Helping Student Comprehend Word Problem by Having Them Write Their Own Problems

Fourth and fifth grade students need a little extra coaching on how to write division problems. Teach them to write multiplication problems, and then turn those problems into division problems. Since 5th grade students divide by decimal numbers, using a menu can be an easy way to accomplish this task. Fourth grade students can also use a menu and a calculator to create problems.

Combo Meals		Side Orders	small	med	large
Includes medium fries and medium soft drink		French Fries	\$1.39	\$1.59	\$1.79
Steak Burger Meal	\$5.39	Onion Rings	\$1.39	\$1.59	\$1.79
Goliath Burger Supreme Meal	\$4.99	9			
Goliath Burger Meal	\$4.19	Drinks	small	med	large
Goliath Burger Jr. Meal	\$3.79	Soft Drinks	\$1.09	\$1.39	\$1.59
2 Cheeseburger Meal	\$4.29	Cola, Root Beer	,	,	7
Chicken Strips Meal (6 pcs)	\$4.59	Orange, Lemon-Lime			
,		Shakes	\$1.79	\$2.29	\$2.79
Burgers		Chocolate, Vanilla			
Steak Burger	\$3.69	Strawberry Milk	\$1.09		
Goliath Burger Supreme	\$3.29	IVIIIK	φ1.09		
Goliath Burger	\$2.49	Desserts			
Goliath Burger Jr.	\$2.09	Pie	\$0.89		
Cheeseburger	\$1.29	Apple, Cherry, Peach	ψ0.09		
Hamburger	\$1.19	Sundae	\$1.19		
- · - · · · · · · · · · · · · · · · · ·	Ŧ	Chocolate, Carmel	7		
Chicken Strips 3 pcs 6 pc	s 10 pcs	Icy Treat	\$2.39		
\$2.39 \$2.8	•	Frozen Dessert			

WORD PROBLEMS CREATED WITH WHOLE NUMBERS ARE A GOOD PLACE FOR 3RD AND 4TH GRADE STUDENTS TO START.

• <u>Third grade students</u> should create multiplication problems with 2-digit numbers and show how both addition and multiplication can solve the problems.

<u>Fourth grade students</u> should create multiplication problems, and then use their knowledge of inverse operations to change those same problems into division problems.



Kimberly bought four sweaters. What is the cost of 4 sweaters? $27 \times 4 = 108$ 27 Kim bought four 27 sweaters. What is 27 the cost of 4 + 27 sweaters? 108 **27** x 4 = **108** Kim spent \$108 on 4 of the same item. What item did Kim buy? \$108 ÷ 4 = \$27 She bought the sweater.

<u>WORD PROBLEM Assignment:</u> Write four word problems (one for each basic operation) that focus on a real-life situation or theme. Label each problem to indicate the operation used to solve it. Include the number sentence that would solve the problem.

	Developing 1	Accomplished 2	Exemplary 3	Score
Four Basic Operations Represented	Less than four word problems are included. ~OR~ Four word problems are included, but all four basic operations are not used in the word problems. Some operations are duplicated.	Four word problems are included. One problem representing each basic operation is included.	At least one problem representing each basic operation is included. More than four word problems are included. ~OR~ One or more problems require a two-step solution.	
Operations Matched to Word Problems And Equations Matched to Word Problems	The problems are not labeled or are labeled with a basic operation that will not solve the problem.	Each problem includes notation of the operation used to solve it. No equations or number sentences are included or some equations included do not match the word problems.	Each problem includes notation of the operation(s) used to solve it. The number sentence or equation that will solve each problem is included and each one correctly solves the matching word problem.	
Problems are Clear, Coherent, and Represent a Real-life Theme or Situation	The phrasing makes the word problems confusing or unclear. Several grammatical errors and problems with sentence structure interfere with the coherence of the problems. The sentences preceding the question do not support the question that is asked. There is no common theme among the problems.	Problems are easy to understand. Minor problems in sentence structure or grammar do not interfere with the clarity or coherence of the problems. Nearly all of the sentences preceding the question support the question that is asked. Most of the problems focus on one theme or real-life situation.	Problems are easy to understand. The sentences preceding the question support the question that is asked. Problems are free of grammatical errors and mistakes in sentence structure. All of the problems focus on one theme or real-life situation.	Created by G. Best

Blogging Ideas (can also be used as small group or math center activities—no technology needed)

Consider posting images like these with instructions for students to submit word problems to your blog. Invite teachers on your grade level to encourage their students to post to your blog, too.

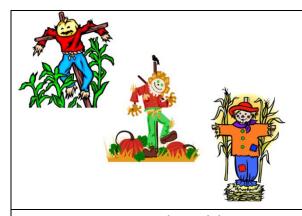
SCHOOL SUPPLIES		
ITEM	Price	
Colored Pencils	\$2.87	
Stapler	\$3.93	
Crayons	\$1.56	
Notebooks	\$3.16	
Scissors	\$2.19	

Write one word problem for each of the four basic operations (addition, subtraction, multiplication, and division).



Solve the multiplication problem below. Then write a word problem that shows your understanding of division as the inverse of multiplication.

Nancy purchased 5 staplers that cost \$4.07 each. How much did she spend for the staplers?



Write two word problems to go with the images above. Label each problem to show what operation you would use to solve it.



The answer to the problem is \$8.28. What is the problem?











Name of Manufacturer	Number Sold In Virginia Summer 2006
Toyota	14,263
Mitsubishi	22,093
Dodge	68,043
Lincoln	87,349

Here is the answer.

What's the question?

Write and solve a word problem using this data.