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| Your Name | Ali Hall |
| Your ED101 Lab Section | Section A1 |
| School | Alcott Elementary School |
| Grade(s) Observing | 5 th grade |
| Supervising Teacher | Ms. Oliver |
| List any teaching help you may have during the lesson | Ms. Oliver will be available during the lesson in case help is needed. |
| Setting (in class, in computer lab, other?) | In class |
| Technology needed to complete lesson | We will use the classroom's ActiveBoard as well as the classroom's laptops. The students will work on the laptops in pairs. |
| Other materials needed | Students will be given scrap paper to use while solving practice problems during the lesson. |
| Content Area(s) | Math |
| Title of web site | Ms. Oliver's 5 th Grade Problem Solving! |
| Topic of Lesson | Word problem solving |
| Goals of the Lesson | The main purpose of the lesson is to improve the student's problem solving skills. We will review the ten methods of problem solving to refresh their memory and facilitate them as they complete practice problems. |
| Three Objectives | <p>Students will be able to correctly name at least six of the ten different methods used for problem solving.</p> <p>Students will be able to apply different methods of problem solving to successfully solve the word problems.</p> <p>Students will be able to organize, plan, and create their own word problem in addition to being able to successfully solve problems.</p> |
| Technology standard | <p>Standard 1. Demonstrate proficiency in the use of computers and applications, as well as an understanding of the concepts underlying hardware, software, and connectivity.</p> <p><u>Word Processing/Desktop Publishing</u></p> <p>G3-5: 1.5 Use menu/tool bar functions in a</p> |

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| | word processing program (i.e., font size/style, line spacing, margins) to format, edit, and print a document. |
| Curriculum Framework | <ul style="list-style-type: none"> ➤ Massachusetts Mathematics Standards ➤ Measurement and Data, Grade 4 ➤ Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. <p>2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p> |
| Introduction of Lesson | <p>The lesson will take place in the students' classroom. The students will be sitting at their own desks in the order that they have already been arranged in. I will welcome the students back from lunch and say something along the lines of, "Hey guys! Now that we've had lunch and recess, lets get back to our school work and get our brains going with some problem solving!"</p> |
| Lesson Procedure, Web Site Use, and Technology Standard | <p>Once I have gained the students attention, we will view my website in the front of the classroom on the ActiveBoard. As a class we will look at the Word Problem Solving Checklist on the ActiveBoard and review the procedure for answering a question. Next, we will scroll through the website and learn about all ten types of problem solving. I will read the definition and explanation of each method. Each method will have a short and simple example. After I have read all the information about a particular method, the students will have a few moments to talk to their neighbors and we will come to a conclusion for the solution as a class. After we have completed this as a class, the students will get up and retrieve a laptop from the classroom's laptop cart. Once they have logged on to the computers, they can go to my website and click on the quiz tab. After they have all completed the quiz, they</p> |

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| | <p>will be given the remainder of the class time (which is an hour long) to create their own word problem. They can brainstorm and plan it out on scrap paper to begin. Then, they will be asked to type up their question in a neat format, leaving plenty of space for the problem to be solved below, and print them. Once the students have reached the step of typing their own problems, I will demonstrate on the ActiveBoard how to set up their problems in a Word document, and also explain how to save and print them from the school printers.</p> |
| <p>How will students be assessed?</p> | <p>The students will swap the problems they created and printed with another student in the class and take them home to complete for homework. If they can successfully solve each other's word problems for homework, they can receive a sticker in class the next day (stickers lead to rewards in class such as homework passes and other treats).</p> |
| <p>How will you know if students have met the objectives stated above?</p> | <ol style="list-style-type: none"> 1. Students will be able to correctly write at least six of the ten different methods used for problem solving. <ul style="list-style-type: none"> -This objective will be reached with an oral quiz after we have reviewed my website as a class. The students can raise their hands and see how many methods of problem solving they can remember. 2. Students will be able to apply different methods of problem solving to successfully solve the word problems. <ul style="list-style-type: none"> -After reviewing the definition and explanation of each kind method for problem solving, the students will be able to apply the methods learned to the simple example questions associated with each method. 3. Students will be able to organize, plan, and create their own word problem in addition to being able to successfully solve the problems. <ul style="list-style-type: none"> -At the end of the lesson, each student will be given time to brainstorm and create their own word problem. Once they have typed up their question and printed it, they will switch with another student in class and take |

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| | the problems home to complete for homework. |
| Web-based Quiz | <ol style="list-style-type: none">1. Which of the following is <u>NOT</u> a problem solving technique?<ol style="list-style-type: none">a) Guess and Checkb) Brainstormc) Take a wild guessd) Look for a pattern 2. What should you always do after solving a problem and labeling your answer?<ol style="list-style-type: none">a) Start working on the next questionb) Double check your answerc) Pass in your solution to Ms. Oliver immediatelyd) Ask your neighbor what they got for an answer 3. Before you begin solving a problem, what should you do?<ol style="list-style-type: none">a) Get a drink of waterb) Daydream for a few minutesc) Guess what the answer is going to bed) Read the entire problem 4. Which type of image will <u>NOT</u> help if you make/draw it while solving a word problem?<ol style="list-style-type: none">a) A map of Ms. Oliver's classroomb) An organized listc) Making a tabled) Making a diagram/drawing a picture 5. What should you do to any information in the problem that you don't need to solve it?<ol style="list-style-type: none">a) Circle itb) Draw stars around itc) Cross it outd) Don't do anything to it |