## INTRODUCTION

Word Problems for Nonreaders was developed by PCl's Janie Haugen-McLane to help students with limited or no reading skills solve basic addition, subtraction, multiplication, and division word problems. Math word problems can be especially challenging for students with learning differences because not only do students have to solve a math problem, but they also have to be able to read and understand the word problem. In order to make the word problems accessible to students with limited or no reading skills, text modifications have been made. Additionally, the math problems are focused on real-life scenarios so that students can easily understand how the problems relate to their everyday lives.

The Word Problems for Nonreaders series has three titles in three separate books:
Addition, Subtraction, and Multiplication and Division.


Each title includes activity sheets in two levels. Level 1 features SymbolStix ${ }^{\circledR}$ symbols by News-2-You ${ }^{\circledR}$ below the text of each word problem to support students with limited or no reading abilities. These symbols allow students to make a connection between the pictures and words, enhancing the understanding of text and the development of literacy. The math problem also has visuals to reinforce what is being added, subtracted, multiplied, or divided. The page layout is clean and uncluttered with only one word problem per page, to further aid students with reading challenges. Level 2 features the same word problems without symbol support. There are two word problems on each page, and the pages also feature a clean and clear page layout along with visuals to reinforce the math problems.

## INTRODUCTION

The word problems are based on everyday situations that students may encounter in their day-to-day lives. Students will apply math concepts to real-world situations and be able to understand how basic addition, subtraction, multiplication, and division skills apply to daily life.

## How to Use the Program

Choose Level 1 or Level 2 Activity Sheets for each student. Level 1 includes symbols to support nonreaders and students with limited reading abilities. Level 2 does not have symbols. Both levels feature math problem picture support.


LEVEL 1


LEVEL 2

Distribute appropriate copies to each student. Give each student a copy of the appropriate activity sheet, and instruct the students to write their names and the current date on the paper.

## INTRODUCTION

Read the instructions aloud to the students. Note that the directions for Level 1 and Level 2 are slightly different since Level 1 activity sheets have one problem per page while Level 2 activity sheets have two per page.

Record student progress on the Progress
Chart. Document mastery or nonmastery of each problem to assist in monitoring progress. The same math word problems are presented in Level 1 and Level 2, so refer to the problem number to determine which word problem is being used. Place a $\boldsymbol{\checkmark}$ in the corresponding level column if the student successfully completed that word problem. Place an $\boldsymbol{X}$ in the column if the student was not successful. Record the date in the corresponding date column. Note any additional observations in the Comments section.


PROGRESS CHART

## Other Suggestions

Use manipulatives. Students are often better able to understand math word problems when they use actual objects to help them "see" the math. For example, you might gather small plastic lemons or real lemons for students to use with a math problem for figuring out how many lemons to use in making a lemon pie. Simple counters can also be used in place of real or plastic items.

## RESEARCH AND STANDARDS

Word Problems for Nonreaders provides practice in dealing with addition, subtraction, multiplication, and division word problems. With the two levels featured in each book, the material is appropriate for students with learning disabilities and mild to moderate cognitive disabilities. Both levels include visual representations of each math problem to support struggling learners. Level 1 features symbols to support students with limited or no reading abilities. Researchers believe that symbols are a vital tool for developing literacy because they act as a bridge between the concrete (pictures) and the abstract (print) (Detheridge, 1996). Research noted by the Learning Disabilities Association of America recommends strategies for teaching students with learning disabilities, such as using graphics and pictures, whenever possible (2006).

Both levels are written with short, clear, simple sentences and vocabulary so that struggling learners can read and understand the text whether they use the symbol support or not. Research tells us that short sentences and simple vocabulary are key to supporting struggling learners (Sousa, 2001). Multiple opportunities for practice are included in each book so that struggling learners are not rushed through learning to solve word problems. Math problems based on everyday scenarios help students connect to what they are learning and to understand the relevance of learning such skills.

Word Problems for Nonreaders meets national standards and expectations of the National Council of Teachers of Mathematics (NCTM) in the areas of:

- Numbers and Operations
- Connections
- Problem Solving
- Representation

Detheridge, Tina. (1996). Developing literacy through symbols. Closing the Gap 15:1.
Sousa, D.A. (2001). How the Special Needs Brain Learns. Thousand Oaks, CA: Corwin Press, Inc.
Learning Disabilities Association of America. (2006). Successful strategies for teaching students with learning disabilities. Retrieved December 12, 2008 from http://www.Idanatl.org/aboutld/teachers/understanding/strategies.asp
National Council of Teachers of Mathematics. (2004). Table of standards and expectations. Retrieved December 11, 2008, from http://standards.nctm.org/document/appendix/numb.htm

## Addition

Read the story below, and work the math problem to find the answer.
1
Rosa wants to bake two lemon pies for a party.
$\pi$

She will need six lemons to make each pie.


6


How many lemons should Rosa buy at the store?


## Addition

 DateRead the story below, and work the math problem to find the answer.

Jess and a friend are having dinner together.


They want to buy a pizza for $\$ 7.00$.


The friend has \$2.26, and Jess has \$5.21.


How much money do they have together?

the amount of money the friends have

## Addition

Read the story below, and work the math problem to find the answer.

## 66



Each one-way ticket is $\mathbf{\$ 1 2 0}$.


How much money will a round-trip ticket cost?

for a one-way ticket


+ 120.00

for a one-way ticket

to buy a round-trip plane ticket


## Addition

Read each story below, and work the math problems to find the answers.
5
Drew takes the cushions off the sofa to clean it. He finds a quarter and a dime. How much money did Drew find?
$\$$
.25

$+$
.10

money found when cleaning

6
Dana takes her cup to the store. She gets a refill for 50c. Dana also buys pumpkin seeds for 85c. How much money did she spend?


## Addition

Read each story below, and work the math problems to find the answers.

## 79

Tisha orders the fish plate for $\mathbf{\$ 2 . 5 0}$. She also gets iced tea for 45c. How much money does she need to pay?

 glass of iced tea

to pay for lunch

## 80

## Carol buys a pound of sliced turkey for $\$ 6.31$. She also buys a pound of cheese for $\$ 2.75$. How much money does she spend?



## TABLE OF CONTENTS

Introduction ..... III
Research and Standards ..... VI
Progress Chart ..... VII
Level 1 ..... 1
Level 2 ..... 101
Answer Key ..... 151

## INTRODUCTION

Word Problems for Nonreaders was developed by PCl's Janie Haugen-McLane to help students with limited or no reading skills solve basic addition, subtraction, multiplication, and division word problems. Math word problems can be especially challenging for students with learning differences because not only do students have to solve a math problem, but they also have to be able to read and understand the word problem. In order to make the word problems accessible to students with limited or no reading skills, text modifications have been made. Additionally, the math problems are focused on real-life scenarios so that students can easily understand how the problems relate to their everyday lives.

The Word Problems for Nonreaders series has three titles in three separate books:
Addition, Subtraction, and Multiplication and Division.


Each title includes activity sheets in two levels. Level 1 features SymbolStix ${ }^{\circledR}$ symbols by News-2-You ${ }^{\circledR}$ below the text of each word problem to support students with limited or no reading abilities. These symbols allow students to make a connection between the pictures and words, enhancing the understanding of text and the development of literacy. The math problem also has visuals to reinforce what is being added, subtracted, multiplied, or divided. The page layout is clean and uncluttered with only one word problem per page, to further aid students with reading challenges. Level 2 features the same word problems without symbol support. There are two word problems on each page, and the pages also feature a clean and clear page layout along with visuals to reinforce the math problems.

## INTRODUCTION

## How to Use the Program

Choose Level 1 or Level 2 Activity Sheets for each student. Level 1 includes symbols to support nonreaders and students with limited reading abilities. Level 2 does not have symbols. Both levels feature math problem picture support.


LEVEL 1


LEVEL 2

Distribute appropriate copies to each student. Give each student a copy of the appropriate activity sheet, and instruct the students to write their names and the current date on the paper.

## INTRODUCTION

Read the instructions aloud to the students. Note that the directions for Level 1 and Level 2 are slightly different since Level 1 activity sheets have one problem per page while Level 2 activity sheets have two per page.

Record student progress on the Progress
Chart. Document mastery or nonmastery of each problem to assist in monitoring progress. The same math word problems are presented in Level 1 and Level 2, so refer to the problem number to determine which word problem is being used. Place a $\boldsymbol{\nu}$ in the corresponding level column if the student successfully completed that word problem. Place an $X$ in the column if the student was not successful. Record the date in the corresponding date column. Note any additional observations in the Comments section.


PROGRESS CHART

## Other Suggestions

Use manipulatives. Students are often better able to understand math word problems when they use actual objects to help them "see" the math. For example, you might gather small plastic lemons or real lemons for students to use with a math problem for figuring out how many lemons to use in making a lemon pie. Simple counters can also be used in place of real or plastic items.

## RESEARCH AND STANDARDS

Word Problems for Nonreaders provides practice in dealing with addition, subtraction, multiplication, and division word problems. With the two levels featured in each book, the material is appropriate for students with learning disabilities and mild to moderate cognitive disabilities. Both levels include visual representations of each math problem to support struggling learners. Level 1 features symbols to support students with limited or no reading abilities. Researchers believe that symbols are a vital tool for developing literacy because they act as a bridge between the concrete (pictures) and the abstract (print) (Detheridge, 1996). Research noted by the Learning Disabilities Association of America recommends strategies for teaching students with learning disabilities, such as using graphics and pictures, whenever possible (2006).

Both levels are written with short, clear, simple sentences and vocabulary so that struggling learners can read and understand the text whether they use the symbol support or not. Research tells us that short sentences and simple vocabulary are key to supporting struggling learners (Sousa, 2001). Multiple opportunities for practice are included in each book so that struggling learners are not rushed through learning to solve word problems. Math problems based on everyday scenarios help students connect to what they are learning and to understand the relevance of learning such skills.

Word Problems for Nonreaders meets national standards and expectations of the National Council of Teachers of Mathematics (NCTM) in the areas of:

- Numbers and Operations
- Connections
- Problem Solving
- Representation

Detheridge, Tina. (1996). Developing literacy through symbols. Closing the Gap 15:1.
Sousa, D.A. (2001). How the Special Needs Brain Learns. Thousand Oaks, CA: Corwin Press, Inc.
Learning Disabilities Association of America. (2006). Successful strategies for teaching students with learning disabilities. Retrieved December 12, 2008 from http://www.Idanatl.org/aboutld/teachers/understanding/strategies.asp
National Council of Teachers of Mathematics. (2004). Table of standards and expectations. Retrieved December 11, 2008, from http://standards.nctm.org/document/appendix/numb.htm

## Subtraction

Read the story below, and work the math problem to find the answer.
1
A carton of eggs is in Ted's refrigerator.


He makes a cake and uses two of the eggs.


How many eggs are in the carton now?


12

eggs in a new carton 2

eggs

eggs left in the carton

## Subtraction

Read the story below, and work the math problem to find the answer.

## 51

 Sam is waiting in line to get an ice cream cone.

He is customer \#92.


The cashier is serving customer \#84.




How many people are before him?


92

is Sam's number

people ahead of him in line

## Subtraction

Read each story below, and work the math problems to find the answers.
1
A carton of eggs is in Ted's refrigerator. He makes a cake and uses 2 of the eggs. How many are in the carton now?

## 12


eggs in a new carton


## eggs left in the carton

## 2

Pat counts the money in his wallet. He has \$8.32. He puts $\$ 5.00$ of the money in his piggy bank. How much money is in Pat's wallet now ?
 in Pat's wallet

money left in Pat's wallet

## Subtraction

Read each story below, and work the math problems to find the answers.

## 99

Denzel is going on vacation for a week. He packed 7 pairs of underwear fo the trip. He wears 1 pair per day. How many clean pairs does he have now?


## 100

Jerry bought a computer for $\$ 1,495.00$. He received a rebate for $\$ 125.00$. How much did the computer cost in all?
\$1,495.00


refund by mail check

final cost of the computer

## TABLE OF CONTENTS

Introduction ..... III
Research and Standards ..... VI
Progress Chart ..... VII
Level 1 ..... 1
Level 2 ..... 101
Answer Key ..... 151

