Primary Success Publications

Math Success

Word Problems

Grade Two

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Math Success Grade Two - Word Problems

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Math Success Word Problems - Grade Two

We learn to do mathematics in order to solve problems in our lives. We use math every day - shopping, counting money, counting things, etc….. and we use the basic math processes to help find the answers.

Children need to be able to transfer the basic math learned into everyday situations and this is why we put emphasis on word problems. There is often more than one possible way of finding the answer, and this creative thinking should be encouraged.

Word problems are a horror for many older students. There are several possible reasons why….

1. Teachers and parents have a horror from their elementary years and unconsciously pass it on.

2. In the early years children are given problems that are beyond their comfortable reading level. If reading becomes the problem - then no wonder the math gets lost.

3. Children are sometimes just expected to understand problems, without being taught strategies as they are in other parts of the curriculum.

4. Some children find it difficult to visualize the problem.

Strategies:

1. Make sure all children can read the problem.
2. What information does the problem provide?
3. What does the problem ask you to find out?
4. Look at the numbers in the problem. Will the answer be larger or smaller than the largest number in the problem? If it will be larger, you will usually add (or multiply). If smaller you will usually subtract (or divide).
5. Are there key words? If the problem has the words 'in all' or 'all together' that tells you to add. If you see the words 'how many/much more' or 'difference' - that tells you to subtract.
6. Drawing a picture helps the student to visualize the problem. You may want to use manipulatives to show the work.
7. Printing an equation helps the child see what to do in mathematical terms.
8. Printing a sentence takes the student back to what the problem asked for.

Using this book:

The ideas presented in the teacher's guide for each problem are to be used at your discretion. If your students know the strategies and are able to do the problems without direction, that is good. The strategies presented can be used in the beginning of the school year and then lessened as the students become more proficient.

Do not allow children to become frustrated with either the reading or the problems themselves. If they do become frustrated, they will grow to dislike word problems and will not put in the effort necessary. Keep the lessons fun and give help to children who struggle with the work. Give all the students time to try and work through the problems on their own, after discussing the strategies.

Be excited and delighted with different ways of coming to the answer. Share the different solutions.

The problems are numbered 1 to 150. The teacher's page also has the *Math Success Grade Two* matching lesson number. Some of the problems are different than the ones in the lesson book - this shouldn't be a 'problem'.....

Photocopying:

There are several ways to use the problem book.

You can print out the entire book beginning with the students' problem 1 page, double siding the odd-numbered pages. This will give a book of only the students' pages. Then these can be put in coil bindings or one inch binders.

Or ....Photocopy single to double-sided the pages the students will need for a week or a month and put them into duotang folders.

Or ..... Photocopy the student pages single-sided, and 'group' them so you have enough of one problem for the children in a stack, and cut the problems apart so you give out the one problem each day.

Teacher's Guide

21. (5.1) Mike's sister is 11 years old. Mike is 7. How old was his sister when Mike was born?

- Read the problem.
- Will the answer be more or less than 11? Why?
- If the students are not sure about what the question asks them - talk about two children in the classroom. How much older is ___ than _____? (in years, of course.)
- Draw a picture.
- This is about finding the 'difference' between two numbers. Show a number line and put one finger on 11 and one on 7. How many spaces are between? Now see how many more…… When we find the difference, we subtract.
- Write the equation. 11 - 7 = 4
- Print a sentence using the words in the problem: Mike's sister was 4 when Mike was born.
- Make a problem rule - if you are finding the difference between two numbers you subtract to find the answer.

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22. (5.2) What things come in 10's?

- Discuss the number 10. Ten is an important number!
- Brainstorm things that come in groups of 10.

Possibilities:

- Numbers come in 10s!
- We count by 10's.
- We have 10 fingers and toes.
- A dime is 10 cents.
- We use 10 in the metric system: 10 mm. in a cm., etc.
- Phone numbers
- Ten commandments
- Numbers on a calculator
- 10 pins in bowling…… can you think of more?

21.

Mike's sister is 11 years old. Mike is 7. How old was his sister when Mike was born?

Draw a picture:

Write an equation: _____

Print a sentence:

_____

_____

_____

_____

_____

22.

What things come in 10's?

Draw something that comes in tens!

Teacher's Guide

78. (16.3) Do an estimation jar today! Why is it called an 'estimation' jar? What does 'estimate' mean? Have several hundred objects. Let everyone make an estimate and then see who is the closest. Discuss how you will count them.

- When all estimates are made, discuss why you chose this number.
- Count the objects - in tens, of course.
- How can you find out how far away your estimate was from the actual counted number?
- Subtract your number from the actual number.
- Do the work in the box.
- Answer the questions.

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79. (16.4) There are 10 fish in the fish tank. Some fish are gold and some are blue. There are 2 more gold fish than blue fish. How many gold fish and how many blue fish are there in the tank?

- Can you visualize the fish in the tank?
- What does the problem tell you?
- What does it ask you to find out?
- Some students will be able to do this mentally, and others may want to use a drawing or concrete objects to answer the question.
- Print an equation: 4 + 6 = 10 or 6 + 4 = 10 .
- Explain what the numbers mean in your equation….. for example, 6 gold fish plus 4 blue fish equal 10 fish in the tank.

78.

I estimate that there are _____ _____ in the jar.

The actual number is _____.

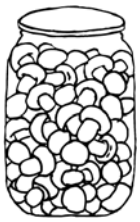
I was (close, not very close) to the actual number.

To find how far I was from the actual number,

I can _____.

My estimate was _____ away from the

actual number.



My work.

79.

There are 10 fish in the fish tank. Some fish are gold and some are blue. There are 2 more gold fish than blue fish. How many gold fish and how many blue fish are there in the tank?

Draw a picture:

Print an equation: _____

Explain what the equation means:

_____

_____

_____

_____

_____

Teacher's Guide

106. (22.1) I have 4 coins in this purse. Can you guess how much money I have?

- The teacher puts four coins in a purse. Depending on the abilities of your students, choose only the smaller coins or from a penny to a 'toonie'. Tell the students the range of coin value.

- The students draw four coins that they think might be in the purse, make the equation.
- Add the coins, beginning with the greatest value. Put this into an addition equation - for example, 25 + 10 + 5 + 1 = 41¢
- Write the amount of your guess.

- This time, we need three different answers so go through this two more times.

- Show your coins and see if anyone 'won'.

- With four coins, what could the very lowest guess? (4¢)
- What might the highest amount of money be? (This depends on the range you are using - if a quarter is the largest, then $1.00 - if a toonie, then $8.00.

- Discuss writing money two ways - with a cent sign and dollar sign.

I have 4 coins in this purse. Can you guess how much money I have?

Guess One: Draw the coins you think might be in the purse.

My equation: _____

I think there is this much money in the purse: _____

_____

Guess Two: Draw the coins you think might be in the purse.

My equation: _____

I think there is this much money in the purse: _____

_____

Guess Three: Draw the coins you think might be in the purse.

My equation: _____

I think there is this much money in the purse: _____

_____

The actual amount is: _____