

INTRODUCTION

Coupon Math: Addition, Subtraction & Multiplication (Book 2) is the second book in a series of reproducible activities designed to help students master basic math concepts through real-world applications. Some students can find math difficult when a lack of reading abilities impairs their understanding of math concepts. *Coupon Math*, Book 2, provides these students with a tool for developing their math skills and applying them in real-world situations without requiring on-level reading skills. For coupon addition and subtraction practice, PCI's *Coupon Math: Addition & Subtraction* (Book 1) is also available.

Book 2 addresses skills in a variety of formats with multiple activities so that individual learning styles are accommodated. *Coupon Math*, Book 2, contains over 150 worksheets organized into a developmental progression. The skills and activities included are age-appropriate and presented at a low-readability level to ensure success for students who struggle with reading. Additionally, the worksheets contain simplified directions and explanations of each activity to further promote success and understanding of math concepts. Book 2 of *Coupon Math* addresses reading comprehension skills, problem solving, addition, subtraction, multiplication, and finding solutions to multiple-step problems.

Coupon Math, Book 2, teaches real-world mathematics through the presentation of engaging problems. Students learn how to incorporate new ideas, techniques, and mathematical relationships to solve problems. The questions on the worksheets require students to use coupons and coupons from coupon mailers. Student worksheets also provide prices of items and services so that students can solve problems and understand and use various strategies, mathematical properties, and relationships. The worksheets contain many practical applications, and students become familiar with a process to set up mathematical problems and solve them.

The goal of *Coupon Math*, Book 2, is to expand students' experience with coupons and to introduce them to the purpose and use of coupon mailers. Students will use coupons and coupons from coupon mailers to solve math problems throughout the book. Other real-world skills addressed include shopping within a budget; buying meals or paying for services within a budget; comparing prices, products, and services; and understanding the reward of saving money with coupons. Before students complete any activity, they need to be able to add, subtract, and multiply whole and decimal numbers; convert cents to dollars with decimals; line up numbers with decimals to add and subtract; and multiply whole and decimal numbers and know where to place the decimal in the product.

In order to simplify steps to solve the real-world problems, sales tax will not be included in these activities. Teachers can discuss how sales tax works and the purpose of sales tax separately. However, none of the problems included in this book require students to figure the sales tax. Even though multiplication is addressed in these activities, there will be no percentages featured in the coupons, such as 20% off. The multiplication required involves multiplying a price by a given amount like "3 items for \$3.00 each."

What are Coupons and Coupon Mailers?

A coupon is a valuable tool to help people save money when shopping for items or services and to help businesses sell their goods or earn business. A coupon is a paper certificate that represents an amount of money that will reduce the price of an item or service. A coupon provides the brand name of an item, bar code for easy tracking, expiration date, and amount saved off of the original price. Each coupon states specific requirements that must be met so that it can be used, for instance “buy one get one free” or a size limit like “12 oz. size or larger.” People can find weekly flyer coupons in newspapers, others at stores, and yet others online.

A coupon in a coupon mailer provides the service or company’s name, one or more coupon offers, an expiration date, an address and phone number, limitations, and may include a USB code. Each coupon states specific requirements that must be met so that it can be used, for instance, “buy one large pizza, get one free bag of breadsticks.” People can find coupon mailers in the mail or in weekly mailings. Sometimes a coupon can reduce the price of an item or service so that it is lower than a competitor’s price for a similar item or service. Both the people who use the coupons and the companies that offer them benefit.

How Coupons and Coupon Mailers Work

Coupons and coupon mailers are designed by companies to encourage people to buy their products or services, to compete with other companies for people’s business, or to introduce consumers to new products or services. The companies decide the value of their coupons, and then distribute the coupons. They provide the coupons in the newspaper, post them online, or mail coupon mailers through the postal system. Consumers clip or print the coupons and use them when they purchase items at a store or restaurant or pay for a service.

At the time of purchase, the stores and franchised restaurants take the coupon and send it back to the coupon clearinghouse for the company. In return, the coupon clearinghouse will send the stores or restaurants a monetary amount equal to the value of the coupon to cover the amount they did not receive when the coupon was used. Companies who mail out coupon mailers do not have to send the coupons to the clearinghouse because they made the coupons themselves. When people use coupons from flyers or coupon mailers, companies sell more products and services; stores, restaurants, and service providers get more business and repeat customers; and people save money.

NINE UNITS

Teacher instructions, unit worksheets, and assessments are presented in the following units:

UNIT 1: What is a Coupon?

UNIT 2: Items for a Set Price

UNIT 3: Buy One, Get One Free

UNIT 4: Buy Two or More

UNIT 5: Buy One or Buy More

UNIT 6: Shop and Compare

UNIT 7: Coupon Mailers

UNIT 8: Real-World Shopping

UNIT 9: Coupon Flyer and Mailers

This order is the suggested sequence for teaching the skills included in this book. The first unit introduces students to the purpose, characteristics, and use of coupons and coupon mailers. Units two through five introduce students to the different types of coupons addressed in the book as well as how to find totals for items, identify the coupons' values, and set up problems to find the total amounts owed. Unit six, "Shop and Compare," shows all types of coupons from the prior units and allows students to set up multiple-step problems, compare total amounts for the better value, and determine which store provides the better bargain. Unit seven, "Coupon Mailers," introduces students to the purpose, characteristics, and use of coupons from coupon mailers to find the total amounts owed for a service. In units eight and nine, students apply the skills, procedures, and processes used in the other units to real-world situations, using the reproducible flyer, coupon mailer, and the realistic flyer and mailers.

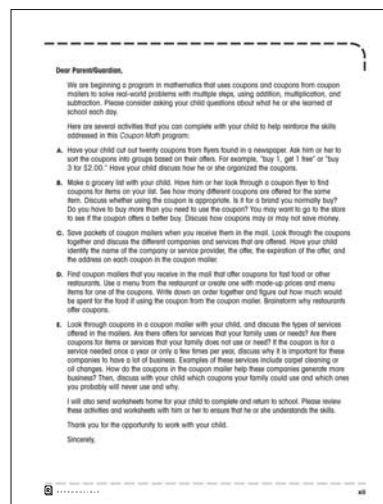
FEATURES OF THIS BOOK

Research and Standards

Coupon Math, Book 2, is a research-based product and is based on the standards of the National Council of Teachers of Mathematics (NCTM). Applicable quotes from research articles and a list of the standards met by this book are found on page xi.

Parent/Guardian Letter

This letter should be sent home with each child prior to the start of the program. It provides parents/guardians with information about the skills their children will learn in this program. The letter also suggests a variety of activities that parents/guardians can complete with their children to reinforce and extend the skills taught in the units. Many of the activities are hands-on and apply the skills to real-world situations. Most importantly, the letter encourages parents/guardians to ask their children what they have learned in school, thus fostering better communication at home. The parent/guardian letter is found on page xii.



Teacher Instructions

Teacher instructions begin each unit and provide the objectives, overview of the unit content, and suggested activities to introduce the skills and concepts covered. The suggested activities include hands-on ideas for how to model and teach the skills of finding coupons and coupon mailers, adding or multiplying items' prices, adding the coupons' values, subtracting to find the total amounts owed, and applying these skills to other real-world mathematical situations.

Unit Worksheets

Each unit provides a variety of worksheets that address each skill covered. The teacher has the option to choose only particular activities to use as review and reinforcement, or to work through all activities to ensure that students have numerous opportunities to comprehend and apply each skill. Each unit is arranged so that skills build on and reinforce each other. The worksheets ask students to identify information from the items' prices and the values of coupons, services' prices and value of coupon mailers, use provided information to answer questions, and gather information to complete the activities.

Units two through five focus on specific types of coupons. In each of these units, the first worksheet should be made into an overhead transparency. The answers are filled in for the steps to model how to work the problems. The second worksheet is similar to the model page and is intended to be completed as a guided whole-group activity. The next worksheet is a modification

sheet that can be copied for students to use if they need additional structure and help setting up the problems. This worksheet can be used with any sheet in its given unit. The worksheets that follow are designed to have the students set up and solve the multiple-step problems, using the information they gained in the model and guided worksheets.

The coupons, coupon mailers, and flyers have expiration dates; however, the dates are not complete. The month and day are provided, but the year is intentionally left blank. Because the expiration date is an integral part of a coupon, this feature allows the coupons and coupon mailers to stay current for years of use in the classroom.

Each worksheet is a complete assignment that is meant to stand alone. Additionally, each worksheet is designed so that the teacher has the option of using it either as an independent or group activity. If the worksheet is completed by groups of students, then be sure each student understands the skill and is able to explain the skill in his or her own words. After skills have been taught, unit worksheets can be sent home for review or reinforcement of skills.

Unit Assessments in Standardized Test Format

Each unit features an assessment for the skills addressed in that unit. The assessments are designed in standardized test format so that students become familiar with this format. While reviewing the skills, teachers can also address the skills needed for taking standardized tests.

Most assessments in *Coupon Math*, Book 2, require students to eliminate incorrect options and choose the correct answer, while some ask students to identify the correct application of the skill. While these assessments are designed to measure students' knowledge of the skills taught, these assessments can also be used as pretests to measure students' prior knowledge of the skills.

Reproducible Coupons and Coupon Mailers

Reproducible coupons and coupon mailers are included in unit eight, immediately following the teacher instructions. The purpose of these coupons is to provide students with the real-life experience of identifying coupons and coupon mailers that can be used when purchasing items and services, finding the value of the coupons to be subtracted from the total of the items and

Worksheet titled "Total Amount Owed" featuring a coupon for a salad bowl and a fruit cup. The coupon includes the text: "Zone and Erin go to the De-Lighter Side Diner for lunch. They each have a coupon from a coupon mailer and use it and the menu to determine what they will order and how much they will pay." The coupon also includes a menu with items like "Salads, Meals, and More!" and "Try our 5 new selections!" and a table with prices for various items. Below the coupon, there are two problems for students to solve, each with a table for calculations.

1. What will Zone pay if he uses the coupon to buy a Chef Salad Bowl for \$4.25 and a regular drink for \$1.85?

price of salad: \$	total amount: \$
price of drink: \$	coupon value: \$
total amount: \$	amount owed: \$

2. What will Erin pay if she uses the coupon to buy a Grilled Chicken Strip Salad for \$6.45 and a Fruit Cup for \$2.00?

price of salad: \$	total amount: \$
price of fruit cup: \$	coupon value: \$
total amount: \$	amount owed: \$

Worksheet titled "Assessment" featuring a coupon for a hair cut and a hair perm. The coupon includes the text: "Directions: Look at the coupon from the coupon mailer, and use it to answer each question. Fill in the circle beside the correct answer." The coupon also includes a menu with items like "Cutting, Coloring, Styling, and More!" and "Hair Sculptures" and a table with prices for various items. Below the coupon, there are five multiple-choice questions for students to answer.

1. What is the discount coupon value for a child's hair cut at Hair Sculptures?

☐ \$1.00 ☐ \$3.00 ☐ \$5.00 ☐ \$10.00

2. What is the discount coupon value for an adult's hair cut at Hair Sculptures?

☐ \$10.00 ☐ \$25.00 ☐ \$30.00 ☐ \$45.00

3. What is the total for an adult's hair cut at Hair Sculptures that costs \$40.00?

☐ \$5.00 ☐ \$10.00 ☐ \$20.00 ☐ \$30.00

4. What is the total for a child's hair cut at Hair Sculptures that costs \$15.00?

☐ \$5.00 ☐ \$10.00 ☐ \$20.00 ☐ \$30.00

5. What is the total for a short hair perm at Hair Sculptures that costs \$125.00?

☐ \$95.00 ☐ \$110.00 ☐ \$125.00 ☐ \$140.00

services, and calculating the total amounts owed. Students will practice finding coupons and coupons from coupon mailers to use with specific items and services. This replicates the real-world experience of searching through newspaper flyers and coupon mailer packets to find coupons for specific products and services. Teachers should reproduce the coupons and coupon mailers for each student. Students should cut out the coupons and coupon mailers and store them in a resealable plastic bag or in a container. The final worksheets in the unit require students to look for coupons to solve the problems and to use the coupons to stay within a specific budget.

Coupon Flyer and Mailers

The coupon flyer is an eight-page, colorful, glossy ad brochure. There are also ten colorful glossy coupon mailers. Students will use the realistic flyer and mailers to complete the worksheets and activities in Unit 9. The flyer and coupon mailers feature advertisements like the ones found in real newspaper coupon flyers and coupon mailers sent in the mail. Students will apply real-world skills by locating the total amounts for items and services, finding coupons or coupons from coupon mailers to use with the items or services, and comparing different stores' and businesses' prices with and without coupons. Teachers can also use the coupon flyer or coupon mailers with small groups.

The flyer and coupon mailers are also designed for use with the provided list of additional activities on page 174 to extend students' understanding of the real-world uses of coupons and coupons from coupon mailers. Many hands-on activities are included such as using real coupons from the newspapers or coupon mailer packets to solve problems.

Answer Key

An answer key for the worksheets and assessments is included at the end of the book.