

<b>Title:</b>	Everyday Math
<b>Grade(s):</b>	4
<b>Subject(s):</b>	Math
<b>Author:</b>	ICAC Team
<b>Overview:</b>	After a review of word problems, students will use <b>Microsoft Word</b> to create some original everyday life math problems. <i>This lesson plan has been developed based on the original by Sonia Evans. ALEX ID: 5812.</i>
<b>Content Standards:</b>	<p>MA(4) 2. Write money amounts in words and dollar-and-cent notation.</p> <p>MA(4) 6. Solve problems, including word problems that involve addition and subtraction of four-digit numbers with and without regrouping.</p> <p>MA(4) 7. Solve problems, including word problems, involving the basic operations of multiplication and division on whole numbers through two-digit multipliers and one-digit divisors.</p> <p>TC(3-5) 10. Use digital environments to collaborate and communicate.</p> <p>TC(3-5) 11. Use digital tools to analyze authentic problems.</p>
<b>Local/National Standards:</b>	
<b>Primary Learning Objectives:</b>	<ul style="list-style-type: none"> <li>• Using pencil and paper, students will apply addition, subtraction, multiplication, and division to solve given word problems according to the correct method.</li> <li>• Students will compose a real life math problem and use the <b>Microsoft Word</b> to describe the story in a table.</li> <li>• Using their storyboard, students will demonstrate their math problem to the class and describe the correct solution.</li> </ul>
<b>Additional Learning Objectives:</b>	
<b>Approximate Duration of Lesson:</b>	90 minutes in three 30-minute blocks that may be separated.
<b>Materials and Equipment:</b>	Pencil and paper for scratch work
<b>Technology Resources Needed:</b>	Desktop and/or laptop, <b>Microsoft Word</b> , Promethean Board or projector
<b>Background/Preparation:</b>	Students should have some experience with word problems. Preparation for teacher includes gathering materials.

**Procedures/  
Activities:**

Step1  
(20 minutes)

Review the process of solving word problems by using the examples attached. Read each example and discuss which type of math function should be used to solve the problem. During this process, you will address several vocabulary words including: **addition, subtraction, multiplication, and division.**

When the students have chosen the correct type of math to use, guide the class in writing a number sentence, as demonstrated in the attached examples. Then, guide the class in solving the problem.

Step 2  
(10 minutes)

Ask students why problem solving is important. Use their responses to discuss how we make word problems from everyday situations (i.e., How much change should I get when buying lunch?). Ask students for some examples of real life word problems.

\*NOTE: The lesson can be stopped here and resumed during another block of time.

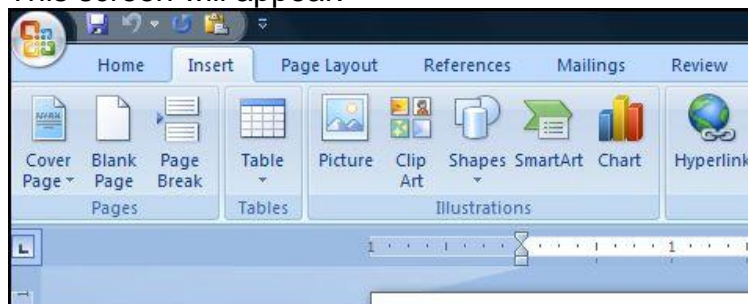
Step 3  
(30 minutes)

Tell students that they are going to create a storyboard that will help them produce good word problems.

Divide the class into groups to brainstorm a real life situation where math skills would be essential. After a few minutes, each group should translate its word problem onto a storyboard using the following procedure as a guide.

- a. Have students open **Microsoft Word** and click on the “Insert” tab.

This screen will appear:



- b. Have students click the highlighted table icon at the top left of the screen. A dropdown box

will appear.

- c. In the dropdown box, highlight the dimensions 3x3 and click the mouse once.

This storyboard table outline will appear. Have students type in these headings for each column:

Beginning Condition	Changes	Question

- d. Using each box (similar to a comic strip), students should type the parts of their "math problem" story.

For example:

Jim took three dollars to the store.	Jim bought some chocolate for \$1.75.	How much money does Jim have left?
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Using their scratch paper and pencil, students will write a number sentence for their problem (numbers only without words) and solve it.

When complete, check that stories are appropriate to present to the class.

\*NOTE: The lesson can be stopped here and resumed during another block of time.

Step 4  
(30 minutes)

Have each group present their storyboard to the class using a Promethean Board or projector. As each group presents, have the entire class solve the math problem. Allow the presenting group to reveal their correct answer.

**Attachments:**  
**Assessment**  
**Strategies:**  
**Remediation:**

Word Problem Examples, Assessment Rubric

Rubric attached

For students struggling with word problems, give simpler examples. See the last set of word problem examples in the attachment for some possible problems.

### Word Problem Examples

Word Problem	Number Sentence & Solution
Charlie and Shana were taking a road trip. The trip was 2895 miles long. Charlie and Shana have already driven 1245 miles. How many miles do they have left?	$2895 - 1245 = 1650$
Roberto has 8 baseball cards. Sandra has 5 times as many cards as Roberto. Luke has 7 times as many cards as Sandra. How many cards does Luke have?	$8 \times 5 \times 7 = 280$
Elizabeth wants to buy a bike that cost \$70. She earns \$7 an hour at her job. How many hours will Elizabeth have to work to earn the \$70 for the bike?	$70 \div 7 = 10$
Giovanna wants to buy a car for \$2500. She has \$1250 saved in the bank and will earn \$1370 from her summer job. Will Giovanna have enough to buy the car at the end of the summer?	$1250 + 1370 = 2620$ Yes, she will have enough.

### Simpler Word Problems for Remediation

The library has 25 books about sharks. Today, 12 books were checked out. How many are left?	$25 - 12 = 13$
Sam worked for 3 hours today. Priscilla worked twice as many hours as Sam. How many hours did Priscilla work?	$3 \times 2 = 6$
Mr. Jones has 24 cookies for class. There are 8 students in his class. How many cookies will each student get?	$24 \div 8 = 3$
Marcella needs \$20 to buy a game. She has \$10 now and will get \$8 next week. Will she have enough to buy the book?	$10 + 8 = 18$ No, she will not have enough.

### Assessment Rubric for Everyday Math Lesson

Score:	1	2	3	4
<b>Participation</b>	No participation in the activity.	Some participation, but did not work well with the group.	Participated throughout activity, contributed to the successful outcome.	Worked well with everyone in group, offered ideas, contributed to successful outcome.
<b>Storyboard</b>	Failed to complete a storyboard.	Created a storyboard with more than three errors.	Created a coherent storyboard with combined calculation and grammar errors totaling 3 or less.	Created a coherent storyboard with accurate calculations and grammar.