

MICHIGAN STATE UNIVERSITY: TE 846 ACCOMADATING DIFFERENCES IN
LITERACY LEARNERS

Lesson Plan Critique

A literary case study in vocabulary and reading comprehension

Stephanie Green

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Student and Classroom Background

Why teach reading strategies in a mathematics classroom? Many students who struggle in reading often struggle in other content areas as well. These struggling students further miss opportunities for success in core content areas because they are unable to fluently read and comprehend the texts applied in those classrooms. Mastropieri, et al. suggests, “content textbooks typically do not present material in a reader friendly fashion, but instead contain densely worded paragraphs that include an overwhelming number of concepts, facts and details with insufficient explanation.” (2003, p. 104). Due to this fact, students need to be taught explicit reading strategies in order to better understand their textbooks. (Standard I). Another aspect of reading in content areas focuses on standardized tests that all students are required to pass according to the No Child Left Behind Act. On these tests, students are expected to read and comprehend several word problems and then apply that knowledge in mathematical ways. In order to problem solve, students must be able to read and distinguish between pertinent information to determine the steps required to solve the problem. Students must understand not only the English patterns when they read write and speak, but also the language of the content area that they are studying. (Echevarria & Graves, 2003) This is ever-so true in the language of math when reading the directions may lead to incorrect diagnostics of how to solve the problem. If students have difficulty understanding the initial problem, then solving the problem becomes even more challenging. As a result, one can see the links between content vocabulary and reading comprehension to math proficiency (Standard II).

In order to better support my students growth in both reading and math, I conducted a case study that uses overt reading strategies in math class. For my mathematics reading lessons, I chose a student who is currently struggling in reading, (she is at a low 5th grade level according

to ED Performance Indicators- See Appendix E) but is at grade level in mathematics. The student I selected for my case study is Amyani Harmon. Amyani is a female African-American student, eleven years old, and currently in the sixth grade. Her primary language is English and she is not learning disabled. She is however, enrolled in an after-school program that offers homework help as well as math and reading supplementary instruction. She has had a tough childhood in her young life and has had to deal with the death of her father at six years old, and the loss of her mother soon after due to drug addiction. Amyani now resides with her grandmother as her mother is in and out of drug treatment programs. She has not had contact with her mother in almost three years. Even through these challenges at home, Amyani has a sunny disposition and she is always willing to help others around her. I have several reasons for selecting this student for my study. First of all, she is a reader who struggles with vocabulary, which in turn impedes her fluency and comprehension. Secondly, Amyani is motivated; she makes efforts to do well in class. She completes in-class assignments and homework assignments, but lacks support at home. Thirdly, this student lacks confidence, and if she is unsure of an assignment, she will not seek help on her own. It is my hope that extra support will improve her reading achievement and thereby build her confidence (Standard III).

Learning Process and Analysis:

With the intention of gaining an understanding of Amyani's interests, values and aspirations, I began my case study with a Reading Interest and Attitude Inventory (Appendix A) and a Reading Attitude Survey (Appendix B) that allowed me to glean information that Amyani thought of as relevant to her. We found a quiet place in our media center where she could complete the surveys on her own (Standard IV). Through the inventory, I learned that Amyani loves to sing, is a cheerleader for the Detroit Mustang football team, and roller skates after

school at a rink near her house. She also loves to collect dolls and most of her dolls have a “princess” theme. Her favorite book is in the *Princess Series* by Kirsten Boie, called the Princess Plot and her interests lie in that genre of writing. I also found that she enjoys having someone read to her and prefers not to read aloud herself, whether alone or in front of a group. From the Reading Attitude Survey (Appendix B), I could determine that Amyani had difficulty choosing the correct words to write for her responses and she also had difficulty being specific about what she thought was interesting about reading. I could also ascertain that she knew genres of books, but didn’t consider reading one of her favorite things to do.

Based on her interests, her EDPerformance Data, and her reading attitude surveys, I decided to assess Amyani using a 6th Grade Vocabulary Maze Assessment (Appendix C), and a Written Assessment of Comprehension Thinking Strategies (Appendix D1, D2, and D3) with the purpose of driving my future lesson planning (Standard II). In order to complete the Comprehension Strategies, she read “The Mystery of Pirate Ringhold’s Lost Treasure” from Scholastic’s *Math Maven’s Mysteries*. (Appendix F). The passage is leveled for grades four-six, so I intentionally chose this passage to pique her interest as well as her comfort level. I chose The Thinking Aloud: Written Assessment (Appendix D1) to define her ability to summarize the passage as well as determine her metacognitive abilities as she is reading. I chose the Determining Importance in Text: Written Assessment to further observe how Amyani picks out information when reading, and finally the Monitoring Comprehension: Written Assessment to discern if she knew strategies for comprehension if she ran into trouble when she was reading. From the assessments and the rubrics provided in module 7 (Appendix D4, D5, and D6), I was able to discover that Amyani makes several grammatical and spelling errors when writing her responses and uses phonetic spelling rather than conventional spelling. Due to this inaccuracy,

some of Amyani's responses were unconnected to the text and she either didn't understand the question, or didn't know how to compose her answer. She also could not pick out important pieces of the text, other than the title, and missed numbers within the text as well as important clue words. She did make strong connections between self and text and uses this as a strategy, along with sounding out words, to help her to create meaning when she is reading (Standard III).

As a result of her initial assessments, I developed two lessons that would focus on her vocabulary and comprehension needs (Standard VI). The first lesson, Math Vocabulary Webs (Appendix G), was designed to promote the use and understanding of the language associated with mathematics, since Amyani had trouble identifying key mathematical terms in text (Standard V). "An important part of teaching concepts is the use of graphic organizers. Such devices are designed to help students develop background knowledge and to grasp relationships among concepts." (Ehren, 2005, p.313). Within the lesson, I used whole class instruction to first model the activity of using the vocabulary web and then students were paired with a partner to complete the activity. I selected a student to pair with Amyani, who had a slightly higher reading and math ability. "For cooperative learning to be effective as a way to promote content-area learning, students who are more knowledgeable [than] others must be able to assist their peers." (Vaughn, Klinger, & Bryant, 2001, p. 70). I used the graphic organizer to facilitate understanding of important concepts by allowing Amyani to visually identify key points and ideas and help her classify ideas to communicate mathematical concepts more effectively. "Active teaching of words as part of larger semantic fields appears to improve the vocabulary knowledge and comprehension of students of all abilities." (Stahl & Shiel, 1992, p. 239). I also chose this lesson to support Amyani's knowledge of core-content vocabulary. The graphic organizer serves as an aid to help her organize her understandings because "graphic organizers

offer students an important visual for examining the lesson's core ideas.” (Blanchowicz & Fisher, 2004, p.66).

The vocabulary words given to Amyani and her partner were “reciprocal” and “ratio”. Each student pair was given 3 webs; one each to “think” and another one to write after they discussed each part of the vocabulary web as their “final web”. Within the graphic organizer, students are asked to come up with a group definition of the word, not just a dictionary definition since Stahl believes that dictionary definitions often thwart students’ knowledge of key vocabulary terms (2003). Instead, he suggests that offering both a dictionary definition and a student-created working definition helps students to understand multiple meanings of the word. “It appeared that effective vocabulary instruction includes both definitional and contextual knowledge, and that a “full” meaning of the word contains both aspects.” (Stahl, 2003, p. 244). Amyani’s initial definition of reciprocal came straight from the text glossary (Appendix H1), but after she and her partner discussed putting the term in their own words, she used the notion of a product of two fractions that equal one in her own words (Appendix H2). In her next vocabulary web for the word “ratio” she did not use the glossary definition (Appendix H3) in the thinking phase of the lesson, and likened comparing ratios to that of “dividing two numbers just like in fraction” using her prior knowledge of fractions to create meaning for this new concept. In the pairing phase, she was able to use her definition, along with her partner’s input, to revise her definition to something they could both agree on (Appendix H4).

The next part of the vocabulary web includes providing an example and a non-example of the word to facilitate meaning. Ehren believes that “providing examples and non-examples to enhance understanding and remembering of concepts is crucial to concept teaching.” (2004, p.317). Stahl and Shiel agree with this statement and ascertain that “children are taught that a

word's definition contains the category to which it belongs, examples, and descriptions. One can also add non -examples to the training.” (1992, p. 228). By doing so, Amyani can create the meaning for what the word is *not* and contextualize the word in various given situations. Both on her own and with a peer, Amyani was able to construct examples and non-examples for both words. (Appendix H1-4) (Standard VI).

Also included within this plan is to have students create pictorial representations of the word. According to Blanchowicz & Fisher, “you can reinforce student mastery of the selected words by connecting them to what students already know by having students demonstrate the words through acting, pantomime, and art.” (2004, p. 68). Having Amyani draw representations of words may help her to internalize the meanings of the words and remember them for future use. She had trouble coming up with a pictorial representation of “reciprocal”, but through a discussion with her partner they came up with a set of dominoes to represent the reciprocal of a number. (Appendix H1 and H2). She created a memorable comparison of grapes to apples to represent “ratio” and used her art for their final web (Appendix H3 and H4) (Standard VI).

Amyani also needed to elicit a real life scenario in which the vocabulary term may apply. “Students who engage with words by hearing them, using them, manipulating them semantically and playing with them are more likely to retain new vocabulary.” (Blachowicz, & Obrachta, 2005 p. 263). In creating these different scenarios, Amyani is manipulating the words and playing with them to “fit” her existing schemas of the word that she has built based on their partner word study/discussion. She has heard the words through the modeling technique and again through her partner collaborations. Gaskins, et. al. also reinforces the significance of students creating their own word situations. It is “important to put students in control of their own learning by guiding their discovery and induction processes as they analyze words...”

(Gaskins, et.al., 1996/1997, p. 326). Stahl goes on to support this analytical view of understanding by suggesting that “as children learn more words, they learn to think about the world in more sophisticated ways. It is this sophistication, rather than a particular group of words, that leads to understanding.” (Stahl, 2003, p. 247). In the thinking phase of the lesson, Amyani only described using the reciprocal of fractions in math class. With her partner, she was able to connect construction workers and measurement for the use of reciprocals in a real-life situation. (Appendix H1 and H2). For the vocabulary word, “ratio”, she was able to determine comparing prices as a real-world situation and added to this context in her final web the condition of finding a better buy (Appendix H3 and H4) (Standard VI).

Finally, Amyani shared with the whole class the vocabulary webs she had created with her partner to discuss their interpretations of the new words they have confronted. “By using whole-class discussion, the teacher can take advantage of the knowledge possessed by the high-vocabulary students in a natural, nonthreatening manner.” (Stahl & Shiel, 1992, p. 237). Using this approach, students teach each other significant aspects of the vocabulary terms and may guide Amyani to a deeper understanding of each of the vocabulary words (Standards II & IV). As Amyani was presenting, she identified each of her strategies for each aspect of the web and related the pictorial representation of “reciprocal” as a way to “teach her grandma about math” as they played the game (Appendix H2). This shows she has made a connection with the word and may be able to use its meaning appropriately when she encounters the word in the future. (Standard VI).

The ability to connect vocabulary to content knowledge is vital in comprehending the material at hand. In order to fully understand reading in the content areas, one must be fluent in its language. The second lesson I developed for Amyani, “Echoes in Roulette Problem Solving”

(Appendix I), combines two reading strategies for effective instruction in improving student performance in math. I chose to incorporate two strategies because lesson plans “teaching multiple strategies seem to have more promise than those that teach only one strategy, strategies should be taught in an integrated way with class content, and both teacher modeling and student independent practice seem to be important ingredients in improving monitoring and comprehension.” (Cromley, 2005, p. 195). I began this lesson using a small group, cooperative approach with Amyani and two other students in a controlled setting on my prep hour. I chose a quiet room to isolate my time with Amyani’s group and ensure both strategies were implemented without distraction so that students would feel engaged in their own discussions (Standard IV). Gambrell points out that “... social collaboration promotes achievement, higher level cognition and intrinsic desire to read.” (1996, p.22).

The first strategy I introduced was echo reading, a reading exercise wherein a teacher reads a passage aloud and the student reads it aloud immediately after, mimicking the teachers expression and pronunciation of the words. I began by explicitly explaining to students the nature of this exercise and that they should not only repeat the words I was saying, but also how I was saying them. Once my expectations were clear, I distributed The Pears Problem (Appendix J), and informed students we would echo read the problem a few times first, once with me and then again in their groups before we would solve it. I chose The Pears Problem because it has a “kingdom” theme and I thought that since Amyani showed interest in princesses, the problem might be motivational for her (Standard III). Gambrell asserts that “...supporting and nurturing reading motivation and achievement is crucial to improving educational prospects for children who find reading difficult.” (1996, p. 15). I initiated reading the problem first in small phrases, then gradually reading up to full sentences. I noticed that Amyani was skipping words when it

was the group's turn to repeat my longer phrases, and took longer to begin her recitation when my sentences were greater in length. I didn't want her to get frustrated, so I returned to shorter phrases to help her build confidence (Standard VI). When it was the groups turn, all students read in short phrases in the leader role and all students repeated the phrases without skipping words or hesitating in the repetition.

Once the group finished echo reading, I described the Roulette Problem Solving Strategy to the team. In this strategy, the group discusses a problem until they come up with a solution orally. Then the group writes out the solution sentence by sentence until all steps are written. Each member of the group writes one sentence and then passes the solution report to another person to write the next sentence of the solution. Once all responses are written, one member of the group solves the problem mathematically, based on the written sentences. I explained to students that they were to first try to solve the problem by discussing it. During this phase of the lesson, they were not to write anything down. I also reminded them of several problem solving strategies that they were already familiar with to use to help them solve the problem.

Kozminsky & Kozminsky suggest that "the prior knowledge of each reader varies from one subject matter to another and the level of that knowledge in any given area will affect his or her ability to apply meaning to the information given in the text." (2001, p. 188). Furthermore, I implied to students that choosing a strategy should be the first thing they discuss. Ivy ascertains that, "learning to read and reading purposefully requires more than just reading the words and that students also need both explicit and implicit instruction in comprehension for reading certain texts, not to mention a real reason for reading and writing." (2002, p. 235) By overtly guiding students to their starting point, they could begin their approach to solving an unfamiliar problem.

After they agreed on a strategy, I distributed the Roulette Problem Solving Sheet (Appendix K) and each student wrote the correlating response to solving the problem. Students had to write the steps in complete sentences and could not use symbols or actual numerals to represent any mathematical reasoning; all content had to be written in words. “Writing has been shown to be an effective tool for enhancing students’ learning of content material.” (Graham & Perin, 2007, p.20)

Writing in this way also provides students a unique opportunity to socialize and communicate ideas through written text. To maximize this prospect, students used The Pears Problem Solution Report (Appendix L). In this activity, students had to translate written sentences into mathematical statements and reason about their own problem solving techniques. Amyani’s role in this phase of the lesson was to read aloud the steps of the groups’ written responses and tell Khartier what to write in numerals and symbols. In doing so, Amyani had to critically think about the relationship between the words she was reading and the math she decoding. “Comprehension involves activating or constructing a schema that provides a coherent explanation of objects and events in the text.” (Ehren, 2005, p.312). Amyani showed her comprehension of the problem by correctly communicating her understanding to Khartier using mathematical representations (Appendix L). Students are regularly asked to perform deciphering activities as they try to solve word problems. Solving problems orally, and then writing out the solutions both in written language and mathematical language helps students to better comprehend not only the words and ideas in the text, but also the mathematical content that text describes. The National Council for Teachers of Mathematics states that

the development of a student’s power to use mathematics involves learning the signs, symbols and terms of mathematics. This is best accomplished in problem situations in which students have an opportunity to read, write, and discuss ideas in which the use of

the language of mathematics becomes natural. As students communicate their ideas, they learn to clarify, refine, and consolidate their thinking (p. 6).

Lesson Reflection and Analysis

In the Vocabulary Web lesson plan (Appendix G), I wanted Amyani to be able to write mathematical and verbal expressions, identify the multiple meanings of some common math terms, and share examples of words being used in both mathematical and real world contexts. I developed these objectives for Amyani based on her Vocabulary Maze Assessment (Appendix C) and her EDPerformance scores (Appendix E) which indicated that she struggled with vocabulary while she was reading text. The Ed Performance data opened my eyes to her vocabulary need as it determined that Amyani only reads and understands vocabulary 37% of the time she is reading. The score also indicates that Amyani is a below average reader overall and that 87% of her peers read at a higher level than she does. Knowing how she struggles with vocabulary, I decided to use a graphic organizer to help Amyani establish her thoughts about mathematical terms and have a strategy to remember these words when she sees them again. Additional research indicates that the use of graphic organizers is also valuable for teaching students how to represent vocabulary and problem situations in diagrammatic form, organize and remember content area information, and how to determine the necessary operation(s) needed to find a solution in a problem (Jitendra et. al., 2004). With the use of this tool, I believe Amyani has made these necessary connections for the two words she was assigned as shown in her vocabulary webs (Appendices H1-H4).

In addition to the graphic organizer itself, Amyani was able to put definitions of mathematical terms in her own words, use both examples and non-examples of the vocabulary

word and create meaning for the word by drawing a pictorial representation to help her remember the words in the future using a Think-Pair Share approach. In this strategy, Amyani was encouraged to think about her vocabulary term and then refine her understanding through a discussion with a partner. As evidenced by her webs (Appendices H1-H4), in the Think phase as well as the Pair and Share phase, she met these objectives.

In the second lesson, Echo's in Roulette Problem Solving (Appendix I), my learning goals for Amyani were to apply and adapt a variety of appropriate strategies to solve problems, monitor and reflect on the process of mathematical problem solving, both in written and oral form, and communicate her mathematical thinking coherently and clearly to others. I chose these goals for Amyani based on her clear difficulty in summarizing mathematical content, identifying important clue words in text, and monitoring her thinking as she is reading (Appendices D1-D6). "Setting high standards through implementing effective writing instruction sends adolescents a message that higher-level thinking about substantive material is important." (Graham & Perin, 2007, p.28). She also reflected a fear when reading out loud, especially in group situations (Appendix A), so I wanted to give her opportunities to read orally in front of others with guided support so she can build confidence as she reads aloud. Research has shown that students who "have more positive self-efficacy beliefs are more likely to work harder, persist, and eventually achieve at higher levels" (Linnenbrink & Pintrich, 2002, pg. 315). Providing Amyani with occasions to support self-esteem and awareness helps her gain assurance as she becomes a better reader.

In completing the lesson, I used cooperative small group instruction as well as direct instruction to support students in the activity. "Peer mediated instruction has been useful in improving engaged academic learning time, modeling correct answers, providing ongoing

feedback, monitoring progress, and increasing the quality of student verbal interaction around learning.” (Vaughn, Klinger, & Bryant, 2001, p. 67). I also chose a problem that incorporated princesses, since Amyani had shown interest in this theme (Appendix A) and it required students to think about and use several different strategies for solving the problem (Standard III).

Linnenbrink and Pintrich tell us that “students' own thoughts about their motivation and learning play a key role in mediating their engagement and subsequent achievement” (2002, p. 314). I also explicitly stated the objectives for the lesson and provided students with overt rules and procedures for using the echo reading strategy as well as the roulette problem solving strategy. “The practice of using content goals for reading instruction is motivating because such goals provide mastery goals for students and thereby increase interest and motivation.” (Guthrie, et al. 2004, p. 416).

The lesson structure was designed to give students multiple opportunities to discuss, communicate and monitor their thinking. “Readers of all ages who do little metacognitive monitoring when faced with a particular text will have trouble understanding that text.” (Cromley, 2005, p. 199) By requiring Amyani to summarize her problem solving technique by taking turns with her peers and monitor her comprehension as she translated the written terms to mathematical sentences, she used metacognition as a strategy to decode the problem (Appendix L). If students are not required to monitor themselves as they are reading in math, it becomes much more difficult to express their ideas about what they are reading in written form. By observing Amyani’s echo reading and listening to her group discuss how they were going to solve the problem, I was able to gauge Amyani’s communication skills. At the beginning of the roulette problem solving activity, it was difficult for Amyani to discuss her thinking without writing it down. I had to remind her several times not to write during this phase, but only discuss

what she was thinking as I observed her writing possible solutions on the Pears Problem reading. The mathematical processes she wrote down first and then discussed are evidenced in Appendix J. Pushing her to monitor her thinking and writing permits her to become a better learner in the process of reading. Allowing students to continue to monitor their comprehension will help them become more proficient readers. (Cromley, 2005).

If I were given another opportunity to teach these lessons again, I would change a few of the strategies I chose within the second lesson. Instead of working with the group in another room, I would use group instruction for the whole class. In this way, I could have each group exchange their written solution reports with another group who may have solved the problem using a different strategy. Students would then have to translate another group's work into mathematical symbols, requiring more higher-level thinking. Once students finished, I could have students record the mathematical version of the solution on the board to show students the variety of ways the problem was solved.

Another aspect I would change is the assessment I used. For the Vocabulary Web Lesson, I could have made a crossword puzzle or matching vocabulary quiz to see if Amyani truly made the connections her vocabulary webs suggest. In the future, I will need to test vocabulary as well as mathematical processes in my class. In addition, I need to conduct a survey with Amyani, as well as my other students, to determine which strategies for reading students enjoy the most. This could be done at the end of the year to guide my future lesson planning. Being informed of my student's needs and preferences helps me to identify the strategies that work, as well as those that do not work well for my students. As Klinger & Vaughn suggest, "students are competent curriculum analysts whose judgments about what they are learning and how they are learning can be determined (1999, p. 24).

Conclusion

Overall, although I cannot conclude that Amyani has made dramatic changes in her reading vocabulary and comprehension skill proficiency on these two lessons alone, I can determine that by continuing to adhere to the strategies used in the two lessons, Amyani has a higher likelihood of being able to understand mathematical terms in various contexts and comprehend mathematical problems, both oral and written, to better communicate her mathematical ideas. By continuing to use these strategies, Amyani will benefit by reflecting on mathematical content, deepening her understanding of vocabulary and word problems through clarification and rehearsal with a partner, and developing the necessary skills for small group discussion, such as listening actively, disagreeing respectfully, and rephrasing ideas for clarity. She also has the opportunity to gain confidence in reading aloud and practicing proper phrasing and expression while reading.

Both the echo reading and word problem roulette strategy were new to me, and incorporating them into my math class has been both a challenge and a unique success. Graphic organizers are one valuable tool for assisting middle school students with basic mathematical procedures and mathematical problem solving through organizing ideas and concepts. Using cooperative group learning where students take turns writing and discussing ideas was valuable for my students to collaborate in problem solving and see how their peers approach word problems and communicate those ideas. Having students' complete surveys on these strategies allows me to better gauge my teaching instruction and complete similar lesson plans for future units. "Students' views on which instructional adaptations and accommodations are most useful could assist teachers in identifying appropriate practices to implement, potentially increasing student involvement, understanding and motivation to learn. (Klinger & Vaughn, 1999, p. 24).

Continuing to use them in my class affords students the benefits of reading and writing in math class.

The importance of reading and writing cannot be overstated. “Throughout their entire lives, students will be using their ability to read and write to learn and to communicate. Certain disciplines, such as mathematics, may require students to develop special skills in order to read and write effectively in that discipline.” (Frietag, p.21) It should be important for the teachers in specific content areas to educate their students to learn and communicate in mathematics. As educators, it is crucial for us to remember that “learning to read is not natural or easy from most children. Reading is an acquired skill.” (Moats, 1999, p 10). By teaching our students reading and writing in each discipline, we can help struggling readers and writers develop the skills necessary to read effectively.

I have come to understand that I need to facilitate students learning in reading and writing skills within my math class in order for my students to become better mathematicians. If students do not comprehend what they are reading, how can I expect them to solve the mathematical problems embedded in their reading? By overtly teaching these strategies, my students can become better learners in all content areas. In order to meet my students comprehension needs, I will use modeling techniques that demonstrate essential writing skills that focus on the reading skills in addition to the mathematical skills I intend for my students to learn. In doing so, I can create an environment conducive to mathematical learning with deeper understanding on the language behind their mathematical thinking. Explicitly teaching my students to write will enable them to better understand the foundations not only of math, but those of reading and writing as well.

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Appendix A

Sample Reading Interest/Attitude Inventory

Name: Amysoni Harmon Date: 03/01/11

Answer the following questions to help me learn about you and about your reading interests.

A. Some activities that I presently enjoy doing are: **(Circle these)**.

B. Some activities that I am interested in trying or watching are: **(Underline these)**

- | | | |
|-------------------------------------|---------------------------|---|
| <u>jogging</u> | horseback riding | <u>gardening</u> |
| <u>roller skating</u> | tennis | raising animals |
| <u>board games</u> | sewing | showing dogs |
| <u>drawing/painting</u> | <u>listening to music</u> | swimming |
| <u>archery</u> | gymnastics | diving |
| cross-country skiing | ice skating | <u>dancing</u> |
| fishing/hunting | <u>basketball</u> | <u>attending music concerts/shows/raves</u> |
| writing letters | <u>talking to friends</u> | attending theatre |
| <u>writing poems/stories</u> | <u>soccer</u> | <u>watching television</u> |
| <u>acting in plays</u> | golfing | computers |
| carpentry | reading novels | playing card games |
| <u>photography</u> | <u>video games</u> | visiting museums |
| <u>movies</u> | <u>bowling</u> | water skiing |
| downhill skiing | hockey | playing a musical instrument |
| <u>reading newspapers/magazines</u> | volleyball | skateboarding |
| <u>cheerleading</u> | reading nonfiction | snowshoeing |
| reading poetry | track and field | <u>arts and crafts</u> |
| sculpture/pottery | <u>cooking</u> | martial arts |
| backpacking/hiking | <u>singing</u> | canoeing/boating |
| | | playing pool |

C. Other activities that I enjoy or would like to try are:

I ride a horse line
to be a nurse to meet my needs

D. From the selections I have made above, the three I like the most, in order of preferences are:

- 1) Singing
- 2) Cheerleading
- 3) Roller Skating

E. One thing that I learned about myself from taking this interest/attitude inventory is:

I love to Singing dance, cheer,
and Roller skate. In there's alot of
the I love to do.

F. The kind of books I most like to read are: (Circle your three favorite types).

poetry
science fiction
romance
nonfiction
autobiography/biography
horror
adventure

mystery
fantasy
sports
science
historical fiction
myths/legends
others _____

G. The newspapers I read are:

I read a news paper along time ago
but I don't remember the title ✓

H. The sections of the newspaper I prefer are: (Check your choices).

____ sports ✓ comics ____ editorials
✓ news articles ____ other (list) _____

I. The magazines I read are: Teen magazines

J. Answer each of the following questions briefly.

1) I have pets: ____ Yes ✓ No
What kind? _____

2) I collect the following things: Dolls

3) I own books: ✓ Yes ____ No
Approximately how many? 80
I borrow books from the library: ✓ Yes ____ No
Approximately how many each week? 2

4) I enjoy having someone read to me: ✓ Yes ____ No

5) When asked to read aloud I feel: okay but sometimes nervous

6) My favourite school subject is: math

Reason: Because its fun to do in it
seems easy

7) The best book I have ever read is: Princess Plot

Reason: Because it related to me

8) A book that I would like to own is: Diary of the wimpy kid

Reading Attitude Survey

Name: Anyani H.Date: April 28, 2011A fiction book is a book that tells fake story'sA nonfiction book is is a book that doesn't tell fake story's.

When I have time to relax, I usually (Circle the letter of your choice.)

- | | |
|----------------|---|
| a. Take a nap | d. Go skateboarding |
| b. Read a book | <input checked="" type="radio"/> c. Play a video game |
| c. Watch TV | f. Other _____ |

I read because It helps me write betterThe kind of book I would buy with my own money would be a comic bookSchool reading assignments and what I read in my free time are different because They don't have the things I read in other booksSchool reading assignments would be more interesting if They were not so hard

Appendix C

Assessment 3: 2008-2009

PLACE ANSWERS
HERE

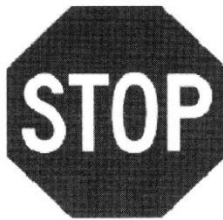
Name: Angela H.

Passage 1:	9/3
Passage 2:	19/1
Average Score:	14/2

6

Read each sentence. When you come to three words that are underlined and in dark print, you will circle the word that belongs in the sentence.

1. The snow was falling and the air was crisp. He put on his trees / boots / houses and walked to school.
2. He was late, so he map / see / ran to catch the bus.



Do not turn this page until you are instructed to do so.

PERSEPHONE IN THE UNDERWORLD

Once, a long time ago, there lived a woman named Persephone. She was the child of the gods / bean / mild Demeter and Zeus and had a ruin / home / tape on Mount Olympus. Her hair was paw / age / the color of the sun. Her eyes were / arid / fate sparkling green. The gods loved new / her / ear so much that the sound of odd / log / her laughter could bring a smile to their / cough / flown faces.

One day, Persephone and her baffle / mother / depose Demeter found a beautiful purple flower heron / panel / while walking through the fields of Greece.

"Look / Barn / Foot at that, mother," Persephone said, and bingo / tried / habit to pick it up.

But the flower / barber / raisin drifted away, out of her reach.

"Bride / Silly / Flame flower," Persephone said, and laughed. "I'm rusty / going / syrup to catch it no matter what!"

By / It / No matter how Persephone ran, she could not / gun / sew catch up with the purple flower. Dirt / Soon / Glee she was so far away that shy / her / bet mother looked like a distant shadow. Her / Sip / Off mother shouted at her to come fact / back / lair.

"Never mind the flower," Persephone told herself / bedside / astound. "You could get lost. Time to turn / bass / dove around."

Just then the flower appeared diver / gripe / right in front of her, and she bent / mace / raid down to pick it. When her fingers / amplify / banquet touched the stem, a man with heard / black / foggy hair and dark eyes burst out it / of / an the ground. He wore a black cloak / havoc / lunch and rode in a black chariot

Name: Angani P.**Prince and the Pauper – Introduction**

"Mark Twain," was the pen name of the extremely popular author, essayist, and journalist Samuel Clemens. Writing between 1864 and 1890, Samuel Clemens produced weathers / anchored many memorable stories including The Prince but / she / and the Pauper. This tale follows the something / adventures / lunchroom of two boys who switch places. Had / Was / One begins as an adored and spoiled prince / magnet / halted while the other begins as a personals / flattering / mistreated and poor beggar— a pauper. Through which / their / makes time living each other's lives, the two / log / sit boys learn many lessons. This excerpt most / from / tack The Prince and the Pauper captures she / the / cot contrasts between the high life of the / bag / was palace and the hard life of the / one / lid poor.

THE PRINCE AND THE PAUPER

In the ancient city of London, at / so / on an autumn day a boy was born / were / last to a poor family of the from / task / name of Canty, who did not want him / too / pit. On the same day another English flake / whips / child was born to a rich family an / of / to the name of Tudor, who did lags / trot / want him. All England wanted him too. England had / the / can so longed for him, and hoped the / for / sip him that, now that he was habits / really / cranky come, the people went nearly mad for / now / she joy. Mere acquaintances hugged and kissed more / each / turn other and cried. Everybody took a holiday / winding / plastics, and high and low, rich and trip / poor / came, feasted and danced and sang, and got / let / sew very mellow; and they kept this up / in / as for days and nights together. By big / let / day, London was a sight to see, with / fuss / then gay banners waving from every balcony met / and / fig housetop, and splendid pageants marching along.

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Student's Name: Amyani Hermer Date: 3/12/11



Thinking Aloud: Written Assessment

Directions:

Read silently for three minutes. When you are told to stop, write as much as you can remember about what you were thinking about as you read the passage. It is most important that you pay attention and remember the story (or text), so that you can write everything you were thinking about as you read. You can write anything the passage makes you think about, any problems you had while reading it, and what you think the passage is about.

Note ➔ Repeat the directions for students until they finish the passage. Give them five minutes to write their initial thoughts about the text.

Frieda was trying to find gold in the ship.
She found a compass that was sold gold.
The story reminded me of when me
in my cousin where trying find a dollar
my older cousin hide in the snow.

Student's Name: _____ Date: _____



Determining Importance in Text: Written Assessment

Directions: Answer some questions about what you think about while you read.

Use the space below each question to write your answer.

- A. Are there some parts of this text that are more important than the others? Which ones? Why do you think they are the most important?

Yes, the story of Pirate Ringold's
last ship.

- B. What do you think the author thinks is most important so far in this text? What signals or clues did the author use to make you think that was important?

The last gold that Frieda was
trying to find

- C. Choose one of the questions below to answer:

- You have just written about ideas, themes, words, pictures, and other parts of the text. How does thinking about the more important parts help you to understand the text better?
- Do you think or do anything while you are reading that helps you remember the important parts?
- Do you ever have trouble remembering what is important after you read? How do you solve that problem?

By think of what I did that
realities to the important facts

Student's Name: _____ Date: _____



Monitoring Comprehension: Written Assessment

Directions: Answer some questions about what you think about while you read. Use the space below each question to write your answer.

- A. What problems did you have while you were reading this text? Did you have more difficulty reading the words or understanding ideas? When you are reading at other times, what kinds of problems do you usually have?

By remembering the whole story,
understanding ideas, remembering all
the story

- B. What did you do to solve any problems you had? How do you usually solve the problems you have when you read?

I read over or sounded the words
out that I didn't understand. I
read the story over.

- C. How do you know that you completely understand a text? What would you tell another student to try if he or she is having trouble understanding?

When I start to realize to the
story. To read the story over.

- D. Choose one of the questions below to answer:

Ⓒ What is important to know when you are reading and have a problem?

- You have just written about problems you have during reading and the ways in which you solve them. What are the different choices you can make to try to solve those problems?

To try to understand it better.

Appendix D4

Student's Name: _____

Amyra

Date: _____

3/12/11



Thinking Aloud: Rubric

Directions:

Use this rubric to record the student's scores on each set of questions. Circle the number corresponding to the statement that best reflects the student's response. If this is done with other assessments, consider both "Thinking Aloud" assessments when scoring the rubric.

1	No response, random thoughts unconnected to the text.
2	Disconnected thoughts relating more to the pictures than text.
3	Thinking is tied to text events/text content; may be inaccurate in relation to text, more tied to personal experience; may identify problems (word or text level) during reading; may include a rough retell.
4	Demonstrates two or three of the following skills: may generate questions; may identify conflict within the text; may infer; may discuss connections between text events and own experience; may make predictions about overall book meaning; may include a detailed retelling; may talk about how his/her thinking changed as he/she read or listened.
5	Clearly expresses own thinking; may speculate about theme, discusses how own thinking supports or inhibits comprehension.

Observation Notes:

- Her response reflected several grammatical and spelling errors
- Made a relevant connection to text and self.

Appendix D5

Student's Name: _____ Date: _____



Determining Importance in Text: Rubric

Directions:

Use this rubric to record the student's scores on each set of questions. Circle the number corresponding to the statement that best reflects the student's response. Consider all three questions when scoring the student.

1	No response, random guessing, inaccurate attempt to identify important elements.
2	Identifies some elements (primarily pictures) as more important to text meaning; isn't sure why these elements are important to overall meaning.
3	Identifies words, characters, and/or events as more important to overall meaning and makes some attempt to explain reasoning in expository text; uses text features such as bold print and captions to identify importance; explains why the concepts are important.
4	Identifies at least one key concept, idea, or theme as important in overall text meaning and clearly explains why.
5	Identifies multiple ideas or themes; may attribute them to different points of view; discusses author's stance or purpose and its relation to key themes and ideas in the text.

Observation Notes:

- She could not pick out important pieces of the text other than the title * missed numbers and important clue words
- She remembers what the story is about by relating the story to herself or to her life.

Appendix D6

Student's Name: _____ Date: _____



Monitoring Comprehension: Rubric

Directions:

Use this rubric to record the student's scores on each set of questions. Circle the number corresponding to the statement that best reflects the student's response. Consider all three questions when scoring the student.

1	Little or no conscious awareness of reading process.
2	Identifies difficulties—problems are often at word level; little or no sense of the need to solve the problem; does not articulate strengths; identifies need to concentrate, talks about word-level solutions (i.e. sounding it out) for text-level comprehension problems.
3	Identifies problems at word, sentence, or schema level; can articulate and use a strategy to solve problems, usually at the word or sentence level.
4	Articulates and uses more than one strategy for solving problems; focuses on problems at the whole-text level.
5	Identifies problems at all levels; uses a variety of word level and comprehension strategies flexibly and appropriately given the context and the problem.

Observation Notes:

- She did not respond to the questions asked of her in A or B and posed answers she thought might be correct

Appendix E

Student Profile - Windows Internet Explorer
 https://admin.edperformance.com/student/performance/scores.ssp?id=f6dd15d0651263a7&aid=0fa8946c739d087

File Edit View Favorites Tools Help

Student Profile

Reading Diagnostic Results

Learning

- Suggested Learning Objectives

Test Scores

- General Science
- Language Arts
- Mathematics
- Reading

Test Admin

- Test Sessions

Reading Test History

Harmon, Amyani D. Grade 6

Date	Student Scaled Score	District Average Scaled Score
11/2007	~1700	~1900
11/2008	~2000	~2100
11/2009	~2100	~2300
11/2010	~2200	~2400
11/2011	2385	~2400

● Student Scaled Score
 ■ District Average Scaled Score

[Enlarge View](#)
[Export XLS](#)

Test Date: 1/31/11
 Grade: Sixth 2385 (58)
 District Average Score: N/A

Reading Test (Grade 6)

Test Date: 1/31/11

Unit	0%	SIP	100%
Reading Overall		34	
		Scaled Score: 2385	
		SEM: (58)	
Vocabulary		37	
Fiction		34	
Nonfiction		26	
Long Passage		36	
Performance			
Rating		Below Average	
Score		Words Per Minute	
Reading Rate		85	
Score		1	99
		NPR	
National Percentile Ranking		13	
Narrative		Amyani took our Reading performance assessment on 1/31/11. Amyani's scaled score was 2385.	

MATH MAVEN'S MYSTERIES

Name: _____

Date: _____

The Mystery of Pirate Ringold's Lost Treasure

Detectives, you are about to join me on a most exciting case. My old friend and world-famous treasure hunter Frieda Finditall has discovered the wrecked ship of the legendary Pirate Ringold – right here in Point Logos Bay!



For many years, people in Point Logos have told the story of Pirate Ringold's lost ship, the Grand Looter. Legend has it that the pirate hid exactly 100 ounces of gold throughout his ship. I decided to help Frieda go through the ship's loot – and find out if there's any truth to this golden legend!

Notes:

It didn't take long before Frieda found the first treasure. "Math Maven, come quick!" she yelled, pulling an old leather pouch from inside the ship's cannon.

She opened the pouch and exclaimed, "My goodness! These are pure gold coins! Math Maven, how much is here?"

I quickly weighed the coins. "19 1/2 ounces," I announced. "There's still plenty of gold hidden around this ship."

We decided to search the pirate's quarters next. Frieda knew just where to look. Without a word, she opened the pirate's desk and found a secret compartment containing an old compass and a black telescope.

She closed one eye and inspected the compass closely. "We found another treasure!" she announced. "This compass is solid gold."

The compass weighed 26 2/3 ounces. "There's bound to be more gold on this ship – but where?" said Frieda, idly tapping the old telescope against the pirate's desk.

Lesson Title: Math Vocabulary Word Webs

Developed By: Stephanie Green

Overview:

In this lesson, students work cooperatively in this word categorization activity. Pairs of students will use the Vocabulary Web Graphic Organizer to explore the meanings of some common math terms and analyze a word's essential and non-essential attributes. Then, groups will synthesize this knowledge by coming up with examples of the words in both mathematical and other contexts.

Instructional Objectives:

Students will:

- write mathematical and verbal expressions
- identify the multiple meanings of some common math terms
- share examples of words being used in both mathematical and other contexts

Materials:

- Vocabulary Web Graphic Organizers
- Math Textbook

Instruction:

- Model how to complete the organizer by placing an example on the whiteboard.
- Pronounce one of the vocabulary terms as you write it in the center oval. Ask students if they know of any similar words this word may relate to. Accept all responses.
- Identify the information needed in each of the surrounding ovals- definition, examples, non-examples and a pictorial representation of the word. Use a think aloud as you discuss filling in each part of the web. Then model how to describe a situation where this term can be used in a real-life situation.
- Explain to students that today we will be using a Think-Pair-Share to help us remember vocabulary terms.
- Describe to students that they will (1) think individually about the vocabulary words they are given, either brainstorming or using the graphic organizer to assist their initial thoughts;(2) pair with a partner and discuss the word together to agree on what words should be written within each oval and (3) share your final webs with the rest of the class.
- Divide the class into pairs. Give students ample time to think individually about each term. Students may use the web to guide their thinking.
- Then have students work together to develop a definition for each assigned vocabulary term. Then ask each group to fill in the remaining ovals. As a team, they should describe a real life situation relevant to the word.

Wrap Up/Closure:

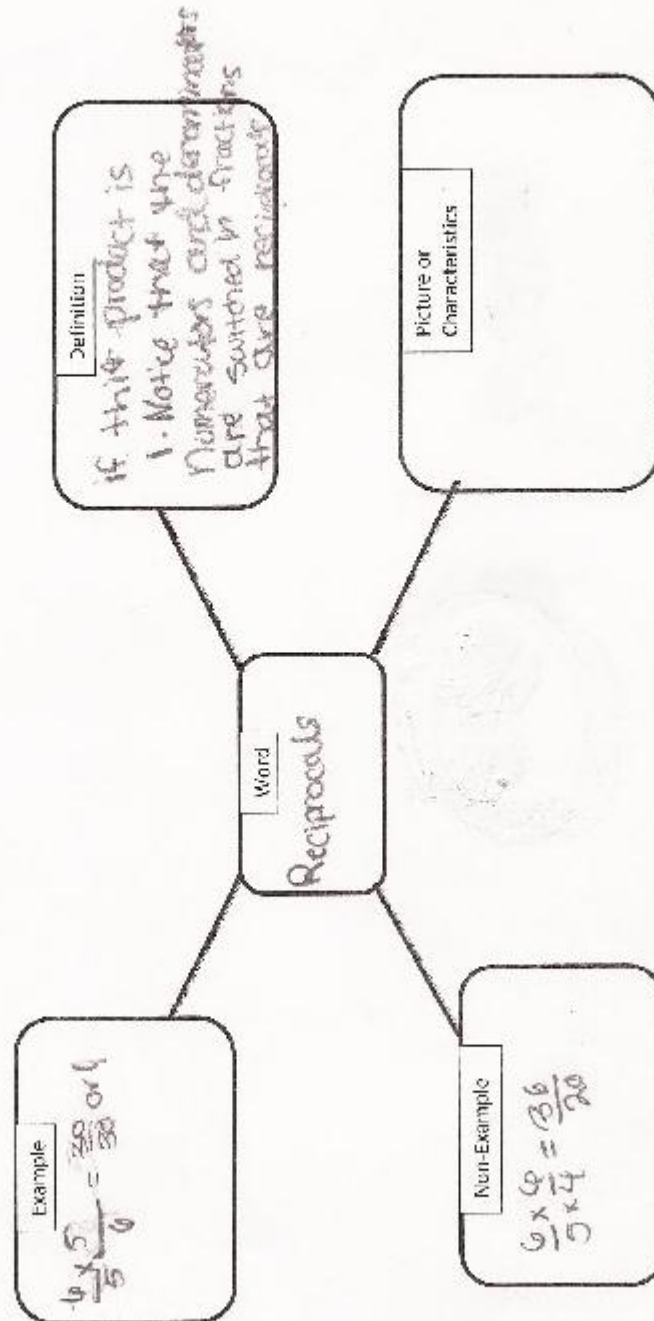
- Students may refine the Vocabulary Webs as they work through the chapter. As a summary exercise, ask each group to present at least one vocabulary word web in “jigsaw fashion” until all vocabulary words for the chapter have been presented and modeled as a class.

Assessment:

- Individual and pair completed Chapter Vocabulary Webs should be assessed by checking to see that each oval accurately reflects the appropriate usage of a word in a mathematical context and in a real life situation.

Name Anyari Harmon

Chapter 5 Vocabulary Webs

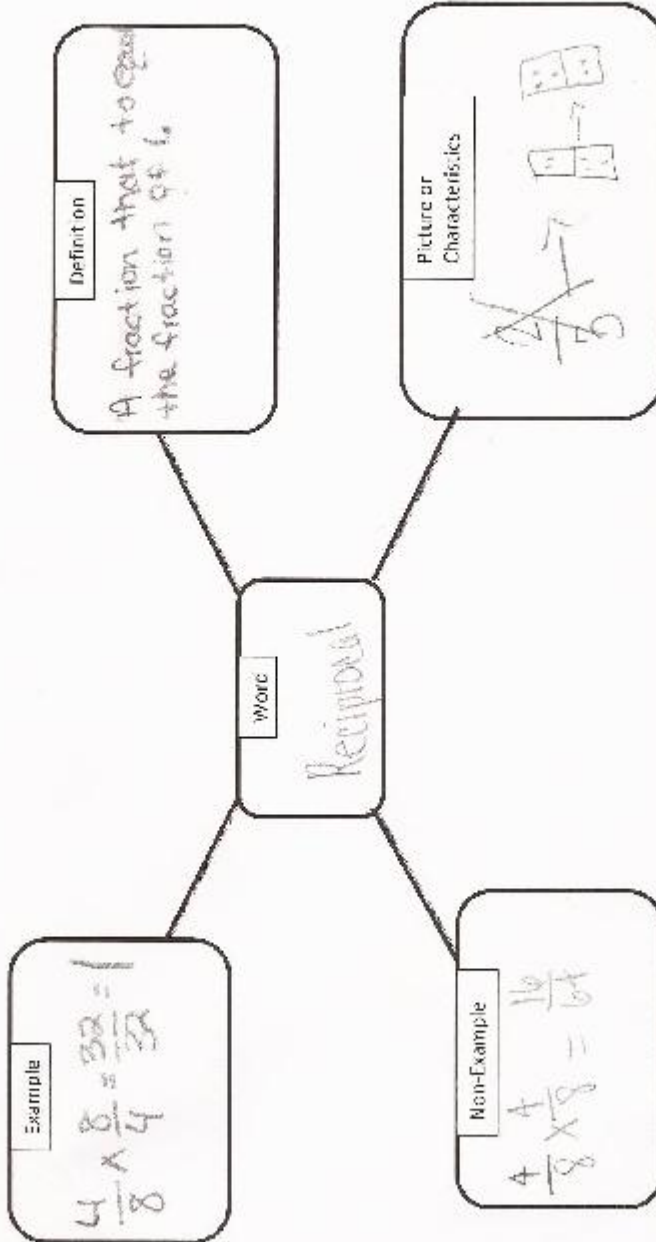


Describe a situation where you would use this word in real life:
on my math homework

Name Angela H. Hunter C.

Chapter 5 Vocabulary Webs

$\frac{4}{8} \times \frac{2}{1} = \frac{8}{8} = 1$
 $\frac{4}{8} \times \frac{2}{1} = \frac{8}{8} = 1$
 $\frac{4}{8} \times \frac{2}{1} = \frac{8}{8} = 1$

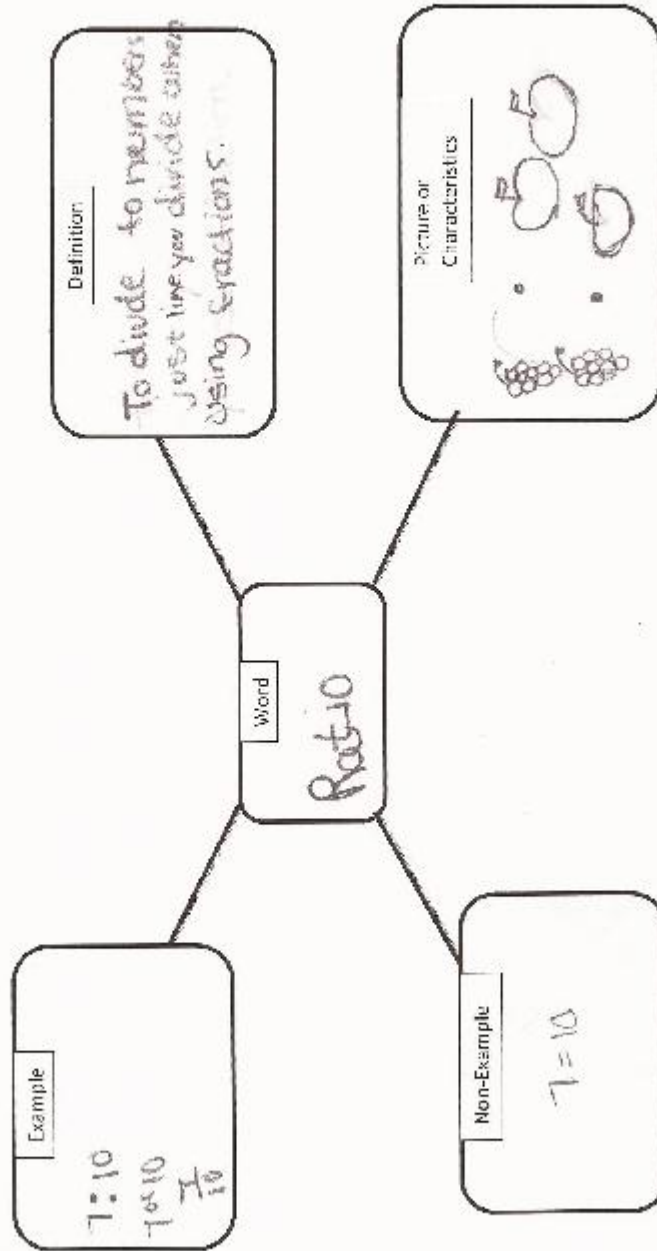


Describe a situation where you would use this word in real life:

Carpenters use fraction when they measure, estimate, and cut.

Name Amyou Hamman

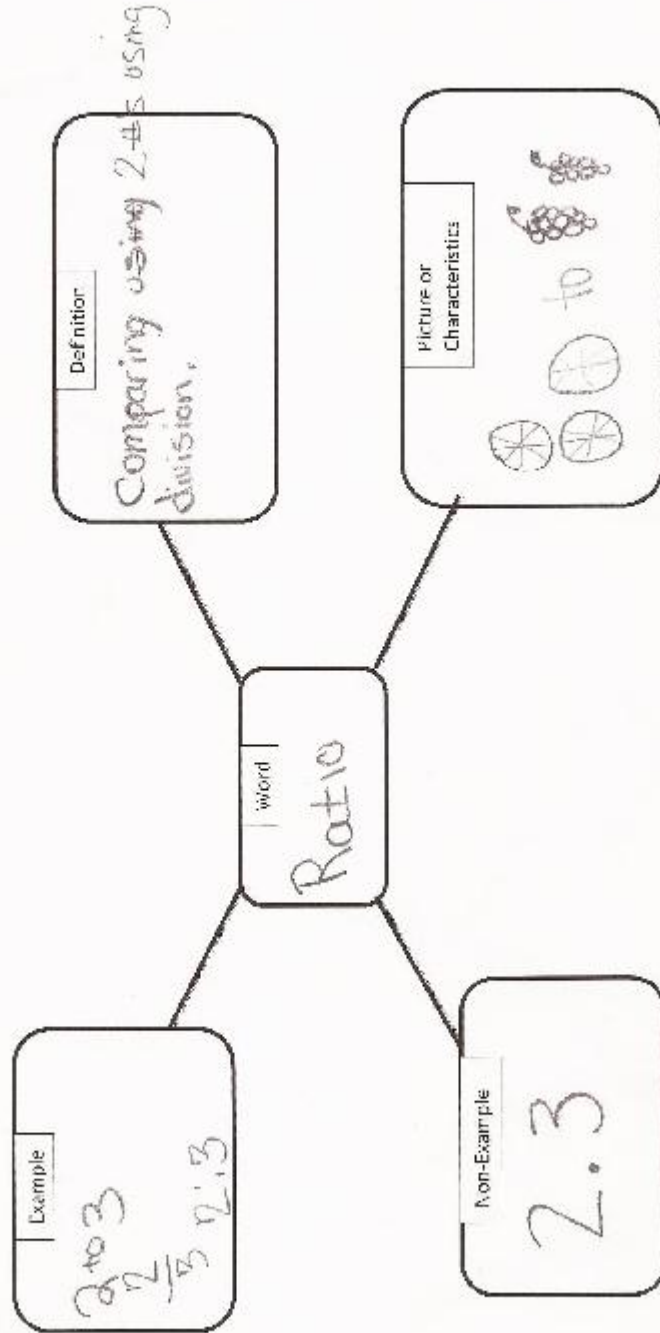
Chapter 6 Vocabulary Webs



Describe a situation where you would use this word in real life:
 compare prices

Name Khanter C. Amador H.

Chapter 6 Vocabulary Webs



Describe a situation where you would use this word in real life:
Comparing Prices of buying milk to see if it's off a gallon or whole gallon would be a better buy.

Lesson Title: Echoes In Roulette Problem Solving

Developed By: Stephanie Green

Overview:

In this lesson, student use the strategy of echo reading to understand a word problem. In echo reading, the learner echoes or imitates a skilled reader to directly involve the student in the reading experience and gain confidence in reading aloud. After reading the problem aloud, students discuss and write about the content of the word problem. Using the word problem roulette strategy, students get a chance to collaborate on solving a problem and then communicate their thought process and solution in writing. It is an activity in which students can benefit from communicating their own thinking and hearing other students' thinking.

Instructional Objectives:

Students will:

- apply and adapt a variety of appropriate strategies to solve problems
- monitor and reflect on the process of mathematical problem solving
- communicate their mathematical thinking coherently and clearly to others

Materials:

- The Pears Problem Activity Sheet
- Roulette Problem Solving Activity Sheet
- Roulette Problem Solution Sheet

Instruction:

- Explain to students that today we are going to echo read a word problem before we try to solve it. Describe to students the structure of echo reading. Say:
I will read a phrase from the problem and after I am finished, you will repeat the phrase I've just read. I will keep reading phrases, with you echoing me, until we have read the entire problem. After we have read the problem once through, you will get into groups of three and re-read the problem using the echo strategy until everyone has a chance to lead the reading.
- Answer any questions students may have before beginning the reading.
- Model how to echo read The Pears Problem with students.
- Divide students into small groups and allow them time to echo read with each member getting a chance to lead the echo.
- Circulate around the room and as groups have finished reading, ask each team if they understand the question being posed to them.
- Ask students to discuss, in groups, possible strategies for solving the problem. (Possible strategies include: guess and check, draw a picture, work backward or write an equation).

Explain to the students that they are to solve this problem by discussing it. No writing or drawing may be done at any time during this step.

- After the group has discussed the problem and agreed on how to solve it, each member takes a turn writing a step to the solution in words rather than using mathematical symbols and numbers.
- Each group member writes one sentence to explain a step in the solution and then passes the solution sheet to the next group member to add his/her statement on the next step of the solution.
- The student writing the step may ask for help from the other group members on how to word the sentence.
- Do not miss a step! The more steps to explain how you solved the problem, the better.
- After the groups have finished writing down all the steps, have the groups exchange their written solution sheet to the mathematical report.
- Choose a reader and a writer for the group and the rest of the group are the problem solvers. The group must solve the problem using mathematical symbols to represent each of the steps in the order they are listed on the solution sheet and read aloud.

Wrap Up/Closure:

- Have a class discussion on the various strategies students used to solve the problem

Formative Assessment:

- Monitor student pronunciation and expression while echo reading.
- Monitor and guide group discussions during roulette problem solving

Summative Assessment:

- Group Roulette Problem Solving Sheet
- Group Solution Report

Group Names: *Kristin Cannon, Debra S, Amy R H.*



The Pears Problem

As a group, work to solve the following problem.

One night the King couldn't sleep, so he went down into the Royal kitchen, where he found a bowl full of pears. Being hungry, he took $\frac{1}{6}$ of the pears.

Later that same night, the Queen was hungry and couldn't sleep. She, too, found the pears and took $\frac{1}{5}$ of what the King had left.

Still later, the first Prince awoke, went to the kitchen, and ate $\frac{1}{4}$ of the remaining pears.

Even later, his brother, the second Prince, ate $\frac{1}{3}$ of what was then left.

Finally, the beautiful Princess came down and ate $\frac{1}{2}$ of what was left, leaving only three pears for the servants.

How many pears were originally in the bowl?

$$\frac{1}{6} \times \frac{1}{5} =$$

$$\begin{array}{r} 360 \\ \times 3 \\ \hline 720 \\ + 3 \\ \hline 723 \end{array}$$

$$\frac{1}{6} \times \frac{1}{3} = \frac{1}{9}$$



$$\frac{1}{6} \times \frac{18}{12} = \frac{18}{6}$$



Roulette Problem Solving

Group Members: _____



- ❖ Steps must be in complete sentences.
- ❖ If you use a number, you must spell it out.
- ❖ Do not leave any steps out.
- ❖ The more steps you list, the better.

Student Name	Solution Step Sentence
Dezprey Smith	Step 1: We had to find multiple of six and we chose eighteen.
Amyani Harmon	Step 2: we multiplied by one sixth and subtracted by three once we got the answer.
Khartier Cannon	Step 3: Then, we divided fifteen by five and then got three.
Dezprey	Step 4: we subtracted three from fifteen and got twelve.
Amyani	Step 5: we divide twelve by four and got three.
Khartier	Step 6: Then we subtracted twelve by three and got nine.
Dezprey	Step 7: We divided three by nine and got three.

If you need additional space, feel free to use the back of this paper.

Roulette Problem Solving

Group Members: _____



- ❖ Steps must be in complete sentences.
- ❖ If you use a number, you *must* spell it out.
- ❖ Do not leave any steps out.
- ❖ The more steps you list, the better.

Student Name	Solution Step Sentence
Amyan	Step 1: Then we subtract three by nine and got six
Khosro	Step 2: Next we divided six by two and got three and that was our answer.
	Step 3:
	Step 4:
	Step 5:
	Step 6:
	Step 7:

If you need additional space, feel free to use the back of this paper.

Solution Sheet



Choose a reader and a writer for the group and the rest of the group are the problem solvers. The group must solve the problem using mathematical symbols to represent each of the steps *in the order* they are listed on the Roulette Problem Solving sheet. Read aloud each step and agree as a group how to solve the problem mathematically.

Step 1: ~~We had~~ 18

Step 2: ~~We multiply~~ $18 \times \frac{1}{6} = 3$

Step 3: $15 \div 5 = 3$

Step 4: $15 - 3 = 12$

Step 5: $12 \div 4 = 3$

Step 6: $12 - 3 = 9$

Step 7: $\frac{9}{3} = 3$

Step 8: $9 - 3 = 6$

Step 9: $6 \div 2 = \textcircled{3}$