2001)

Students learn to use language to focus and work through problems, to communicate ideas coherently and clearly, to extend their thinking and knowledge and understand their own problem-solving and thinking processes.

Kathryn Sullivan (1982)

Research showed that even a brief program centered on helping students distinguish the mathematical usage of "small" words can significantly improve student mathematics computation scores.

Close Reading in Mathematics



*Close Reading of text is not only, or even primarily, an English language arts strategy. It is an effective strategy for deepening **content knowledge** and learning to read like an expert in all academic disciplines.*

Teacher Information

Common Core Literacy Impact on Instruction:

All students will be able to read increasingly complex texts and tasks proficiently and independently.

READING IN MATHEMATICS through Mathematical Practice Standards

Standards 3: Construct viable arguments and critique the reasoning of others

Standard 6: Attend to precision: Communicate precisely using clear definitions

(Students should be expected to use the proper mathematical language.)

Teachers need to understand and employ Close Reading:

- 1) What is Close Reading of text, and what are its essential attributes? How, and for what purposes, should teachers employ this strategy?
- 2) What is the role of background knowledge in the development of reading comprehension, and when should teachers activate and/or provide background knowledge?
- 3) What should teachers consider about Close Reading as they prepare to implement it in practice?

MOST Close Reading lessons will share the following attributes:

1. **Selection of a brief, high-quality, complex text.** Limiting the length of the passage allows students the opportunity to apply new skills and strategies through multiple readings of the text.
2. **Individual reading** of the text. Students unable to read the text independently might engage in a partner read or a group read in lieu of an independent attempt.
3. **Group reading aloud.** A group read aloud might be teacher- or student-led. This practice supports the engagement of all students, especially those who struggle with reading the text independently, and reinforces the primacy of the text throughout Close Reading lessons.
4. **Text-based questions and discussion** that focus on discrete elements of the text. Questions and discussion may focus on the author's word choices and repetition, specific sentences, literary devices, academic vocabulary, or particular passages containing information that is key to the curricular objective.
5. **Discussion among students.** These discussions, either in small groups or across the whole class, will ensure that the text—as opposed to personal reflections—remains the focus as the reader explores the author's choices.
6. **Writing about the text.** Students may be asked to reflect on the knowledge gained through Close Reading in short or long written passages.

Source:

Brown, Shelia. "Implementing the Common Core State Standards: A Primer on Close Reading of Text." *Aspen Institute*. (2012): 1-10. Print.

<http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/CR.Primer.print_.pdf>.