Daily Math Puzzlers

Level B
Grades 3 - 5

Power Pack

International Version

Created by Laura Candler

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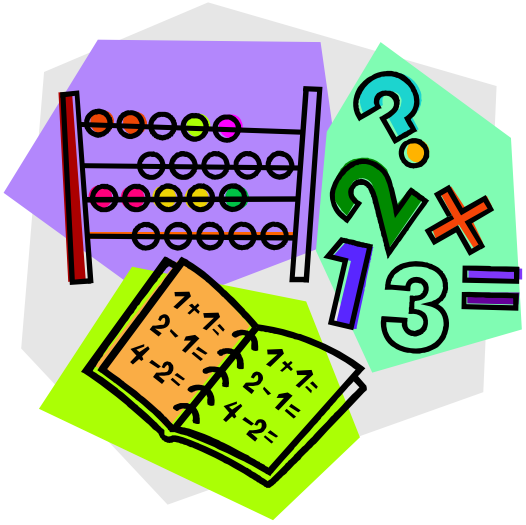
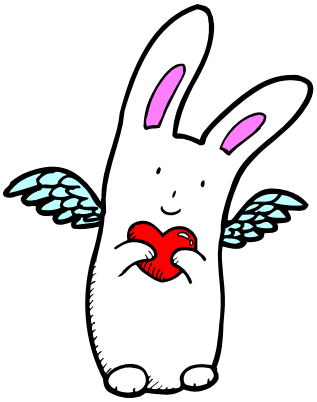


Teaching Resources
www.lauracandler.com

Acknowledgements

I would like to thank all the students and teachers who field tested this program. You opened your classrooms and embraced the Daily Math Puzzler program wholeheartedly. Your enthusiastic response meant the world to me! I would like to offer a special thanks to Pamela Reid in Ontario, Canada for assisting in the development of this International Version. She modified the measurement word problems to make them suitable for world-wide use. She also proofread and edited the entire document. I couldn't have completed this project without her valuable assistance.



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About the International Version

This version of the Daily Math Puzzler Level B book is almost identical to the United States version. However, these math problems use metric measurements and spelling conventions commonly used outside of the United States.

Daily Math Puzzlers

Contents and Introduction

Power Pack Contents

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What If Kids Actually Liked Solving Math Problems????

Problem solving is one of the most important, yet most neglected, areas of math instruction. Many math skills are relatively easy to teach, but teaching kids how to think through a problem in a logical manner is most definitely NOT easy! Yet why should we teach math at all if our students can't apply their knowledge to everyday life?

What if you could significantly improve your students' problem-solving abilities in just 15 minutes a day? A mere 15 minutes per day adds up to 45 hours of instruction on problem solving! Even 10 minutes a day would result in 30 hours of problem-solving instruction. What if you found a method that involved very little preparation yet provided a clear and sequential approach to problem-solving? And what if your students began to look forward to those 10 to 15 minutes of math instruction? What if they actually enjoyed the problems and asked you for MORE????

No need to wonder . . . Daily Math Puzzlers is that program! These math problems were field-tested by dozens of teachers all over the world, and their kids were actually asking for more! The program helped students develop confidence in their problem-solving abilities. As a teacher, you'll enjoy the step-by-step instructions for reviewing calculator skills, teaching problem-solving steps and strategies, and providing a variety of challenging and engaging math problems.

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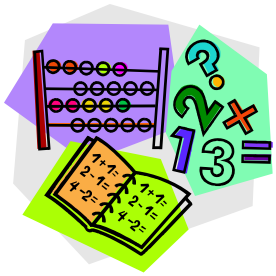
Puzzler Program Overview

Introduction Continued

Meeting NCTM Standards

When using Daily Math Puzzlers, you can feel confident you are meeting NCTM standards for math instruction. In addition to addressing all of the content strands, this program targets the process standards such as problem solving, reasoning and proof, communication, and connections. One easy program meets all the standards!



Daily Math Puzzler Power Packs

This book is the second in a series of Daily Math Puzzler Power Packs that are leveled according to difficulty. The chart below shows the grade level recommendations for each Power Pack. Each book in the series includes a Daily Math Puzzler program overview, calculator lessons, a calculator enrichment game, an introduction to problem solving, and a set of 20 word problem activity pages. In each book, the teacher materials are essentially the same, but the games and student pages are unique.

Time Requirements

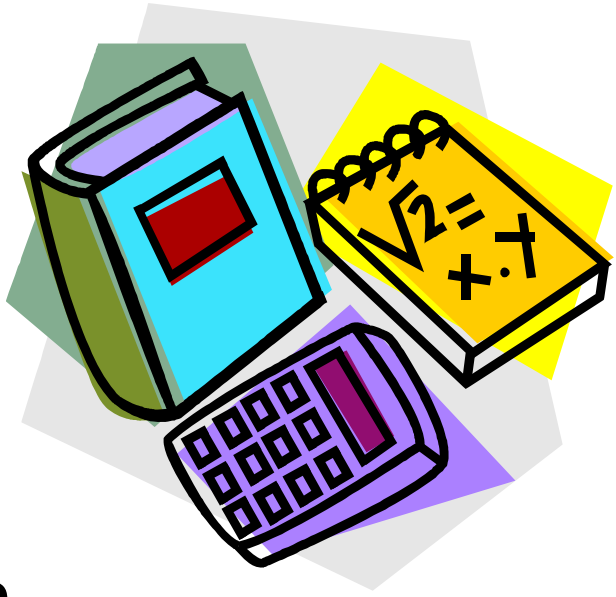
The Daily Math Puzzler program is designed to take 10 to 15 minutes per day. It's not necessary to adhere to the timeline below; some teachers may spread the introductory lessons out over 2 or 3 weeks, while others may skip them altogether. Not ready to start a daily problem-solving program? Check out the Alternative Strategies section on page 42 and you'll find many other uses for the Math Puzzler worksheets. You can have students complete the activity pages in one lesson, use them for cooperative learning, or even send them home for homework.

Suggested Timeline

Week 1: Introduction to Calculator Skills
Week 2: Introduction to Problem Solving
Week 3: Daily Math Puzzler Program

Puzzler Pack	Grade Levels
Level A	2, 3 and 4
Level B	**3, 4 and 5**
Level C	4, 5, and 6
Level D	5, 6 and 7

Introduction to Calculator Skills



Optional Activities to Teach or Review Basic Calculator Skills

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Calculator Introduction

Rationale

Is Calculator Instruction Needed?

If your students will be allowed to use calculators with the Daily Math Puzzler program, it's worth taking time to instruct them in how to use this tool properly. Don't assume that your students already know how to use a calculator! At the very least, give the Basic Calculator Skills Quiz to make sure. You may be surprised at the results!

If you already know that your students will need a full introduction to their calculators, follow the lesson sequence on the next page. There are 2 lessons, but if you only spend 15 or 20 minutes a day on problem solving, it may take more than 2 days to teach the material and assess student progress.

Notes:

- These lessons focus on basic calculator functions only. There are so many different versions of calculators that it would be impossible to address them all. The lessons do not address how to use a calculator to solve fraction problems since those directions are specific to certain calculators. You can certainly teach those functions if you wish.

- Many calculators come with teacher guides that contain an illustration of the calculator. Just do an online search for the specific calculator your class is using and you'll be amazed at the resources you'll find!

- Make a transparency of the calculator you are using or use an overhead projector version. Most calculator teacher guides come with an illustration that you can use to make this transparency. Better yet, check to see if your set of calculators comes with a teaching poster.

- Make a transparency of each page that you plan to use for student instruction. These visuals will help kids focus on your instruction.

Calculator Introduction

Lesson 1

Introduce the Basic Calculator Functions

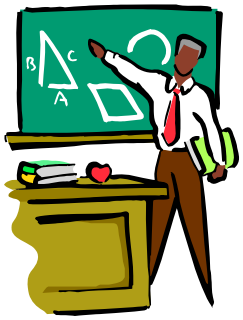
- Start by distributing the calculators and displaying your overhead calculator or transparency. Point out the various number and function keys you'll be using in the lesson. Don't bother to introduce advanced calculator functions at this time, or you will overwhelm your students with information they don't need for the basic problem-solving lessons.
- Place the **Calculator Confusion** page on the overhead and cover the Tricky Situation Hints so students can't see them. Ask them to try to solve the problems at the top of the page. Have them write their answers on individual dry erase boards or paper. Walk around and observe them as they try to solve the problems. Tell them not to worry if they get confused—they can just write a "?" for the ones they can't figure out. Stop the activity if your students get too frustrated and tell them that this activity is designed to show how tricky the calculator can be! Reassure them that these problems will soon seem easy.
- Reveal the hints at the bottom of the page and discuss the issues that are raised by each situation. Remind students that they need to work each problem at least 2 times to check for accuracy!
- Display a transparency of the **Calculator Practice Problems** and have the students do them one at a time. Have students display their answers on dry erase boards or paper so you can check for understanding. Provide additional practice problems as needed.

Basic Calculator Quiz

Administer the **Calculator Quiz** at the end of Lesson 1 or the next day. Use the Answer Key to score the results. You may want to grade this one quite strictly if you plan to retest those who have difficulty. I generally count off points for missing commas, decimal points, dollar signs, etc. You will be surprised at the number of students who need a retest! Note: A blank Calculator Quiz template on page 16 has been provided so that you can create your own test to meet the needs of your class.

Calculator Introduction

Lesson 2



Feedback, Reteaching, and Enrichment*

- Return the quizzes and review the answers as a class.
- Divide the class into two groups based on mastery level.
- **Enrichment (see page 19)** - Students who scored 90% or higher can be given one of the Enrichment activities described on page 19. Students who scored below 90% correct need additional instruction from you.
- **Reteaching** - Use the **Calculator Key Challenge** activity page to help reinforce correct use of the calculator. Some students just don't know what keys to press and in what order to press them. Duplicate a copy of the activity sheet and make a transparency for the overhead. Each problem shows exactly how many calculator keys will have to be pressed to solve the problem. Have students fill in the boxes with the individual keys they will press. Then allow them to enter those keys on their calculators to solve the problems. Provide additional problems as needed until students are comfortable with their calculators.

Administer Retest

Use the retest form of the Calculator quiz to give students an opportunity to improve their original test scores. Even if some kids still have a little trouble, you can proceed with the problem-solving lessons and they will generally improve their calculator skills naturally over time.

*** Mastery Learning Model** - The calculator lessons are based on the Mastery Learning model. Teach a lesson or unit quickly, then test your students to see who has mastered the content. Then divide the class into two groups and provide differentiated activities for each group. Give the students who have mastered the material an enrichment activity. While they are working independently or with a math buddy, gather the other students together in a small group and reteach the content using a different method of instruction. When you retest this group, you'll see significant improvement in their knowledge and understanding. For more information on Mastery Learning, visit www.lauracandler.com.

Calculator Confusion

Tricky Situations

Can you solve these with your calculator?

1) $8.76 − $2.14 = ?
2) $2.37 + $5.13 = ?
3) 45¢+ 73¢ = ?
4) Subtract 18 from 25
5) 20 ÷ 8 = ?

Tricky Situation Hints

1. **Displaying Money Answers** – The calculator doesn't have a key for the dollar or cent sign, but you still need to write these symbols in your answers when you record them.
   Ex: 8.76 - 2.14 = 6.62 or $6.62
2. **Zeroes in Money** - The calculator won't display any zeros to the far right of the decimal point, but money answers are generally written by displaying two places after the decimal point.
   Ex: 7.5 = $7.50
3. **Adding Dollars and Cents** – Since calculators don't use the cent sign, we have to use decimal place value to enter cent amounts.
   Ex: 45¢ + 73¢ → 0.45 + 0.73 = 1.18 = $1.18
4. **Subtraction** – Be sure to enter the larger number first! When subtracting one number <u>from</u> another number, enter the larger number and then subtract the smaller number. Ex: 25−18 = 7
5. **Division** – In real life, division problems frequently have remainders or decimal answers. Some calculators don't have a special key for division and you have to use the [/] key.
   Ex: 20 ÷ 8 = 20 [/] 8 = 2 r 4 or 2.5 or 2½

B

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Name _____

Calculator Practice Problems

1. 2381 – 654 = _____	6. 348 + 854
2. 378 x 8	7. 4 + 9 + 13 + 8 = ____
3. 56¢ + 74¢ = _____	8. $5.00 ÷ 4= _____
4. $9.75 – $5.40 = _____	9. $7.15 x 8 = _____
5. 21 ÷ 6 = ____	10. $7.00 + 2.80 = _____

B

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Name _____

Answers: Calculator Practice

1. 2381 – 654 = **1727**	6. 348 + 854 **1202**
2. 378 x 8 **3024**	7. 4 + 9 + 13 + 8 = **34**
3. 56¢ + 74¢ = **$1.30**	8. $5.00 ÷ 4= **$1.25**
4. $9.75 – $5.40 = **$4.35**	9. $7.15 x 8 = **$57.20**
5. 21 ÷ 6 = **3.5**	10. $7.00 + 2.80 = **$9.80**

B

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Name _____

Calculator Skills Quiz

1. 4826 – 943 = _____	6. 784 + 839
2. 456 x 7	7. 9 + 23 + 15 + 7 = ____
3. 67¢ + 49¢ = _____	8. $8.48 ÷ 4= _____
4. $8.75 – $3.60 = _____	9. $8.15 x 4 = _____
5. 20 ÷ 8 = ____	10. $6.00 + 3.40 = _____

B

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Name _____

Answers: Calculator Skills Quiz

1. 4826 – 943 = **3883**	6. 784 + 839 **1623**
2. 456 x 7 **3192**	7. 9 + 23 + 15 + 7 = **54**
3. 67¢ + 49¢ = **$1.16**	8. $8.48 ÷ 4= **$2.12**
4. $8.75 – $3.60 = **$5.15**	9. $8.15 x 4 = **$32.60**
5. 20 ÷ 8 = **2.5**	10. $6.00 + 3.40 = **$9.40**

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Calculator Key Challenge

For each problem, try to figure out how many keys you will have to press, and what symbol you should use for each part of the problem. Fill in the blocks with the numbers and symbols needed. Then try your ideas with a real calculator to see if it works!

Example: 93 + 42 = | 9 | 3 | + | 4 | 2 | = |

1) 3765 − 25 =

2) 15¢ + 78¢ =

3) 6.8 x 1.92 =

4) $9.25 - $3.68 =

5) 75 ÷ 4 =

B

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Calculator Key Challenge Answers

For each problem, try to figure out how many keys you will have to press, and what symbol you should use for each part of the problem. Fill in the blocks with the numbers and symbols needed. Then try your ideas with a real calculator to see if it works!

Example: 93 + 42 = | 9 | 3 | + | 4 | 2 | = |

1) 3765 – 25 =

| 3 | 7 | 6 | 5 | - | 2 | 5 | = |

2) 15¢ + 78¢ =

| 0 | . | 1 | 5 | + | 0 | . | 7 | 8 | = |

3) 6.8 x 1.92 =

| 6 | . | 8 | x | 1 | . | 9 | 2 | = |

4) $9.25 - $3.68 =

| 9 | . | 2 | 5 | - | 3 | . | 6 | 8 | = |

5) 75 ÷ 4 =

| 7 | 5 | / | 4 | = |

B

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Name _____

Calculator Skills Quiz

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

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Name _____

Calculator Skills Retest

1. 8364 - 625 = _____	6. 865 + 472
2. 678 x 3	7. 8 + 34 + 28 + 9 = ____
3. 83¢ + 56¢ = _____	8. $12.64 ÷ 4= _____
4. $6.38 – $4.80 = ____	9. $2.75 x 5 = _____
5. 30 ÷ 4 = _____	10. $8.00 + 5.60 = _____

B

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Answers: Calculator Skills Retest

1. 8364 - 625 = **7739**	6. 865 + 472 **1337**
2. 678 x 3 **2034**	7. 8 + 34 + 28 + 9 = **79** ____
3. 83¢ + 56¢ = **$1.39**	8. $12.64 ÷ 4= **$3.16** _____
4. $6.38 – $4.80 = **$1.58**	9. $2.75 x 5 = **$13.75**
5. 30 ÷ 4 = **7.5** _____	10. $8.00 + 5.60 = **$13.60**

B

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Calculator Introduction

Enrichment Activities

Benefits of Using Enrichment Activities:

- Students who have attained mastery of basic calculator skills can extend their understanding through higher level thinking and reasoning. It also keeps them from getting bored and disruptive!
- Providing enrichment activities motivates students to do their best on the first test so that they may participate in the activity.
- Dividing the class this way reduces the number of students in your "reteaching" group, allowing you more individual contact with them.

Enrichment Ideas:

1. Math Track Calculator Game - Prior to the lesson, duplicate the game materials (pages 21 - 23). Use card stock or construction paper if possible. If you have them, toy cars work well for playing pieces.
2. Independent Enrichment Assignments - Use your textbook or the Internet to locate a quiet independent activity for students to do.
3. Computer Software - Permit students to practice skills by using software or by going to a favorite math website.
4. Math Stations - Set up math activities in "stations" or centers. See Math Stations for Middle Grades (www.lauracandler.com) for more ideas!

Classroom Management

When you allow students to work independently on Enrichment Activities, you need to establish ground rules. See the Golden Rules mini poster on the next page for ideas. Assign each person a Math Buddy or partner so they have someone they can ask for help if they need it. To avoid chaos and confusion, avoid activities that require more than 2 or 3 students to work together. If they are going to play a game, make sure they have full directions or have been introduced to the game previously so they can work without assistance. Have a back-up independent seatwork plan in the event the game doesn't work out!

Note: If you allow the Enrichment students to play a math game, make the game available later at a Math Station so the others can play, too!

Golden Rules for Enrichment Activities

- Stay on task at all times.
- Don't bother anyone or call attention to yourself.
- Don't talk to the teacher while he or she is working with another group.
- Quietly ask someone if you need help. If that person can't help you, signal the teacher and do something else until help arrives.

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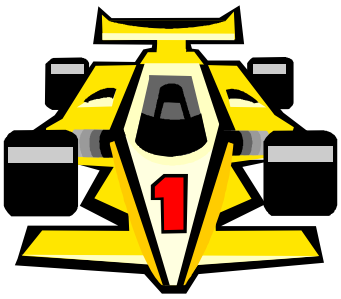
Math Track

Calculator Game

Number of Players: 2



Materials:

- 1 calculator
- Math Track Fuel Cards
- Math Track Game Board
- Small toy cars or Race Car game pieces

Objective: To use math skills to cross the Finish Line first

Directions:

1. Cut out the Fuel Cards and stack them face down in the Gas Station.
2. Draw a Fuel Card from the deck to decide who goes first. High number becomes Player 1. Both players choose a game piece to place on Start.
3. Player 1 draws two Fuel Cards and uses the calculator to ADD or MULTIPLY the two numbers. If the answer is EVEN, Player 1 moves forward 2 spaces. If the answer is ODD, he or she moves forward 1 space. If an "Out of Gas" card is drawn, Player 1 loses a turn.
4. Player 2 draws two Fuel Cards and follows the directions in Step 3.
5. Continue taking turns until one player wins by crossing the Finish Line.

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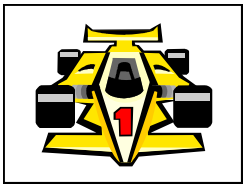
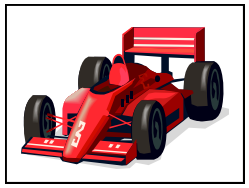
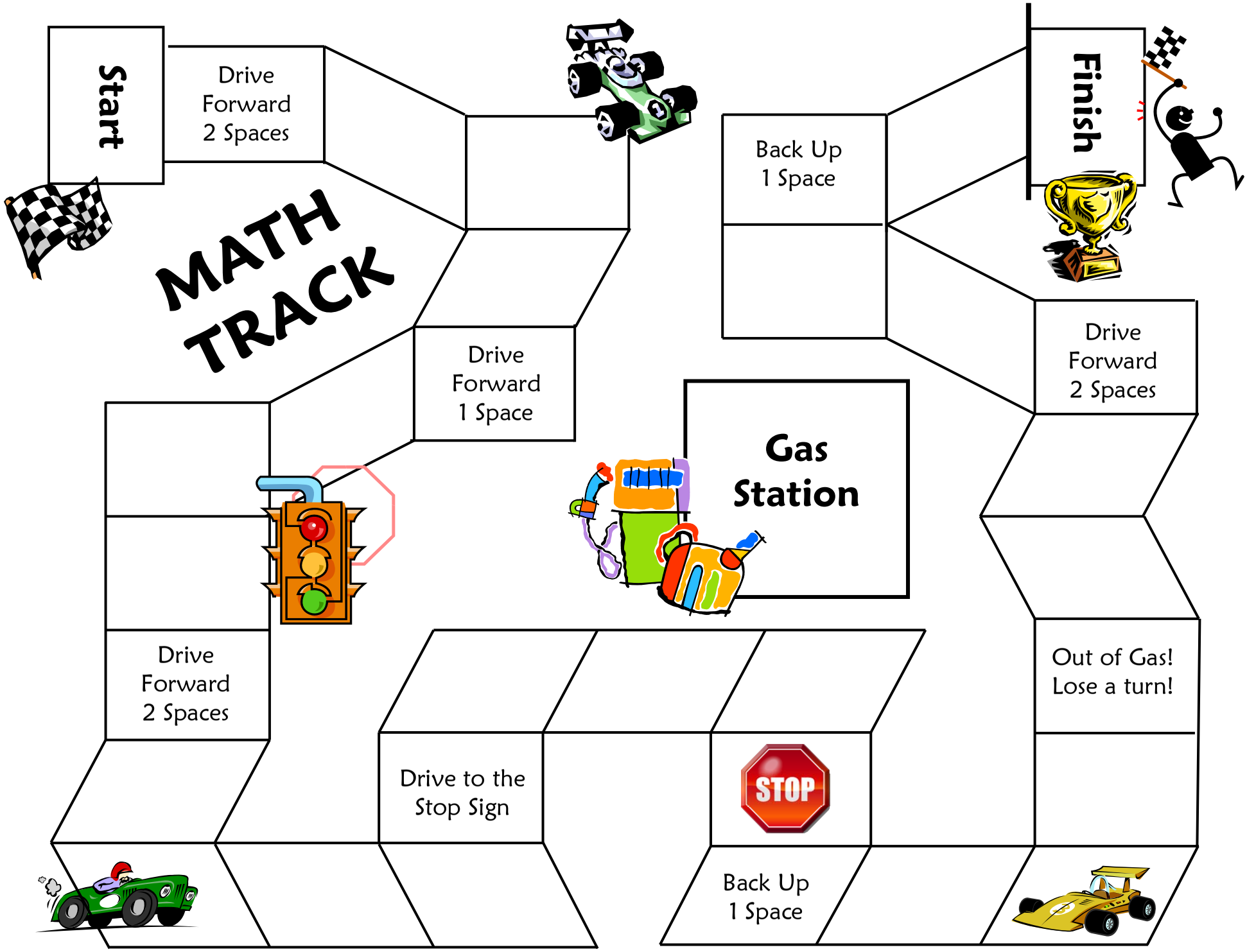
Math Track Fuel Cards

24	13	Out of Gas	5
12	Out of Gas	21	18
16	7	8	14
Out of Gas	25	4	16



Race Car Game Pieces





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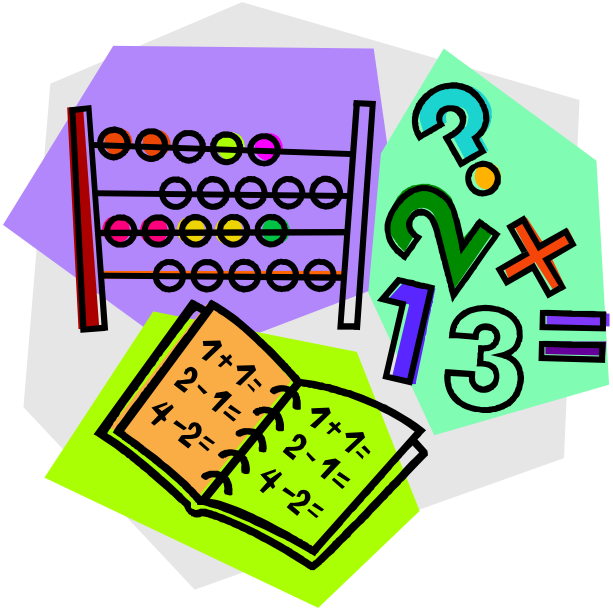
Introduction to Problem Solving



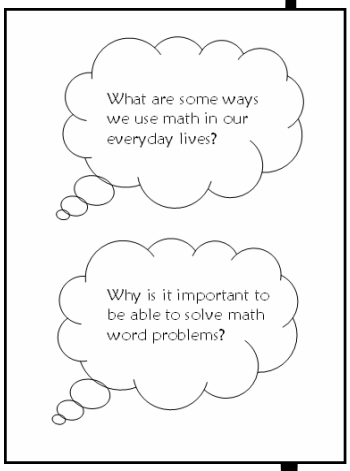
Optional Activities to Teach Problem Solving Steps and Strategies

Steps and Strategies Intro

Teaching Strategies

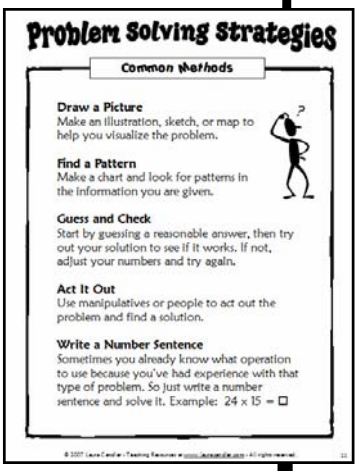
If your students aren't experienced problem-solvers, you'll find it helpful to begin by focusing on a different problem-solving strategy each day. There are probably a dozen strategies you could teach, but to keep things simple we'll focus on just 5 different methods. Each one has a blackline master with a few problems that can be solved using that strategy. Make a transparency of each blackline master and let your students work the problems on individual dry erase boards or scrap paper.

Day 1 - Introduction



Display or ask the first question shown on the blackline master: "What are some ways that we use math in our everyday lives?" Ask students to think about their own responses, and then give them 3 minutes to work with a partner and list their ideas. Then ask volunteers to share their ideas and create a class list on chart paper. Examples include time, money, measurement, etc.

Next discuss the related question, "Why is it important to be able to solve math word problems?" Students usually mention reasons like being on time, being able to figure out how much change you'll receive, knowing how much food to buy for a party, and so on.


Problem Solving Strategies

Common Methods

Draw a Picture
Make an illustration, sketch, or map to help you visualize the problem.

Find a Pattern
Make a chart and look for patterns in the information you are given.

Guess and Check
Start by guessing a reasonable answer, then try out your solution to see if it works. If not, adjust your numbers and try again.

Act It Out
Use manipulatives or people to act out the problem and find a solution.

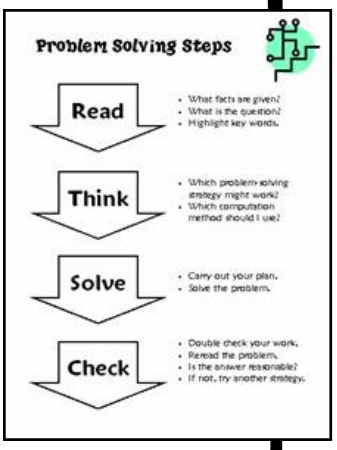
Write a Number Sentence
Sometimes you already know what operation to use because you've had experience with that type of problem. So just write a number sentence and solve it. Example: 24 x 15 = □

Then explain that even though many students find word problems to be tricky, they can be fun if you think of them as puzzles or brainteasers. Tell them that you are going to share 5 different methods commonly used to tackle word problems. Display a transparency or chart showing the Problem Solving Strategies and briefly mention each method. (Hint: You might want to duplicate this page for your students or create a poster of the strategies since it's difficult to show them on the overhead when you are using the projector to work out math problems!)

Steps and Strategies Intro

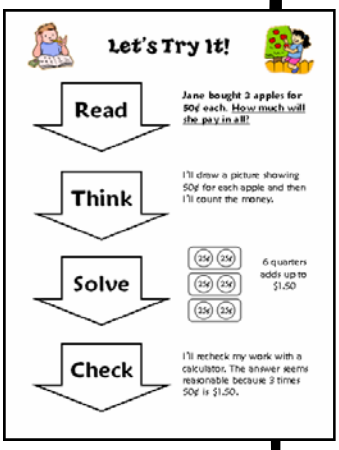
Teaching Strategies

Finally, tell them that you are going to share four basic steps for solving almost any word problem. Display a poster or transparency of the steps (Read, Think, Solve, and Check). Read the steps and briefly explain the strategies for each step. Tell them that tomorrow they will learn to use those steps to solve some math puzzles.

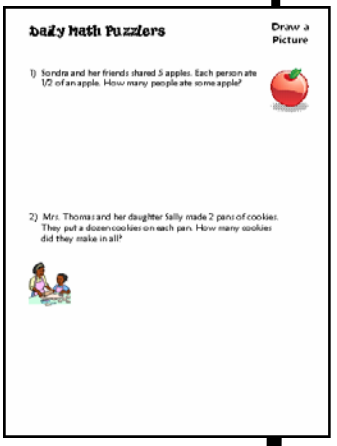


Day 2 - Draw a Picture

The next day, begin by reviewing the Strategies and the Steps. Give the students a copy of the steps or have students draw the 4 arrows and write the 4 key words on paper or in a journal. Display a transparency of the "Let's Try It" page and explain how that problem was solved using the steps.



Now your students are ready to tackle their first problems! Display a transparency of the Draw a Picture problem page. Cover the bottom problem so they can focus on the top one. Read the problem aloud and model the 4 steps as you begin to solve it. For example, highlight key words and underline the question. Ask students to draw their solutions, and let them know that you are not looking for artistic illustrations—you are looking for simple ways to picture the important elements of the problem. Walk around and observe students as they work. Let them show their strategies to a partner and compare their solutions. Model the "checking" step by asking them if their solutions are reasonable. Make sure everyone knows how to picture the solution.



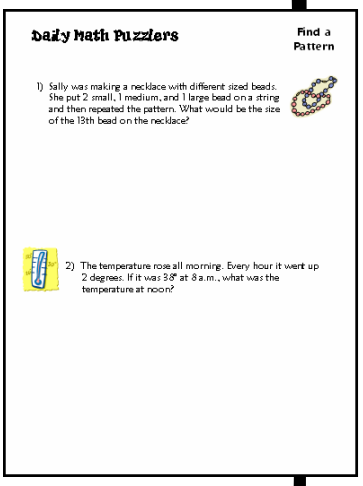
Repeat this procedure for the second problem, modeling the correct use of each problem-solving step.

Practice Problem Answers: #1 - 10 people #2 - 24 cookies

Steps and Strategies Intro

Teaching Strategies

Day 3 - Find a Pattern

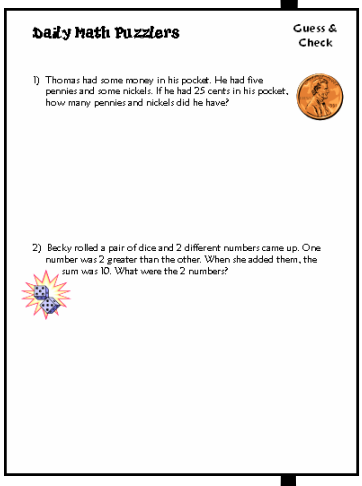


Begin by displaying the Strategies and Steps again. Tell students that they are going to practice a few pattern problems. For the first problem, they can draw the pattern. For the second problem, teach them how to make a chart to organize their facts. One way to chart this information is as follows:

Time	8	9	10	11	12
Temp	3°	5°	7°	9°	11°

Practice Problem Answers: #1 - small bead #2 - 11°

Day 4 - Guess and Check



The key to solving Guess and Check problems is to make an organized list of your guesses and results. For example, in the first problem, you can list the pennies (5) in one column and the number of nickels in the other column. Then you have to multiply the number of nickels times 5 and add it to the pennies. A chart with 4 columns works well for this problem:

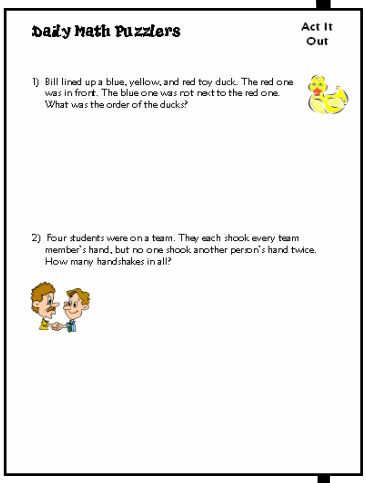
Pennies	Nickels	Total Amount	Result
5	2	15¢	Low
5	5	30¢	High
5	4	20¢	Correct

Practice Problem Answers: #1 4 nickels #2 4 and 6

Steps and Strategies Intro

Teaching Strategies

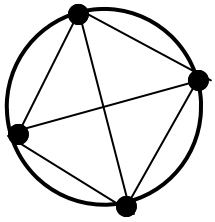
Day 5 - Act It Out Strategy


Daily Math Puzzlers — Act It Out

1) Bill lined up a blue, yellow, and red toy duck. The red one was in front. The blue one was not next to the red one. What was the order of the ducks?

2) Four students were on a team. They each shook every team member's hand, but no one shook another person's hand twice. How many handshakes in all?

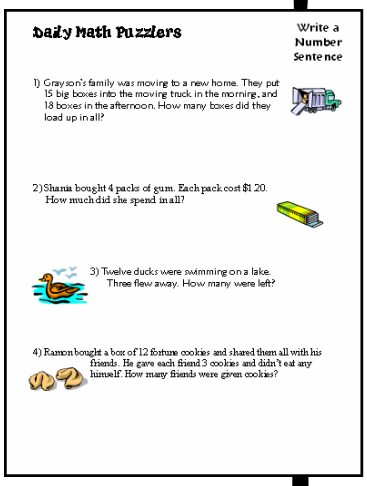
It's important for students to realize that "acting it out" doesn't necessarily mean that people have to get up and move. Ordinary objects can be used as manipulatives to help solve problems. For example, the first practice problem involves determining the correct order of 3 toy ducks arranged in a row. To represent the ducks, you can use colored cubes, colored squares of paper, or square plastic tiles.



The second problem, a classic "handshake" problem, can be demonstrated by 4 students, but you will also need to draw a diagram on the board to record the results of the handshake experiment.

Practice Problem Answers: #1 - (front) R, Y, B #2 - 6 handshakes

Day 6 - Write a Number Sentence


Daily Math Puzzlers — Write a Number Sentence

1) Grayson's family was moving to a new home. They put 15 big boxes into the moving truck in the morning, and 18 boxes in the afternoon. How many boxes did they load up in all?

2) Shania bought 4 packs of gum. Each pack cost $1.20. How much did she spend in all?

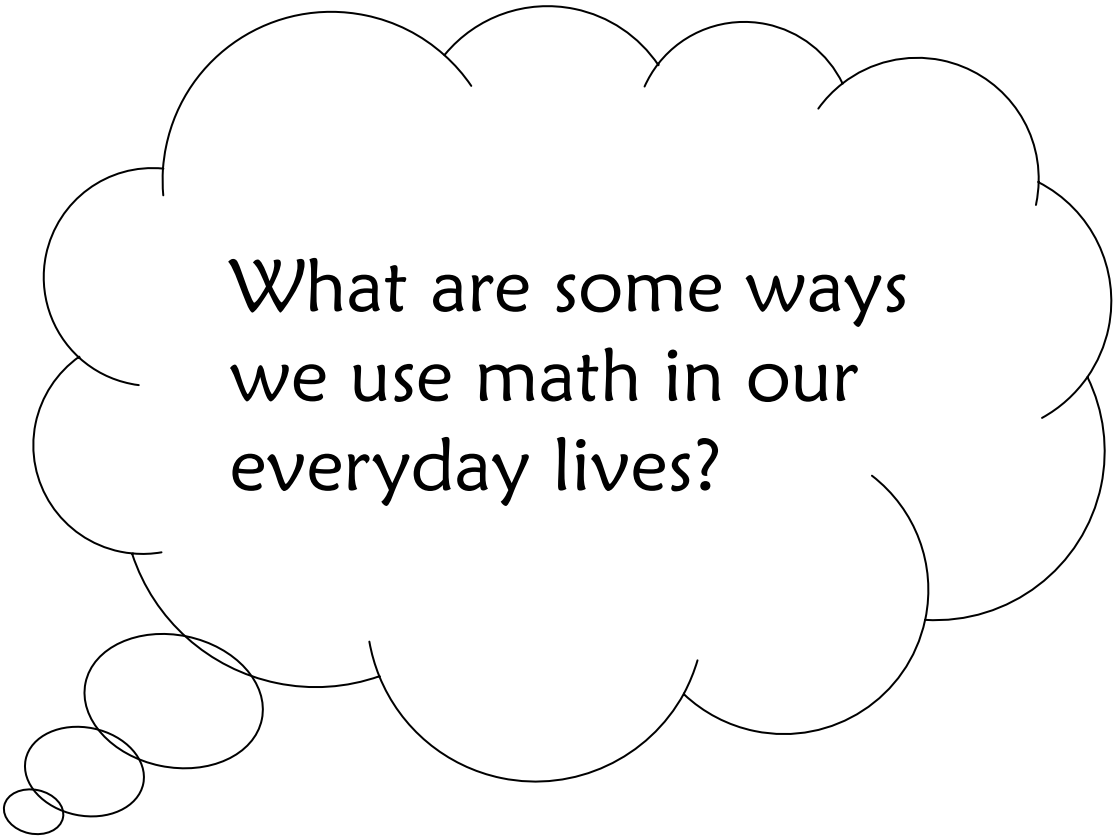
3) Twelve ducks were swimming on a lake. Three flew away. How many were left?

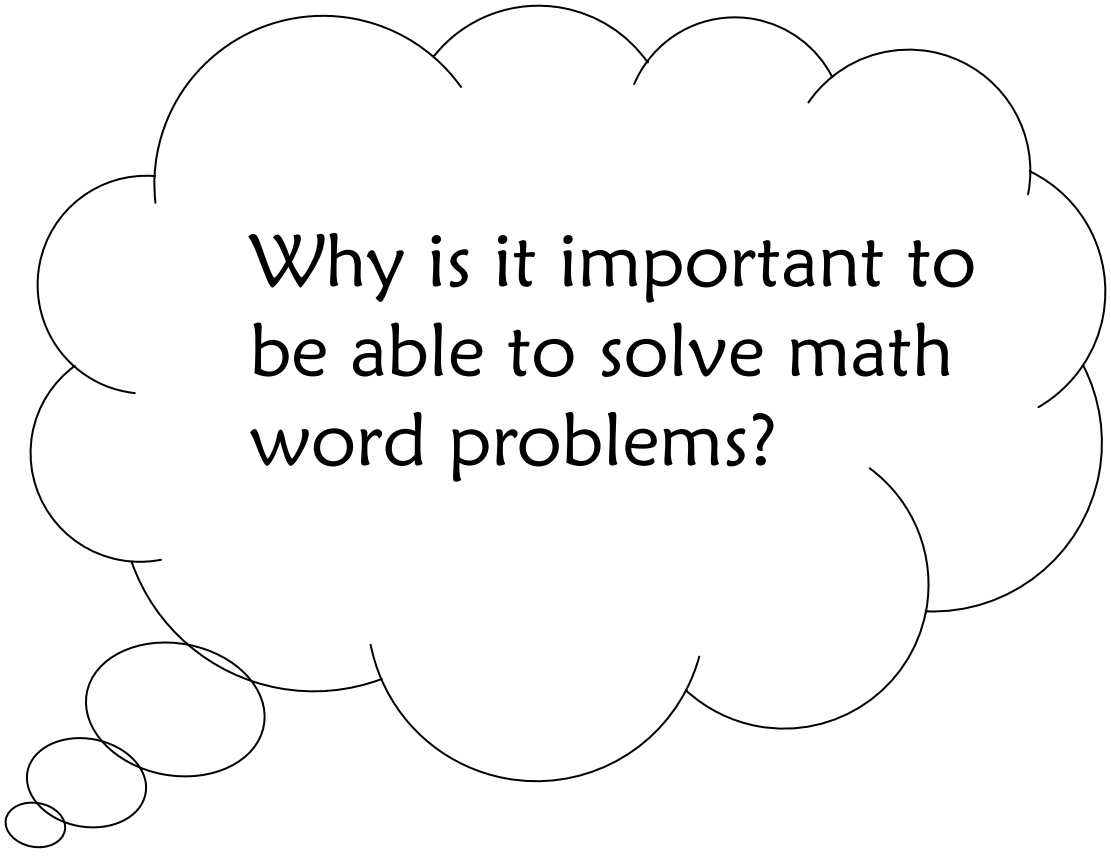
4) Ramon bought a box of 12 fortune cookies and shared them all with his friends. He gave each friend 3 cookies and didn't eat any himself. How many friends were given cookies?

Writing a number sentence can be an option if you can quickly and easily determine what needs to be done to solve the problem. For example, in the first problem, many students quickly see that you just need to add 15 plus 18. In the second problem, it's fairly obvious that you need to multiply the cost of the gum times the number of sticks.

Number sentences are written in a horizontal, rather than vertical, format and students at this age frequently struggle with how to write number sentences correctly.

Practice Answers: #1 $15 + 18 = 33$ # 3 $12 - 3 = 9$
#2 $4 \times \$1.20 = \$4.80$ #4 $12 \div 3 = 4$

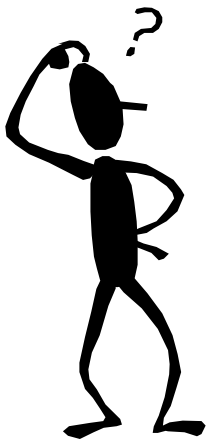

What are some ways we use math in our everyday lives?


Why is it important to be able to solve math word problems?

Problem Solving Strategies

Common Methods

Draw a Picture
Make an illustration, sketch, or map to help you visualize the problem.



Find a Pattern
Make a chart and look for patterns in the information you are given.

Guess and Check
Start by guessing a reasonable answer, then try out your solution to see if it works. If not, adjust your numbers and try again.

Act It Out
Use manipulatives or people to act out the problem and find a solution.

Write a Number Sentence
Sometimes you already know what operation to use because you've had experience with that type of problem. So just write a number sentence and solve it. Example: 14 + 25 = □

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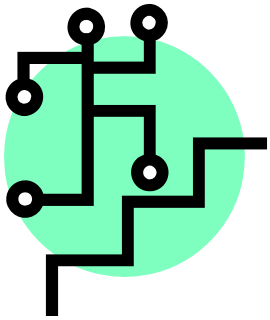
Problem Solving Steps



Read

- What facts are given?
- What is the question?
- Highlight key words.

Think

- Which problem-solving strategy might work?
- Which operation should be used?

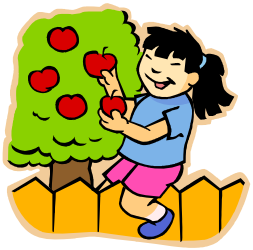
Solve

- Carry out your plan.
- Solve the problem.

Check

- Double check your work.
- Reread the problem.
- Is the answer reasonable?
- If not, try another strategy.

Let's Try It!



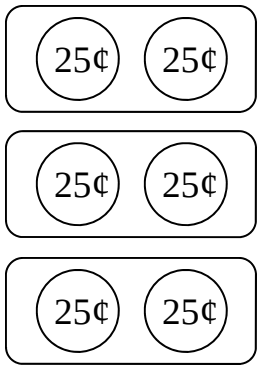
Read

Jane bought 3 apples for 50¢ each. How much will she pay in all?

Think

I'll draw a picture showing 50¢ for each apple and then I'll count the money.

Solve



6 quarters adds up to $1.50

Check

I'll recheck my work with a calculator. The answer seems reasonable because 3 times 50¢ is $1.50.

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Daily Math Puzzlers

Draw a Picture

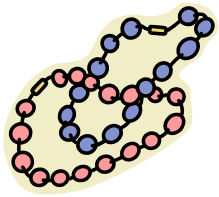
1) Sondra and her friends shared 5 apples. Each person ate 1/2 of an apple. How many people ate some apple?

2) Mrs. Thomas and her daughter Sally made 2 pans of cookies. They put a dozen cookies on each pan. How many cookies did they make in all?

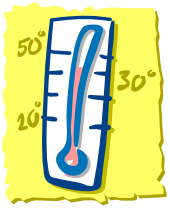
B

Daily Math Puzzlers

Find a Pattern



1) Sally was making a necklace with different sized beads. She put 2 small, 1 medium, and 1 large bead on a string and then repeated the pattern. What would be the size of the 13th bead on the necklace?



2) The temperature rose all morning. Every hour it went up 2 degrees. If it was 3° at 8 a.m., what was the temperature at noon?

B

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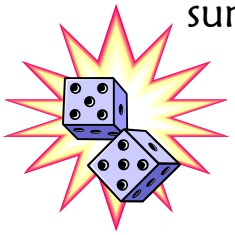
Daily Math Puzzlers

Guess & Check

1) Thomas had some money in his pocket. He had five pennies and some nickels. If he had 25 cents in his pocket, how many pennies and nickels did he have?

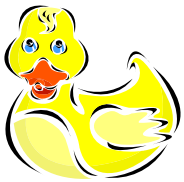
2) Becky rolled a pair of dice and 2 different numbers came up. One number was 2 greater than the other. When she added them, the sum was 10. What were the 2 numbers?



B

Act It Out

1) Bill lined up a blue, yellow, and red toy duck. The red one was in front. The blue one was not next to the red one. What was the order of the ducks?



2) Four students were on a team. They each shook every team member's hand, but no one shook another person's hand twice. How many handshakes in all?

B

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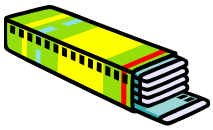
Daily Math Puzzlers

Write a Number Sentence

1) Grayson's family was moving to a new home. They put 15 big boxes into the moving truck in the morning, and 18 boxes in the afternoon. How many boxes did they load up in all?

2) Shania bought 4 packs of gum. Each pack cost $1.20. How much did she spend in all?



3) Twelve ducks were swimming on a lake. Three flew away. How many were left?

4) Ramon bought a box of 12 fortune cookies and shared them all with his friends. He gave each friend 3 cookies and didn't eat any himself. How many friends were given cookies?

B

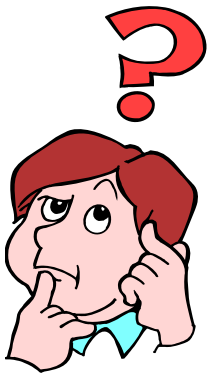
Daily Math Puzzler Program

Program Description and Strategies

B

Daily Math Puzzler Program

Teaching Suggestions



After several weeks of introductory activities, you are finally ready to get started with your Daily Math Puzzler Program! The following strategies are to be regarded as suggestions only. Feel free to modify the program to suit your own needs.

Problem-Solving Worksheets

This Power Pack includes 20 problem-solving worksheets that are coded according to level and page number. The code appears in the lower left corner of the activity page. Level B denotes the level of all problems in this packet, which are on a 3rd through 5th grade level. The number refers to the numerical sequence of the worksheets, but they can be used in any order. For example, B-3 refers to Level B, worksheet #3. If you purchase more than one level, it will be helpful to know the worksheet level in the event they become mixed together.

Should you use the activity pages in order? Not necessarily. You're the best judge of what page to use each week. Review the problems to make sure your students are ready for them. The problems should be somewhat challenging, but they shouldn't be completely frustrating. To be successful, your students should have had some previous experience with those mathematical concepts. For example, if a worksheet contains problems that require students to calculate elapsed time, they will be lost, even after you explain the answer. In general, as the page number increases, the problems become progressively more difficult. However, the difficulty also depends on when you introduce concepts like fractions and measurement. If you don't use the activity pages in order, you'll want to use the Tracking Chart on page 74 to keep track of when and how you use them.

Student Progress Charts

Several charts are included to help you track student progress. On Page 75, you'll find a Student Activity Page Record. Duplicate one per student and make notes after using each worksheet. Or use the Class Activity Page Record on page 76 to keep everyone's information together. To save time, write in your students' names before duplicating and make multiple copies.

Daily Math Puzzler Program

Program Sequence

Daily Math Puzzler Program Snapshot

1. Distribute weekly activity page on Monday.
2. Students solve Problem #1 independently.
3. Teacher checks problem #1 (optional).
4. Whole class instruction on Problem #1.
5. Individuals correct problem #1 independently.
6. Repeat with a new problem on Tuesday, Wednesday, and Thursday.
7. Collect papers on Friday for final review and/or grading.

Strategies and Suggestions

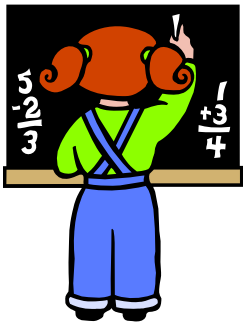
1. **Introduce Weekly Activity Page** - On Monday, give each student a copy of the worksheet and explain that they will work on one problem each day. You will discuss each day's problem the next day, after you have had a chance to review their work. Following this sequence, in a normal 5-day week, the final problem will be discussed on Friday.

2. **Independent Work** - After being given the activity page, students should try to solve the first problem without help. They should NOT take the worksheet home to get extra help because it's too easy for them to let someone else do all the work. Also, tell them not to work ahead and do all the problems - they need to focus their thoughts and energies on the first problem only. They should show all work and write the solution on the answer line.

3. **Quick Check** - If you want to review their work on a daily basis, there are two options you may want to consider:
   A. Collect their worksheets before they leave each day. Check over their answers and explanations before they return to class. If anyone has the correct answer and a logical explanation or illustration to show their work, circle the ✓+. If they don't have the right answer or don't show their work, don't circle anything.

Daily Math Puzzler Program

More Strategies



B. Or wait until students arrive in the classroom the next morning. Either collect the papers or walk around the room to do a quick check before you start the lesson. Circle the ✓+ if the problem is completely correct.

4. **Mini Lesson and Discussion** - After students have tried the problem on their own, ask them to put their pencils down while you teach a mini-lesson on one method of solving the problem. Demonstrate by drawing pictures, acting it out, using guess and check, etc. Involve them in the lesson, but don't let them blindly copy the answer from the overhead projector. Ask students if they can think of other ways to solve the problem. Use the Math Money coupons to reward students for creatively thinking of other methods for solving the problem. (Note: You may want to excuse those who earned a ✓+ from this portion of the lesson. However, they can be valuable contributors to the lesson if they have other strategies to share.)

5. **Students Revise Answers** - Now, turn off the overhead projector and have students use one of the methods to correct their work and write the answer. They need to do more than put a new answer on the line - they also need to show work that reflects the correct answer. Circle a ✓ for anyone who successfully solves the problem. As they finish this problem, they may begin working on the next one. You can use this time to circulate through the room and begin reviewing their work.

6. **Repeat and Review Work** - Repeat these steps for each problem, completing one per day. Collect the papers on Friday for a final review and/or grading. Any grade should be based on effort and participation as well as correctness of answers. If students aren't able to correct some of their answers, circle the ✓- to show that they made an attempt but never successfully reworked the problem.

Daily Math Puzzler Program

Alternative Strategies

Homework - Send one worksheet home each week for homework, then collect them to review and discuss at school.

Problem of the Week Challenges - Why not include one Daily Math Puzzler problem on your weekly newsletter? Students can work with their parents to solve the problem and submit their answers by a certain due date. Offer Math Money to students who get the problem correct!

Problem Solving Focus Days - Devote one day a week to solving all four problems. Use a cooperative learning strategy and spend one class period a week on problem solving rather than 15 minutes a day.

Paper Saver Option - To save paper, make a transparency and have students work the problems on dry erase boards or their own paper.

Written Explanations - Does your state require students to write out explanations when they solve word problems? If so, you will want to add that component to your problem-solving routine. You can use the Solve and Write blackline master on page 73 and duplicate it on the back of each worksheet. Or just have students write explanations on lined paper and staple their papers to the back of the activity page.

Problem-Solving Checkpoint System - At first, it's important to have students review the problem-solving steps and procedures. You can duplicate the checkpoint list on the next page, then cut the slips apart and laminate them for students to use when solving problems.

One Problem Per Page - At the beginning of the year, you may want present just one problem per day to students rather than overwhelming them with four on a page. If so, cut out and paste one problem on the single page template found on page 44 and then duplicate it for students. This template provides more work space as well as the checkpoint system for checking off each step of the problem-solving process.

Problem Solving Checkpoint

- ❑ I read the problem twice.
- ❑ I underlined key words.
- ❑ My work shows my thinking.
- ❑ I checked my answer.
- ❑ I wrote a complete answer.

Problem Solving Checkpoint

- ❑ I read the problem twice.
- ❑ I underlined key words.
- ❑ My work shows my thinking.
- ❑ I checked my answer.
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Problem Solving Checkpoint

- ❑ I read the problem twice.
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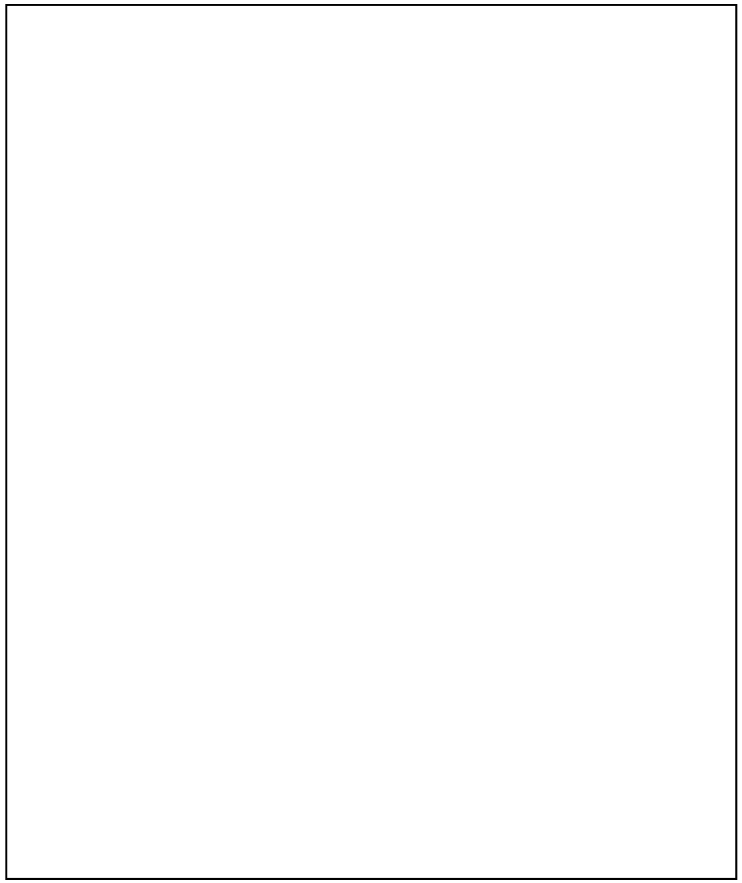
- ❑ My work shows my thinking.
- ❑ I checked my answer.
- ❑ I wrote a complete answer.

Daily Math Puzzler

Name _____

Date _____



Work Space:

Checkpoint

- ❑ I read the problem twice.
- ❑ I underlined key words.
- ❑ My work shows my thinking.
- ❑ I checked my answer.
- ❑ I wrote a complete answer.

Answer _____

✓- ✓ ✓+

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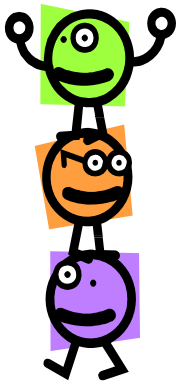
Daily Math Puzzler Program

Cooperative Learning

Stretch mathematical thinking by involving students in Cooperative Learning problem-solving tasks.



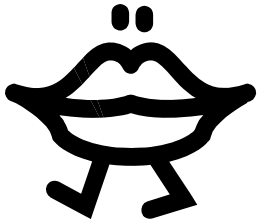
Math Buddies - Divide your class into Math Buddies and duplicate one worksheet per pair. Have them work the problems together and take turns recording their answers on the page. Form new Math Buddies each week. (This option is just for practice and does not lend itself to grading.)

Math Talk - Frequently when students work together in teams, one person does all the work and the others simply copy the answer. However, Math Talk offers a perfect remedy for this problem! It's designed to encourage discussion and discourage copying. To get started:

- Make a transparency of the Math Talk directions (page 46). Put a sturdy plastic cup in the center of each team, and give each person one copy of the same Daily Math Puzzler worksheet. They will complete this worksheet in one class period rather than over an entire week.
- At first, you'll need to model the Math Talk activity for students and guide them through it in a step-by-step manner. After that, they will want to progress through the worksheet at their own pace.
- Remind students that they may only talk when their pencils are in the cup. When they have their pencils in their hands, they must work on the problem on their own without talking! This step ensures individual accountability and discourages cheating.
- Since students have to explain every problem in their own words, this assignment does lend itself to individual grading or evaluation.

Show 'N Tell - For a new twist on teamwork, cut out the 4 problems to make a set of problem "cards." Give each team one set of word problem cards, and put a transparency of the Show 'N Tell directions (page 47) on the overhead projector. Everyone will need an individual dry erase board or chalkboard for this activity. Lead students through the process in a step-by-step manner until they are comfortable with this activity.

Math Talk



Directions

1. Team members have identical worksheets.
2. Each person places his or her pencil in the cup.
3. Person #1 is the first Leader. The Leader reads the first problem only and everyone discusses strategies for finding a solution. Do not actually solve the problem at this time, and don't reveal the answer!
4. The Leader asks, "Is everyone ready to start working on the problem?"
5. If the answer is "No," continue the discussion.
6. When ready, everyone picks up their pencils.
7. ***Without talking***, everyone solves the first problem and writes their answer on the line. Everyone must show how the problem was solved.
8. Pencils are placed back in the cup.
9. Person #2 becomes the new Leader. Continue rotating Leaders for each question.

Pencils In = Talking
Pencils Out = No Talking

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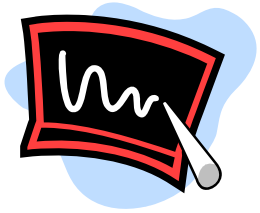
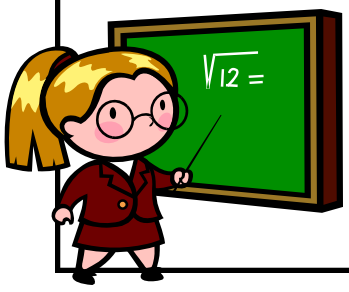
Show 'N Tell



Directions

1. One set of problem cards is needed per team. Stack the problem cards face down in the middle of the team.
2. Person #1 is the first Leader. The Leader reads the first problem aloud and places the card in the middle of the team where everyone can see it. (It's okay for team members to pick up the card and read it again.)
3. Everyone tries to solve the problem on their own. They work out their solutions on individual chalkboards or dry erase boards. If they can't finish the problem, they should try their best and do as much as they can.
4. When everyone has solved the problem or tried their best to solve it, they place their dry erase boards face down in front of them.
5. The Leader says "Show 'N Tell!" and everyone flips their boards over to show their work. They take turns explaining how they solved the problem.
6. The team agrees on one correct answer. The Leader writes the team answer on the card. (Drawings and explanations are not needed on the team answer card).
7. A new person becomes the Leader for each round. Steps 2 - 6 are followed for each problem card.



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Math Money

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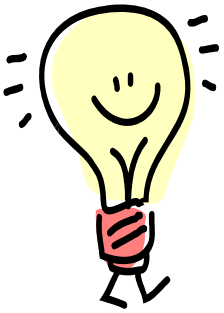
Daily Math Puzzler Program

Teacher Tips*



Highlighters - I wanted to share what I have my kids do when they are doing these kind of problems. They read the problem twice. The second time they use two color highlighters. They highlight key info with one color and the question with another. They love using highlighters and they are much more focused on the problem. ~ Sharyn Powell

Spiral Notebooks - I have the students cut out the problems and paste them into a spiral notebook, one problem per page. This way they have space for working out the problem as well as a written explanation if required. ~ Suzann Falgione

Sentence Answers - When my kids answer word problems, after the computation they then answer the question in a simple sentence, such as "Ronald had 247 more cards than Brad." This way, they can "self-check" if their answer makes sense. They are not just looking at the numbers in the problem and choosing an operation. Putting the answer into words also helps the kids with language issues (ESL or ESE.) ~ Linda Schuman

Problem-Solving Bulletin Board - Something I've done before was to have a bulletin board area with the Problem of the Week posted. When students have completed their answers (pictures, words, symbols), they post them face down. At the end of the week, or the Thursday night before, I "reveal" all the submitted answers. The kids are excited to compare and see what everyone else posted. We then discussed the correct answer and some of the ways it was solved. I've also seen something similar done as a whole school. The problem was posted, answers submitted to a sealed box, then posted at the end of the week. The display remained up for a week after for parents, community members, and other staff and students to view. ~ Rose Carre

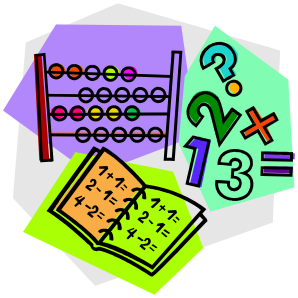
* Teacher Tips submitted by field testers and teachers who are using the Daily Math Puzzler program. Feel free to send your teacher tips to Laura at lauracandler@att.net.

Daily Math Puzzler Program

Dear Parents,

Math problem solving is challenging for most students, but it's also extremely important. Knowing how to add, subtract, multiply and divide is meaningless if you can't solve problems in everyday life. That's why I'm excited to introduce Daily Math Puzzlers, a new weekly math program that will take just a few minutes a day but will help your child build a solid foundation in math.

Here's how the program works. Every Monday I will give my students a worksheet containing four math word problems. One problem will be completed each day, Monday through Thursday. Each day before they do another problem, we will discuss the problem from the previous day. We've been learning a variety of problem-solving steps and strategies, and now it's time to apply what we've learned.



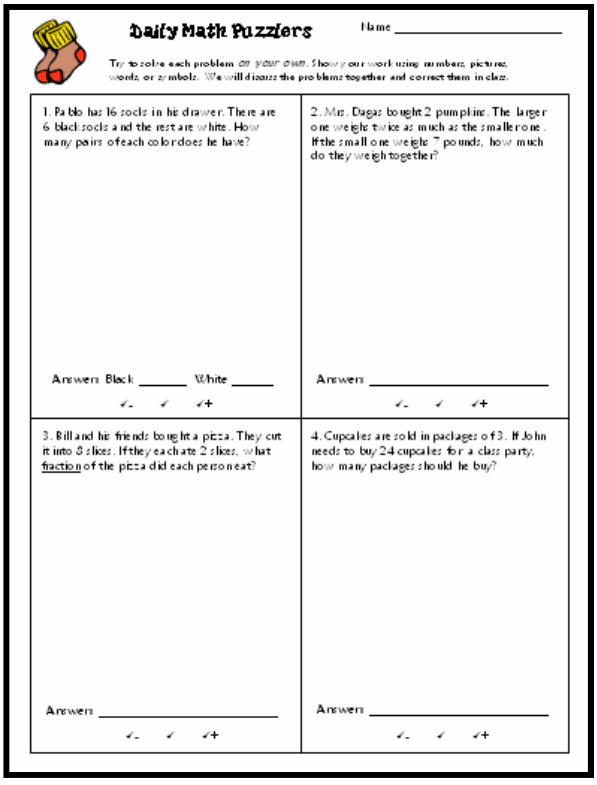
Daily Math Puzzler Guidelines:

- Students solve one problem per day, and they must show their work with numbers, pictures, symbols, or words.
- Students should attempt to work each problem on their own first without receiving outside help. Each day we will discuss the previous day's problem as a class, and your child can make corrections at this time.
- Your child may use a calculator if he or she knows how to solve the problem but is not comfortable with the computation needed for the solution.
- The Daily Math Puzzler activity sheet will be graded on effort and participation as well as work quality. Students might not have all the problems correct at first, but they can still do well if they ask questions, share ideas, and correct their answers in class.

Even though I'm requesting that you do not assist your child at home with this assignment, I wanted you to be aware of this program and how I will evaluate your child's performance. If you have any questions, please feel free to contact me and I'll explain the program in more detail. Thanks for your support!

Sincerely,

Daily Math Puzzler Activity Pages



Daily Math Puzzlers

Name _____

Try to solve each problem on your own. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Pablo has 16 socks in his drawer. There are 6 black socks and the rest are white. How many pairs of each color does he have?

Answer: Black _____ White _____

✓- ✓ ✓+

2. Mrs. Dagas bought 2 pumpkins. The larger one weighs twice as much as the smaller one. If the small one weighs 7 pounds, how much do they weigh together?

Answer: _____

✓- ✓ ✓+

3. Bill and his friends bought a pizza. They cut it into 8 slices. If they each ate 2 slices, what fraction of the pizza did each person eat?

Answer: _____

✓- ✓ ✓+

4. Cupcakes are sold in packages of 3. If John needs to buy 24 cupcakes for a class party, how many packages should he buy?

Answer: _____

✓- ✓ ✓+

20 Activity Pages for Daily Problem Solving

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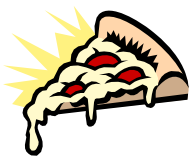


Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Brad, Tony, and Ronald collected baseball cards. Brad had 234, Tony had 316, and Ronald had 481. How many more cards did Ronald have than Brad?

Answer: _____

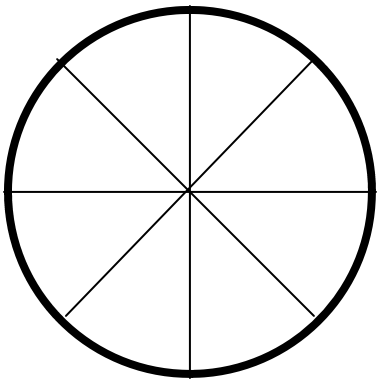
✓- ✓ ✓+

2. Ginger's coloring book came with 125 stickers. If she puts 10 stickers on a page, how many pages of stickers will she have? How many stickers will be left over?

Answer: Pages _____ Left Over _____

✓- ✓ ✓+

3. Sarah and Amy shared this pizza. Sarah ate half and Amy ate 3 slices. Who ate more? Use the pizza below to show how you know.



Answer: _____

✓- ✓ ✓+

4. Thomas wanted to buy a toy plane that costs $1.15. He emptied his piggy bank and found 3 quarters, 4 dimes, and 2 pennies. Does he have enough money? Use the space below to show how you know.

Answer: _____

✓- ✓ ✓+

B-1

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Tom and Jose scooped seeds out of their pumpkins. Tom had two hundred six seeds. Jose had one hundred nineteen more seeds than Tom. How many seeds did Jose have?

Answer: _____

✓- ✓ ✓+

2. Mrs. Dale baked a pan of a dozen cookies. She frosted half the cookies. How many cookies were not frosted?

Answer: _____

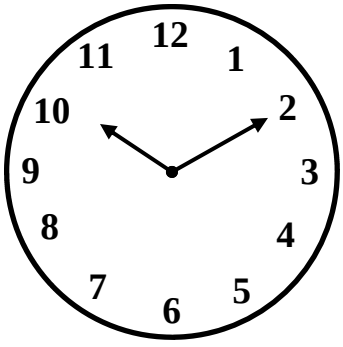
✓- ✓ ✓+

3. Sandra collected seashells and put them into bags. She had 4 bags with 5 shells in each, plus one bag with 3 shells. How many shells did she have?

Answer: _____

✓- ✓ ✓+

4. Benji looked at the clock below and realizes he needs to go to a party in 20 minutes. What time is the party?



Answer: _____

✓- ✓ ✓+

B-2

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Daily Math Puzzlers

Name _____

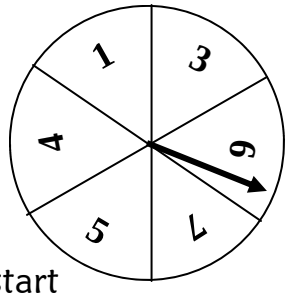
Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Ginger buys two dozen cupcakes for the class party. There are 25 students in the class. Will there be enough cupcakes for each person to have one? Use the space below to show how you know.

Answer: _____

✓- ✓ ✓+

2. If Jessica spins this game spinner and lands on an even number, she will have to start over. What is the chance that she will have to start over?



Answer: _____

✓- ✓ ✓+

3. Greg built a tower with some blocks. Sammy added 8 more to the top of the tower. Now there are twice as many blocks as Greg started with. How many blocks does the tower have now?

Answer: _____

✓- ✓ ✓+

4. The temperature in Andre's bedroom was 21°C. Each hour it dropped 2 degrees. What was the temperature after 3 hours?

Answer: _____

✓- ✓ ✓+

B-3

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Tanya is making a beaded necklace with a repeating pattern. What shape will she use for the 15th bead?

Answer: _____

✓- ✓ ✓+

2. Brenda was building a fence around her rectangular garden. The garden was 1 metre long on one side and 2 metres long on the other. How many feet long will her fence be?

Answer: _____

✓- ✓ ✓+

3. The Damien family will be driving 235 kilometres to their grandma's house for vacation. They can travel about 80 kilometres per hour. About how many hours will it take them to get to their grandma's house ?

Answer: _____

✓- ✓ ✓+

4. Steven made a chart of the pages he read each day. About how many pages did he read in all that week?

Day	Pages Read
Monday	18
Tuesday	22
Wednesday	27
Thursday	19
Friday	9

Answer: _____

✓- ✓ ✓+

B-4

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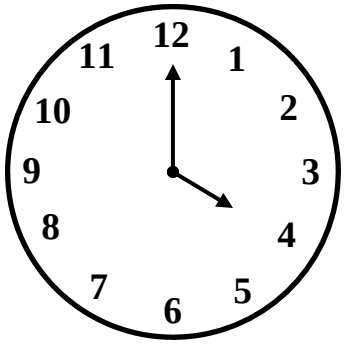
Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Brenda started watching a movie at quarter after two. When it was over, she saw that it was the time shown below. How long did her movie last?



Answer: _____

✓- ✓ ✓+

2. Mary collected twenty-three leaves. Susan collected twice as many as Mary. Rebecca collected five less than Susan. How many leaves does Rebecca have?

Answer: _____

✓- ✓ ✓+

3. A caterpillar can crawl 12 centimetres every minute. If it climbs up a flower stem that is 75 centimetres tall, how many minutes will it take to get to the top?

Answer: _____

✓- ✓ ✓+

4. Justin wants to buy some new pencils and pens. His mom gave him $2.00 to spend. The pencils are a quarter, and the pens are 60¢ each. Will he have enough to buy 4 pencils and 2 pens? Use this space to show how you solved the problem.

Answer: _____

✓- ✓ ✓+

B-5

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Stacy's family bought a box of doughnuts and ate eight of them. If the doughnuts shown below were left over, how many were in the box when they bought it?

Answer: _____

✓- ✓ ✓+

2. Javier made a double batch of cookies for his class party. If one batch of cookies calls for 125 mL sugar, how much sugar will he need for the double batch?

Answer: _____

✓- ✓ ✓+

3. Angelica rolled 2 dice and added the numbers. She rolled two even numbers. Was the sum even or odd? Use the space below to explain or show how you know.

Answer: _____

✓- ✓ ✓+

4. Devin tried to divide his books evenly between his 3 shelves, but he had some left over. If he put 5 books on each shelf and had 3 left over, how many books did he have in all?

Answer: _____

✓- ✓ ✓+

B-6

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Dalton wants to buy 2 scoops of ice cream at the fair. He can buy it in a cup or in a cone. He has a choice of chocolate, vanilla, and peach ice cream. How many combinations are possible if he buys two different flavors of ice cream?

Answer: _____

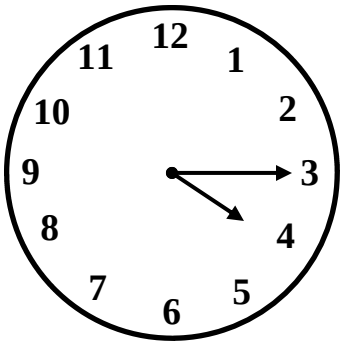
✓- ✓ ✓+

2. Tickets to the zoo cost $5.25 for adults and $4.50 for children. Mrs. Sanchez has a $20 bill and wants to buy herself and her 3 children a ticket. Does she have enough money? Show how you know.

Answer: _____

✓- ✓ ✓+

3. Ethan is at a friend's house and needs to go home at half past five. He looks at the clock and notices the time shown below. How much time does he have left to play?



Answer: _____

✓- ✓ ✓+

4. Kayleigh plants a flower garden with 3 rows of roses and 2 rows of daisies. Each row has 5 flowers. How many flowers did she plant in all?

Answer: _____

✓- ✓ ✓+

B-7

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. While on vacation, Jessica sent 2 letters and 3 postcards each day for 4 days. How many items did she mail in all?

Answer: _____

✓- ✓ ✓+

2. Carlos collected shells at the beach. In the first hour he collected 8 shells. During the next hour, he collected twice as many. He put all his shells together and gave 5 to his sister. How many did he have left?

Answer: _____

✓- ✓ ✓+

3. Taylor went to the grocery store to buy grapes. If a kilogram of grapes costs $3.00, how much did he pay for $\frac{1}{2}$ kilogram?

Answer: _____

✓- ✓ ✓+

4. Chelsey needs to buy hotdog rolls for the family cookout. She wants enough for each person to have 2 hotdogs, and there will be 6 people at the cookout. The rolls come in packages of eight. How many packages should she buy?

Answer: _____

✓- ✓ ✓+

B-8

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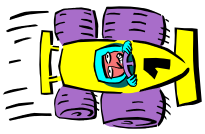

Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Marcus counts his toy cars and shows them to Jason. Jason has five times as many cars as Marcus. If Jason has 20 cars, how many does Marcus have?

Answer: _____

✓- ✓ ✓+

2. Bella measured the length of her garden by taking 6 steps next to the fence. If each step was 50 centimetres long, how many metres long was the garden?

Answer: _____

✓- ✓ ✓+

3. Mikayla bought a dozen new pencils and wanted to sharpen them all. If it took her 30 seconds to sharpen one pencil, how many minutes will it take her to sharpen them all?

Answer: _____

✓- ✓ ✓+

4. Max's faucet was dripping and he wanted to see how much water he was losing. He collected 125 mL of water in an hour. How much water did he collect in four hours?

Answer: _____

✓- ✓ ✓+

B-9

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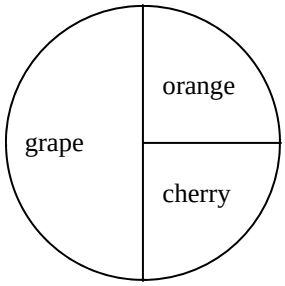
Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

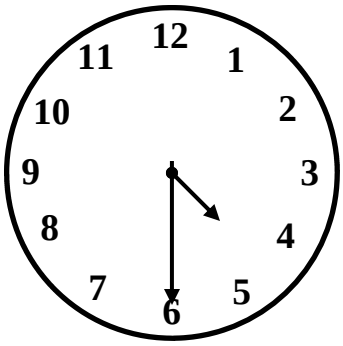
1. Lance's class made a circle graph showing the types of punch that each person liked. Six people liked cherry punch and another six liked orange. How many people liked grape? How many people were surveyed in all?



Answer: Grape _____ All _____

✓- ✓ ✓+

2. Shondra looked at her watch when she went into the library and saw the time below. She spent 25 minutes looking for books, 15 minutes reading, and 5 minutes checking out books at the end. What time did she leave?



Answer: _____

✓- ✓ ✓+

3. Joe can drive 400 kilometres on one tank of gas. It's 225 kilometres one way to the beach. If he starts his trip to the beach with a full tank, will he have to stop for gas on the way back? Explain or show how you know.

Answer: _____

✓- ✓ ✓+

4. Betsey brings two dozen lollipops to share with the art club. Her mom tells her to share the candy equally between the members. If there are 8 members, how many lollipops will each person get?

Answer: _____

✓- ✓ ✓+

B-10

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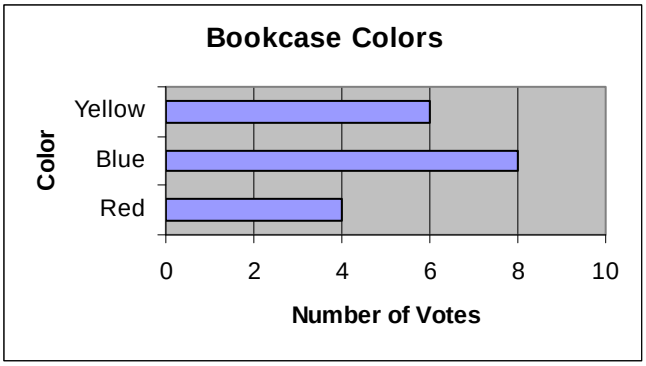
Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Mrs. Sampson's class voted to see what color they should paint a bookcase. How many people voted for yellow or red?



Answer: _____

✓- ✓ ✓+

2. Tyler watched a movie that was 1 hour and 45 minutes long. If the movie started at 11:15 a.m., when did it end?

Answer: _____

✓- ✓ ✓+

3. Mavis practiced her violin each day, and every day she practiced a little longer. On Monday she played for 10 minutes, on Tuesday she played 13 minutes, and on Wednesday she played 16 minutes. If she continues in the same way, how many minutes will she practice on Saturday?

Answer: _____

✓- ✓ ✓+

4. Brock bought 6 red balloons and 2 yellow balloons at the fair. What fraction of the balloons were yellow?

Answer: _____

✓- ✓ ✓+

B-11

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Samantha planted 8 seeds in each of 5 flowerpots. When the seeds began to sprout, she noticed that only 6 seeds in each pot sprouted. How many seeds sprouted in all?

Answer: _____

✓- ✓ ✓+

2. Spencer's cell phone plan gives him 125 minutes each month. He called his mother and talked for 48 minutes, and then talked to his sister for 27 minutes. How many minutes does he have left?

Answer: _____

✓- ✓ ✓+

3. Andrea wanted to buy a coloring book that costs $1.25. She had five dimes, three nickels, and three quarters. Does she have enough money? Show how you know.

Answer: _____

✓- ✓ ✓+

4. Charlie fenced in a square corner of his backyard for his dog. If the area was 2 metres long and 2 metres wide, how much fence did he have to buy in all?

Answer: _____

✓- ✓ ✓+

B-12

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. In a frog-hopping race, Becky's frog hopped 386 centimetres and Seth's hopped 4 metres. Whose frog hopped farther?

Answer: _____

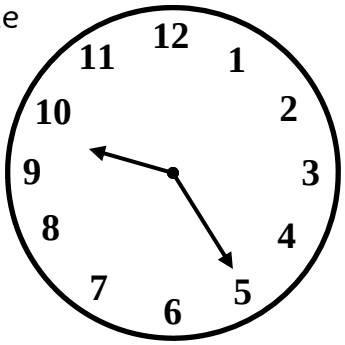
✓- ✓ ✓+

2. Clare bought a hat for $3.00 and a scarf for half of that price. She paid for both of them with a $5.00 bill. How much change did she get back?

Answer: _____

✓- ✓ ✓+

3. James started running a race at exactly 8:45 a.m. When he finished, he looked at his watch and saw the time shown. How long did it take him to run the race?



Answer: _____

✓- ✓ ✓+

4. Dalton bought a dozen eggs, but when he opened the package he found that $\frac{1}{3}$ of the eggs were cracked. How many eggs were cracked?

Answer: _____

✓- ✓ ✓+

B-13

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Travis has 3 times as many Choco Bears as his sister Ruby. If Ruby has nine Choco Bears, how many does Travis have?

Answer: _____

✓- ✓ ✓+

2. Michael shared a 3 decimetre-long cheese breadstick with his friends by cutting it into thirds. How many centimetres long was each piece?

Answer: _____

✓- ✓ ✓+

3. Peggy reaches into a bag that has a mix of flavored candies. There are five orange, seven grape, and three lemon. What is the probability that she will take out a lemon candy?

Answer: _____

✓- ✓ ✓+

4. Zach needs $12.50 to buy a basketball. He saves $3.75 the first week, and $4.25 the second week. How much more does he need to buy the basketball?

Answer: _____

✓- ✓ ✓+

B-14

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Daily Math Puzzlers

Name _____

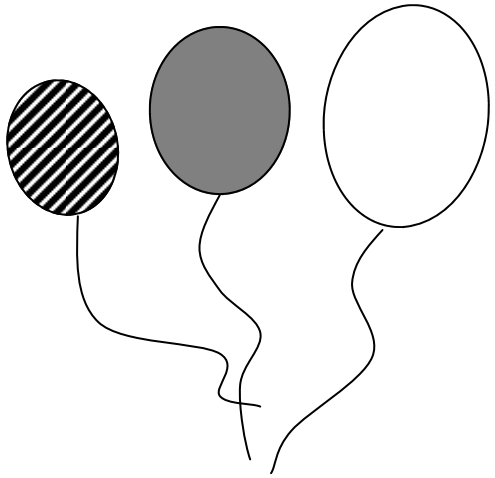
Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Patrick left his house at quarter past five. He jogged to the park and arrived at 6:30. How long did it take him to jog to the park?

Answer: _____

✓- ✓ ✓+

2. Ralph's balloon is not next to Margaret's balloon. Cody's balloon is smaller than Margaret's balloon. Who has the striped balloon?



Answer: _____

✓- ✓ ✓+

3. Jon bought a box of animal crackers. There were 2 elephants, 5 lions, and 3 bears in the box. What fraction of the animals were lions?

Answer: _____

✓- ✓ ✓+

4. It takes 2 minutes to peel 1 apple and 4 minutes to peel 2 apples. How long will it take to peel 5 apples?

Answer: _____

✓- ✓ ✓+

B-15

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. A quarter weighs about 6 grams and a dime weighs about 2 grams. Meredith has a dollar's worth of quarters. How much do her quarters weigh in all?

Answer: _____

✓- ✓ ✓+

2. Pedro was making punch for the class party. He mixed one litre of soda with one litre of orange juice. How many 250 mL servings of punch did he make?

Answer: _____

✓- ✓ ✓+

3. Skylar ordered lunch from the Zip Stop Mart. If she ordered 2 tacos, a bag of chips, and milk, how much did she pay for her meal?

Zip Stop Menu

Hotdog	$2.95
Taco	$1.35
Fries	$0.99
Milk	$1.05
Chips	$0.85

Answer: _____

✓- ✓ ✓+

4. Brandon brought six pencils to class. He gave one third of them to Gavin. Then he gave 1 pencil to Lance. How many does he have left?

Answer: _____

✓- ✓ ✓+

B-16

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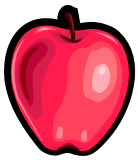

Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Kevin buys 3 apples that cost 75¢ each. How much change does he get back if he pays with a $5 bill?

Answer: _____

✓- ✓ ✓+

2. Emily has 6 erasers. Angela has twice as many as Emily. Deliah has 1 less than Angela. How many erasers in all?

Answer: _____

✓- ✓ ✓+

3. Matthew can type at a rate of 30 words per minute. If he has a 152 word story to type, about how many minutes will it take?

Answer: _____

✓- ✓ ✓+

4. Caroline kept a chart of the minutes she studied during the week. About how many <u>hours</u> did she study in all?

Day	Minutes
Monday	29
Tuesday	42
Wednesday	18
Thursday	32

Answer: _____

✓- ✓ ✓+

B-17

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Ariel roasted marshmallows for her mother, father, brother, and herself. If it takes her three minutes to roast one marshmallow and each person ate two marshmallows, how long did it take her to roast them?

Answer: _____

✓- ✓ ✓+

2. Manuel put 4 colored beads on a string. He slid the red one on first and then added 2 more beads. He put the blue bead on last and noticed that the green bead was touching the blue one and the yellow one. Show the order of the beads.

Answer: _____

✓- ✓ ✓+

3. A recipe that makes 20 cookies calls for 125 mL of sugar. If David wants to make 60 cookies, how much sugar will he need?

Answer: _____

✓- ✓ ✓+

4. Each page in a photo album holds 4 pictures, and the album holds 60 pictures in all. If Twyla already has 10 full pages of pictures, how many pictures can she add?

Answer: _____

✓- ✓ ✓+

B-18

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. While visiting aviary at the zoo, Dillon saw over a dozen birds. He saw 3 birds in each of 4 cages and 5 birds in the 5th cage. How many birds did he see in all?

Answer: _____

✓- ✓ ✓+

2. Sally wants to buy 3 packs of gum for 65¢ each. In her pocket, she has a $1 bill, four dimes, and 1 quarter. How much more money does she need?

Answer: _____

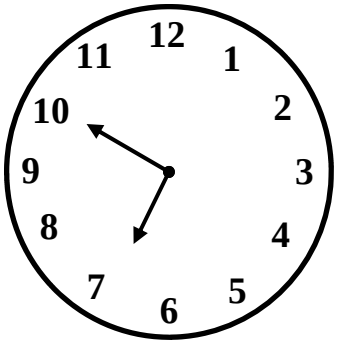
✓- ✓ ✓+

3. Lewis has three different shirts and four different pairs of pants. How many different outfits can he make from these choices?

Answer: _____

✓- ✓ ✓+

4. Morgan knows that the mall closes at half past seven. She checks her watch and notices the time shown below. How much time does she have left to shop?



Answer: _____

✓- ✓ ✓+

B-19

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Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1. Colten brought in 295 pennies for the class penny drive. Sandra brought in 250 pennies, and Felisha collected twice as many pennies as Sandra. Together how much money did the three students give to the penny drive?

Answer: _____

✓- ✓ ✓+

2. Miesha made a dozen cupcakes for the class party. She frosted $\frac{1}{4}$ of the cupcakes green and the remaining cupcakes red. How many cupcakes were red?

Answer: _____

✓- ✓ ✓+

3. Ramon's car gets 13 kilometres to the litre. If he puts 48 litres of gas in his car, how many kilometres can he drive before he needs to fill up his tank again?

Answer: _____

✓- ✓ ✓+

4. Chante weighed an apple and found that it was 100 grams. She needs to buy a ½ kilogram of apples for a pie. How many apples should she buy?

Answer: _____

✓- ✓ ✓+

B-20

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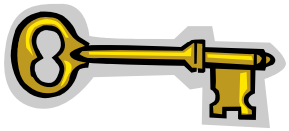
Answer Key



Activity Page	Problem #1	Problem #2	Problem #3	Problem #4
B-1	247 cards	12 pgs 5 left	Sarah	No
B-2	325 seeds	6 cookies	23 shells	10:30
B-3	No	2 out of 6 (1/3)	16 blocks	15 degrees
B-4	☺	6 metres	About 3 hours	About 100
B-5	1 hr 45 min	61 leaves	6 minutes	No
B-6	12 doughnuts	250 mL	Even	18 books
B-7	6 combinations	Yes	1 hr 15 min	25 flowers
B-8	20 items	19 shells	$1.50	2 packages
B-9	4 cars	3 metres	6 minutes	500 mL
B-10	12 grape; 24 in all	5:15	Yes	3 lollipops
B-11	10 people	1:00 p.m.	25 minutes	2/8 or 1/4
B-12	30 seeds	50 minutes	Yes	8 metres
B-13	Seth's frog	$2.00 change	40 minutes	4 eggs
B-14	27 Choco Bears	10 cm	3 out of 15 (1/5)	$4.50
B-15	1 hr 15 min	Ralph	5/10 or 1/2	10 minutes
B-16	24 grams	8 servings	$4.60	3 pencils
B-17	$2.75	29 erasers	5 minutes	2 hours
B-18	24 minutes	RYGB or BGYR	375 mL	20 pictures
B-19	17 birds	30 cents	12 outfits	40 min
B-20	$7.95	9 red	624 km	5 apples

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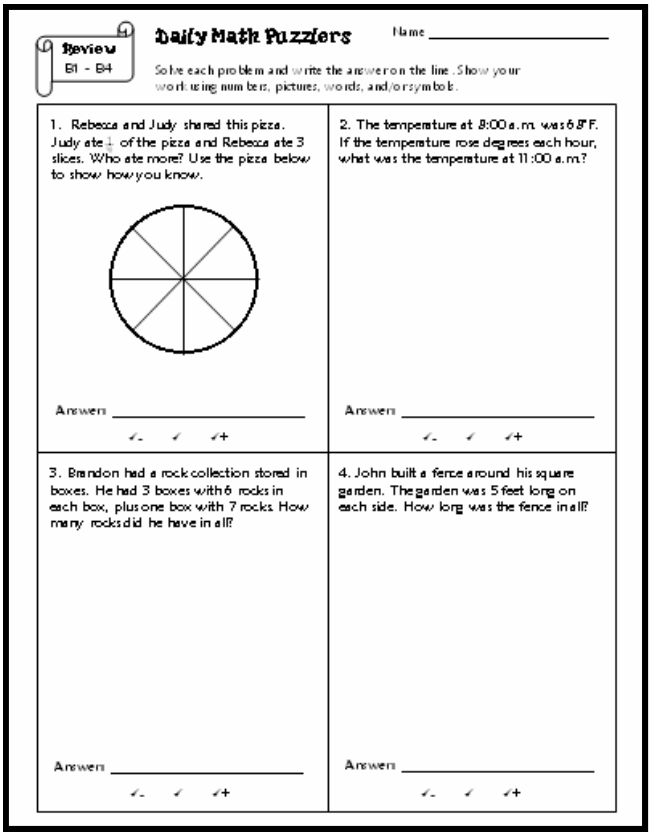
Daily Math Puzzler Review Pages



Review
B1 - B4

Daily Math Puzzlers Name _____

Solve each problem and write the answer on the line. Show your work using numbers, pictures, words, and/or symbols.

1. Rebecca and Judy shared this pizza. Judy ate $\frac{1}{2}$ of the pizza and Rebecca ate 3 slices. Who ate more? Use the pizza below to show how you know.

Answer: _____

✓- ✓ ✓+

2. The temperature at 8:00 a.m. was 68°F. If the temperature rose degrees each hour, what was the temperature at 11:00 a.m.?

Answer: _____

✓- ✓ ✓+

3. Brandon had a rock collection stored in boxes. He had 3 boxes with 6 rocks in each box, plus one box with 7 rocks. How many rocks did he have in all?

Answer: _____

✓- ✓ ✓+

4. John built a fence around his square garden. The garden was 5 feet long on each side. How long was the fence in all?

Answer: _____

✓- ✓ ✓+

Daily Math Puzzler Review

Using the Review Pages

Overview

While using the Daily Math Puzzler program, you may feel the need for periodic review and assessment. There are five review pages, one for every four activity pages in the program. Each review page contains problems that are similar to problems on the corresponding activity pages. For example, Review Page B1-B4 contains four problems, one problem for each of the activity pages B1-B4.

Assessment and Grading

Scoring

✓- = 19 points
✓ = 22 points
✓+ = 25 points

You can use the review pages as you've been using the regular activity pages, or you may want to use them for assessment. If so, you can have students complete the review page in one session rather than spreading it out over a week. Any grading system should give credit to students who try to solve each problem and who show their work, even if their answers are not completely correct. An easy way to grade the worksheet is to circle the check minus, check, and check plus for each problem and then assign the points shown above. This system will result in 100 points for four check pluses, 88 points for four checks, and 76 points for four check minuses. You may also want to use the grading rubric shown on page 83.

Activity Page	Problem #1	Problem #2	Problem #3	Problem #4
B1 - B4	Rebecca	34°C	25 rocks	20 metres long
B5 - B8	28 animals	6 combinations	1 hr 30 min	$2.50
B9 - B12	2 minutes	Yes	4/20 or 1/5	18 metres
B13 - B16	3 red balloons	2/10 or 1/5	35 minutes	$5.80
B17 - B20	33 erasers	30 pictures	45 minutes	6 oranges

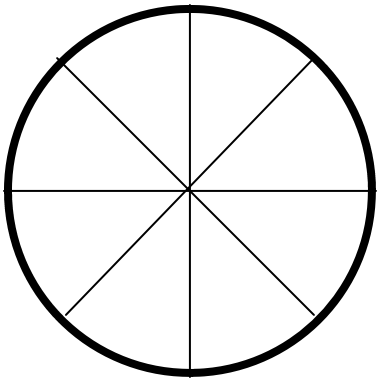
Review
B1 - B4

Daily Math Puzzlers

Name _____

Solve each problem and write the answer on the line. Show your work using numbers, pictures, words, and/or symbols.

1. Rebecca and Judy shared this pizza. Judy ate $\frac{1}{4}$ of the pizza and Rebecca ate 3 slices. Who ate more? Use the pizza below to show how you know.



Answer: _____

✓- ✓ ✓+

2. The temperature at 8:00 a.m. was 28°C. If the temperature rose 2° each hour, what was the temperature at 11:00 a.m.?

Answer: _____

✓- ✓ ✓+

3. Brandon had a rock collection stored in boxes. He had 3 boxes with 6 rocks in each box, plus one box with 7 rocks. How many rocks did he have in all?

Answer: _____

✓- ✓ ✓+

4. John built a fence around his square garden. The garden was 5 metres long on each side. How long was the fence in all?

Answer: _____

✓- ✓ ✓+

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Review
B5 - B8

Daily Math Puzzlers

Name _____

Solve each problem and write the answer on the line. Show your work using numbers, pictures, words, and/or symbols.

1. Sheila collected sixteen stuffed animals. Donna collected twice as many as Sheila. Julie collected four less than Donna. How many stuffed animals does Julie have?

Answer: _____

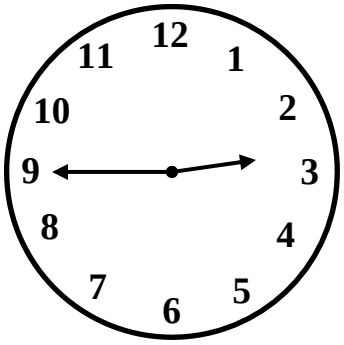
✓- ✓ ✓+

2. Ronald wants to order a pizza. He has a choice of thin or thick crust, and he plans to order 2 toppings. If his topping choices are pepperoni, ham, and bacon, how many combinations are possible?

Answer: _____

✓- ✓ ✓+

3. Brian is at a friend's house and needs to go home at quarter past four. He looks at the clock and sees the time below. How much time does he have left to play?



Answer: _____

✓- ✓ ✓+

4. Brenda went to the grocery store to buy sliced ham. If a kilogram of ham is $5.00, how much did she pay for $\frac{1}{2}$ kilogram?

Answer: _____

✓- ✓ ✓+

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Review
B9 - B12

Daily Math Puzzlers

Name _____

Solve each problem and write the answer on the line. Show your work using numbers, pictures, words, and/or symbols.

1. Sondra bought eight new pencils and sharpened them all. It took her 15 seconds to sharpen one pencil. How many minutes did it take her to sharpen them all?

Answer: _____

✓- ✓ ✓+

2. Brad can drive 600 kilometres on one tank of gas. It's 340 kilometres one way to the beach. If he starts his trip to the beach with a full tank, will he have to stop for gas on the way back? Explain or show how you know.

Answer: _____

✓- ✓ ✓+

3. Adele bought 9 red balloons, 7 green balloons, and 4 yellow balloons at the fair. What fraction of the balloons were yellow?

Answer: _____

✓- ✓ ✓+

4. Zane fenced in a rectangular corner of his backyard for his dog. If the area was 4 metres long and 5 metres wide, how much fence did he have to buy in all?

Answer: _____

✓- ✓ ✓+

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Review
B13 - B16

Daily Math Puzzlers

Name _____

Solve each problem and write the answer on the line. Show your work using numbers, pictures, words, and/or symbols.

1. Dalton bought a dozen balloons for a party, and $\frac{1}{4}$ of the balloons were red. How many red balloons were there?

Answer: _____

✓- ✓ ✓+

2. Steven reached into a box of donuts and picked one without looking. The box had 3 chocolate, 5 plain, and 2 jelly donuts. What was the probability that he picked a jelly donut?

Answer: _____

✓- ✓ ✓+

3. Beth needs 7 litres of blueberries for a large batch of jam. It takes 5 minutes to pick 1 litre of blueberries and 20 minutes to pick 4 litres of blueberries. How long will it take Beth to pick 7 litres of berries?

Answer: _____

✓- ✓ ✓+

4. Rosalee ordered lunch from the Zip Stop Mart. If she ordered 2 hot dogs, fries, and milk, how much did she pay for her meal?

Zip Stop Menu

Hot Dog	$1.95
Fruit Cup	$1.35
Fries	$0.85
Milk	$1.05
Slushy	$1.85

Answer: _____

✓- ✓ ✓+

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Review
B17 - B20

Daily Math Puzzlers

Name _____

Solve each problem and write the answer on the line. Show your work using numbers, pictures, words, and/or symbols.

1. Emma has 7 erasers. Amy has twice as many as Emma. Dinah has 2 less than Amy. How many erasers in all?

Answer: _____

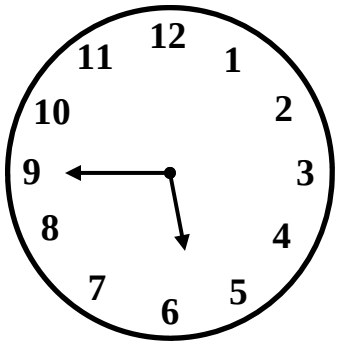
✓- ✓ ✓+

2. Each page in a photo album holds 6 pictures, and the album holds 65 pictures in all. If Joe already has 10 full pages of pictures, how many pictures can he add?

Answer: _____

✓- ✓ ✓+

3. The shoe store closes at half past six. Nikki checks her watch and notices the time shown below. How much time does she have left to shop for shoes?



Answer: _____

✓- ✓ ✓+

4. Greg weighed an orange and found that it weighed 150 grams. He needs 600 grams of oranges to make orange juice. How many oranges should he buy?

Answer: _____

✓- ✓ ✓+

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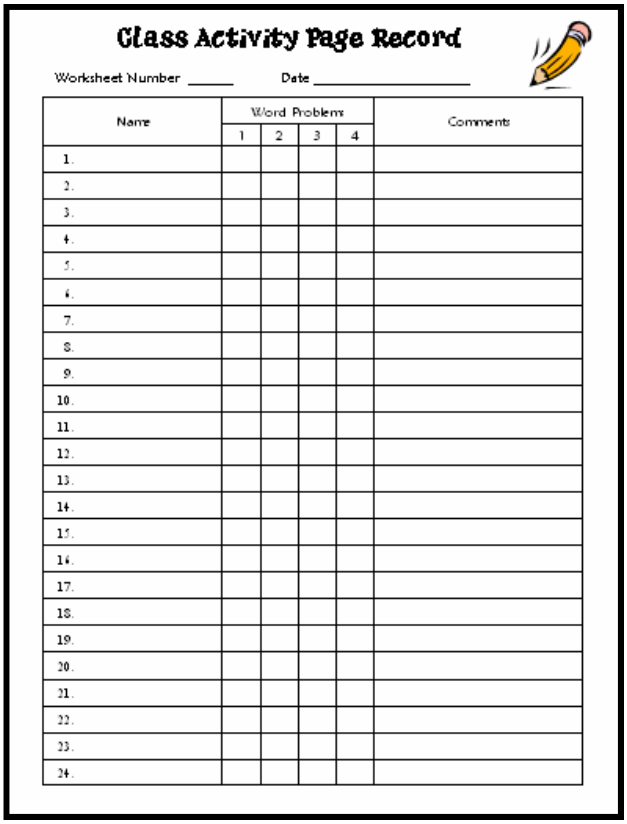
Additional Resources

Blackline Masters
& Record-Keeping



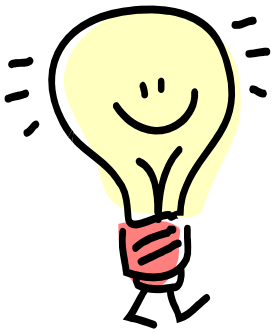
Class Activity Page Record

Worksheet Number _____ Date _____

Name	Word Problems				Comments
	1	2	3	4	
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					

Daily Math Puzzler Program

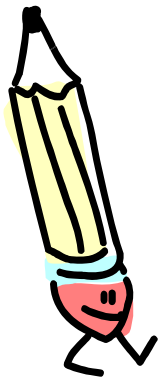
Additional Resources



This section includes several additional resources you may find useful. Use these templates and record-keeping charts to customize the program and track student progress. Read on for a brief overview of each item and suggestions for how to use it with your class. For easy access, keep copies of the record-keeping charts in a 3-ring notebook.

1. Math Problem Template (Page 83)
Copies Needed: One per class
Purpose: To customize the Daily Math Puzzler worksheets
Suggestions: If you downloaded this blank template form when you purchased your Power Pack, you can type create new word problems and type them directly onto the page. If you don't have a digital copy of the blank template, just write or type your problems into each block. You can use this page to make a set of review problems on a particular topic such as fractions or measurement. You can also modify the existing word problems to make them easier or more challenging.

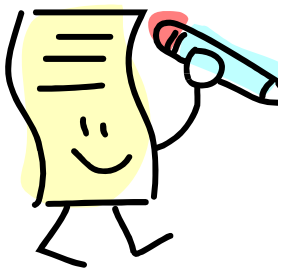
2. Solve and Write (Page 84)
Copies Needed: One per student
Purpose: To provide a place for written explanations
Suggestions: You can duplicate this on the back of your Daily Math Puzzler worksheet to give your students a place to write their explanations in sentence form.



3. Daily Math Puzzler Rubric (Page 85)
Copies Needed: One half page per student
Purpose: To assess work quality and effort
Suggestions: You can use this rubric "as is" or create your own based on the overall concept. There are many rubric-creation sites available such as Rubistar (http://rubistar.4teachers.org) that you can use for this purpose. If you don't want to use the grading scale at the bottom of the page, just remove it before copying.

Daily Math Puzzler Program

Additional Resources



4. **Activity Page Tracking Sheet (Page 86)**
   Copies Needed: One per class
   Purpose: To keep track of which problem-solving Activity Pages have been used
   Suggestions: Record the date you use each page and make notes about any difficulties your students experienced. You'll be able to tell at a glance which pages are still available for use.

5. **Student Activity Page Record (Page 87)**
   Copies Needed: One per student
   Purpose: To record individual progress throughout the program
   Suggestions: Record the Activity Page letter and number in the first column. Then record a ✓-, ✓, or ✓+ for each problem on the worksheet. Use the comments section to notate any difficulties experienced by the student or improvements made over time. At the end of the year, you can place the Student Activity Page Record in the student's portfolio or include it with other assessment documentation.

6. **Class Activity Page Record (Page 88)**
   Copies Needed: One per class for each Activity Page
   Purpose: To identify trends in student performance
   Suggestions: Before duplicating the Class Activity Page, list your students' names in the first column. Then duplicate one copy of the recording sheet for each Activity Page. Each day record a ✓-, ✓, or ✓+ for each student in the column under that day's problem number. At the end of the week, you'll be able to see at a glance which problems were difficult and which ones were easy for your students, allowing you to provide additional instruction on some topics as needed. You may even want to supplement with another Daily Math Puzzler book such as Level A or Level C.

Daily Math Puzzlers

Name _____

Try to solve each problem ***on your own***. Show your work using numbers, pictures, words, or symbols. We will discuss the problems together and correct them in class.

1.

Answer: _____

✓- ✓ ✓+

2.

Answer: _____

✓- ✓ ✓+

3.

Answer: _____

✓- ✓ ✓+

4.

Answer: _____

✓- ✓ ✓+

Solve and Write

Name _____

Use the space below to write an explanation of how you solved each Daily Math Puzzler problem. Be sure to use complete sentences and explain your answer clearly!

1. Answer: _____

Explanation

✓- ✓ ✓+

2. Answer: _____

Explanation

✓- ✓ ✓+

3. Answer: _____

Explanation

✓- ✓ ✓+

4. Answer: _____

Explanation

✓- ✓ ✓+

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Daily Math Puzzler Rubric

Name _____

Criteria	4	3	2	1	0	Totals
Facts & Questions	Correctly identified the question and/or the important facts in all problems	Correctly identified the question and/or the important facts in most problems	Correctly identified the question and/or the important facts in some problems	Correctly identified the question and/or the important facts in one problem	Did not identify the question and/or the important facts in any of the problems	
Strategies	Used a variety of effective strategies and showed work for all problems	Used a variety of strategies and showed work for most problems	Had difficulty applying effective strategies and/or did not show work	Was unable to apply strategies without assistance and/or did not show work	Was unable to apply strategies and/or did not show work for any problems	
Solutions	Solved all problems correctly and labeled answers	Solved most problems correctly and labeled answers	Many solutions were incorrect (may have been due to careless errors)	Solved at least one problem correctly	Was unable to solve any problems correctly	
Effort	Showed effort and persistence in solving all problems	Showed effort and persistence in solving most problems	Put forth reasonable effort in solving some problems	Demonstrated very little effort or persistence in solving problems	Did not put forth any effort to follow directions or solve problems	

Overall Score: **4-5 = F** **6 - 7 = D** **8 - 10 = C** **11 - 13 = B** **14 - 16 = A** **Total Points**

Daily Math Puzzler Rubric

Name _____

Criteria	4	3	2	1	0	Totals
Facts & Questions	Correctly identified the question and/or the important facts in all problems	Correctly identified the question and/or the important facts in most problems	Correctly identified the question and/or the important facts in some problems	Correctly identified the question and/or the important facts in one problem	Did not identify the question and/or the important facts in any of the problems	
Strategies	Used a variety of effective strategies and showed work for all problems	Used a variety of strategies and showed work for most problems	Had difficulty applying effective strategies and/or did not show work	Was unable to apply strategies without assistance and/or did not show work	Was unable to apply strategies and/or did not show work for any problems	
Solutions	Solved all problems correctly and labeled answers	Solved most problems correctly and labeled answers	Many solutions were incorrect (may have been due to careless errors)	Solved at least one problem correctly	Was unable to solve any problems correctly	
Effort	Showed effort and persistence in solving all problems	Showed effort and persistence in solving most problems	Put forth reasonable effort in solving some problems	Demonstrated very little effort or persistence in solving problems	Did not put forth any effort to follow directions or solve problems	

Overall Score: **4-5 = F** **6 - 7 = D** **8 - 10 = C** **11 - 13 = B** **14 - 16 = A** **Total Points**

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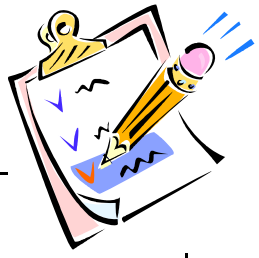
Activity Page Tracking Chart



Activity Page	Date of Use	Notes
B-1		
B-2		
B-3		
B-4		
B-5		
B-6		
B-7		
B-8		
B-9		
B-10		
B-11		
B-12		
B-13		
B-14		
B-15		
B-16		
B-17		
B-18		
B-19		
B-20		

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Student Activity Page Record

Name _____

Activity Page	Word Problems				Comments
	1	2	3	4	
B-1					
B-2					
B-3					
B-4					
B-5					
B-6					
B-7					
B-8					
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Class Activity Page Record

Worksheet Number _____ Date _____

Name	Word Problems				Comments
	1	2	3	4	
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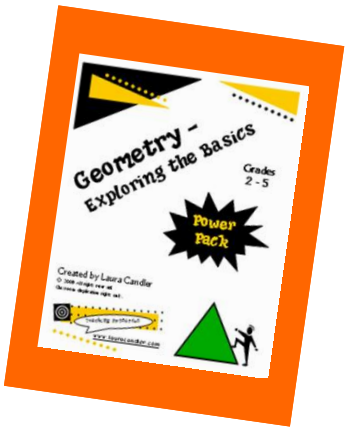
More Teaching Resources from Laura Candler



Geometry - Exploring the Basics

This book is awesome! I love all the ideas for games, concentration, etc. This is the one strand of math that I really don't like teaching, and feel that these activities will help me to build a better foundation of the geometric principles needed. I absolutely love the foldable that you have included, we use foldables a lot in our grade level.
~ Suzann, North Carolina,, USA

Math Stations for Middle Grades

I just downloaded your Math Stations for Middle Grades, and it is EXACTLY what I was looking for! This is my second year teaching math, after eleven years as a communications teacher. I don't feel I made math fun or interesting for my students last year, which means they didn't learn the things I wanted them to learn about setting goals for themselves and enjoying the challenge for its own sake. Now I finally know how to do that, and I will be able to not only use your activities but build from them and tailor them to my own students' specific needs. Your math stations provide exactly that element of fun practice and social sharing that I hoped to add this year. I can't wait to get started! ~ Shari Miller, Texas, USA

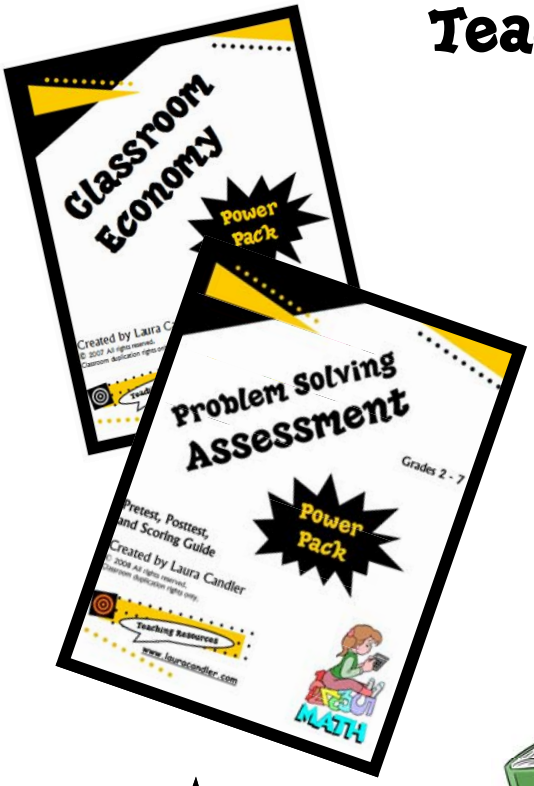
Classroom Goal Setting

WOW! Thank you so MUCH! I just downloaded your Goal Setting Power Pack and I LOVE it! I was most pleasantly surprised because I teach a combination class of grades 6-7-8, and wasn't sure if your pack would be "old" enough for my students! No need to worry....it's perfect! Thank you for a wonderful, quality product!
~ Nancy Berner, Pennsylvania, USA

Visit www.lauracandler.com to learn more!

Teaching Resources Website

www.lauracandler.com



Free Resources for Teachers!

- Blackline masters and activity sheets
- Lesson plans and teaching strategies
- Cooperative learning methods
- Classroom management and motivation
- Literacy and Literature Circle strategies
- Mathematics instructional resources
- Bi-weekly Newsletters

NEW!

Receive the **Classroom Economy** and **Problem Solving Assessment Power Pack** for FREE when you sign up for Laura Candler's bi-weekly newsletters at **www.lauracandler.com**!

Workshop Information

- Invite Laura to your school or district to energize your teachers with powerful strategies!
- Workshops available:
  - * The Dynamic Duo: Putting the Punch in Math Instruction
  - * Innovative Approaches to Literacy Instruction
- Teachers walk away with specific strategies to implement in their classrooms the next day.

Contact Laura for more information: lauracandler@att.net