



POWER Consumer BASICS Mathematics



Teacher's Guide

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Table of Contents

To the Teacher	<i>iv</i>
Classroom Management	<i>vi</i>
Application Activity Rubric	<i>vii</i>
Use Chart	<i>viii</i>

Unit 1: Dollars and Sense

Unit Overview	1
Suggested Activities	3

Unit 2: Spending Wisely

Unit Overview	4
Suggested Activities	7

Unit 3: Borrowing Wisely

Unit Overview	9
Suggested Activities	12

Unit 4: Banking, Insurance, and Taxes

Unit Overview	13
Suggested Activities	17

Answer Key	18
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Station Activities

Set 1: Analyzing and Describing Relationships	28
Set 2: Multi-Step Real-Life Problems with Rational Numbers	31
Set 3: Appropriate Units of Measurement	34
Graphic Organizers	37
Student Book Glossary	42

To the Teacher

Overview

Power Basics® is a complete textbook program designed to meet the needs of students who are daunted by the length and complexity of traditional textbooks. The goal of all textbook programs is to provide students with important new information. However, in traditional textbook programs, this goal is often overshadowed by other considerations. Many textbooks are written for the above-average reader and cover a wide range of content. They are filled with photographs, illustrations, and other visual elements. For some students, the amount of material is overpowering, the visual elements are distracting, and the rapid pace is unnerving. In Power Basics®, we revisited the basic goal, developing a streamlined textbook program that presents the essential content students need to succeed.

Program Components

As with traditional textbook programs, Power Basics® includes a core textbook and ancillary products designed to round out the program. The student text provides coverage of the essential content in each subject area. A consumable workbook provides a variety of activities for each lesson, including practice activities, extension activities, and activities designed for different learning styles.

The student text includes a collection of station-based activities that provide students with opportunities to extend beyond the mathematical skills and concepts they are learning. These station-based activities foster a collaborative learning experience, while allowing students the opportunity to reflect on and synthesize their thinking. These activities can be found near the end of the book.

Teacher support materials include a teacher's guide and test pack for each student text. The teacher's guide includes the following: an overview of each unit in the student text; suggestions for extension activities; the student text glossary and appendixes; a complete answer key to all practice activities and unit reviews in the student text; an overview/answer key for the station activities; classroom record-keeping forms; and graphic organizers for student use.

For more detailed assessments, the test pack offers a pretest, unit tests for each unit in the student text, a posttest, scoring keys, and test-taking strategies for students. Finally, a practice pack provides additional exercises with a separate answer key, organized by unit.

Student Book Organization

The student text is divided into units. Each unit contains a series of lessons on related topics, with one lesson for each topic. Each lesson begins with a clear, student-centered goal and a list of key words that are introduced in the lesson. The definitions for these words are included in the teacher material for each lesson.

Next comes a brief introduction to the topic of the lesson, followed by instructional text that presents essential information in short, easy-to-understand sections. Each section of instructional text is followed by a practice activity that lets students apply what they have just learned. A Unit Review is provided at the end of each unit to assess students' progress. The review is followed by an Application Activity that encourages students to extend and apply what they have learned.

The student text also includes several special features. "Tip" sections give students useful hints to help them remember specific pieces of information in the student text. "Think About It" sections ask students to use critical-thinking skills. "In Real Life" sections show students how the material they are learning connects to their own lives, answering the perennial question, "When am I ever going to use this?"

The reference section at the back of the student text includes a summary of rules and other important information presented in the text, a glossary (with pronunciation guide) that includes all vocabulary in the Words to Know sections, and an index to help students locate information in the text.

Record-Keeping Forms

To make record-keeping easier, we have provided reproducible class charts that you can use to track students' progress. Fill in your students' names, and make copies of the chart for each unit in the student text. Add lesson numbers, lesson titles, and practice numbers as needed. We have also provided a generic grading rubric for the Application Activities in the student text so that these activities may be assigned for credit, if you wish. You may customize the rubric by adding more grading criteria or adapting the criteria on the sheet to fit your needs.

We're pleased that you have chosen to Power Up your Basic Skills Curriculum with Power Basics®!

To the Teacher, *continued*

Guide to Icons

Teacher's Guide



Teaching Tips

Practical suggestions help you to engage students in the learning process.



Calculate It

Useful tips and tricks help students get the most from their calculators.



Mental Math

Oral math activities help learners develop strong mental arithmetic skills.



Differentiation

Different approaches to the content give all learners the opportunity to connect to the material.

Student Text



Tip

Tips give helpful hints to boost understanding and retention.



Think About It

These sections develop critical-thinking.



In Real Life

These features connect learning concepts to students' lives, answering the perennial question, "When am I ever going to use this?"

Workbook



Reinforcement

Reinforcement activities give students additional opportunities to practice what they have learned.



Multiple Intelligences

Different approaches capitalize on different learning styles and interests to help all students connect to the material.



Extension

Deepen and broaden learning with critical-thinking activities, real-life applications, and more.

Classroom Management

Student Name	Lesson No.:		Title:								
	Practice #	Practice #	Practice #	Practice #	Practice #	Practice #	Practice #	Practice #	Practice #	Unit Review Score	
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
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30.											

Application Activity Rubric

Name _____ Date _____

Unit _____ Activity _____

POINTS	4 all of the time	3 most of the time	2 some of the time	1 almost none of the time
followed directions				
organized material well				
used appropriate resources				
completed the entire activity				
showed an understanding of the content				
produced error-free materials				
drew logical conclusions				
where appropriate, listed sources used				

Use Chart

POWER BASICS WORKBOOK

STUDENT TEXT PRACTICE

Unit 1: Dollars and Sense

Activity 1: More or Less	Practice 1: Pennies and Cents
Activity 2: Money Matching	Practice 1: Pennies and Cents
Activity 3: The Right Form	Practice 2: Dollars and Cents
Activity 4: More Money?	Practice 2: Dollars and Cents
Activity 5: Counting Cash	Practice 2: Dollars and Cents
Activity 6: Found Money	Practice 3: More Dollars and Cents
Activity 7: Adding It Up	Practice 4: Nickels, Dimes, and Quarters
Activity 8: Dollar Store	Practice 4: Nickels, Dimes, and Quarters
Activity 9: Coin Combinations	Practice 5: More Practice with Nickels, Dimes, and Quarters
Activity 10: Money in My Wallet	Practice 5: More Practice with Nickels, Dimes, and Quarters
Activity 11: What's the Problem?	Practice 6: Adding Money
Activity 12: Take It Away	Practice 7: Subtracting Money
Activity 13: X-act Change	Practice 7: Subtracting Money
Activity 14: Plus Tax	Practice 8: Multiplying Money
Activity 15: Multiply Your Money	Practice 8: Multiplying Money
Activity 16: How Much?	Practice 9: Dividing Money
Activity 17: Penny Division	Practice 9: Dividing Money
Activity 18: Comparing Coins	Practice 10: Comparing Coins
Activity 19: Change for a Dollar	Practice 11: Giving Change
Activity 20: Getting Change Back	Practice 12: Getting Change Back
Activity 21: Money, Money	Practice 13: Writing Dollars and Cents
Activity 22: Writing Money	Practice 13: Writing Dollars and Cents
Activity 23: Coupon Cutting	Practice 14: Addition and Subtraction with Dollars and Cents
Activity 24: Play Ball	Practice 14: Addition and Subtraction with Dollars and Cents
Activity 25: Money Problems	Practice 15: Multiplication with Dollars and Cents
Activity 26: Dollars for Donuts	Practice 15: Multiplication with Dollars and Cents
Activity 27: It's a Bargain!	Practice 16: Division with Dollars and Cents
Activity 28: Dividing Money	Practice 16: Division with Dollars and Cents
Activity 29: Figuring Change	Practice 17: Getting Change Back
Activity 30: The Same Only Different	Practice 18: Larger Bills
Activity 31: Match Money	Practice 18: Larger Bills
Activity 32: Ready to Rebate	Practice 19: Addition and Subtraction with Larger Bills
Activity 33: Estimating Sleep	Practice 20: More Addition and Subtraction with Larger Bills
Activity 34: Minus Money	Practice 20: More Addition and Subtraction with Larger Bills
Activity 35: Multiple Amounts	Practice 21: Multiplication with Larger Amounts
Activity 36: How Much for One?	Practice 22: Division with Larger Amounts
Activity 37: How Much?	Practice 22: Division with Larger Amounts
Activity 38: How Much Change?	Practice 23: Getting Change Back

Use Chart

POWER BASICS WORKBOOK

STUDENT TEXT PRACTICE

Unit 2: Spending Wisely

Activity 39: Nutrition Math	Practice 25: Reading Labels
Activity 40: Estimates and Guarantees	Practice 26: Shopping for Services
Activity 41: Contracts	Practice 26: Shopping for Services
Activity 42: Consumer Sites	Practice 27: Getting Satisfaction from Your Purchases
Activity 43: Generic Versus Brand-Name	Practice 28: Shopping Around
Activity 44: Discounts and Sale Prices	Practice 29: Figuring Discounts
Activity 45: Discount Percentages	Practice 29: Figuring Discounts
Activity 46: Finding the Original Price	Practice 30: Rounding Off Discounts
Activity 47: Find the Discount	Practice 31: Fractions as Discounts
Activity 48: Comparing Discounts	Practice 31: Fractions as Discounts
Activity 49: Comparing Sale Prices	Practice 32: Comparing Discounts
Activity 50: Finding a Better Price	Practice 32: Comparing Discounts
Activity 51: Unit Pricing	Practice 33: Unit Pricing with Fluid Measures
Activity 52: Coffee Value	Practice 33: Unit Pricing with Fluid Measures
Activity 53: Going the Distance	Practice 34: Unit Pricing with Measures of Length
Activity 54: The Long and Short of It	Practice 34: Unit Pricing with Measures of Length
Activity 55: Finding the Unit Price	Practice 35: Unit Pricing with Measures of Weight
Activity 56: Prices to Ship	Practice 35: Unit Pricing with Measures of Weight
Activity 57: Carnival Budget	Practice 36: What is a Budget?
Activity 58: Dividing Income	Practice 36: What is a Budget?
Activity 59: Deductions	Practice 37: Figuring Out Your Paycheck
Activity 60: Income Levels	Practice 38: Other Sources of Income
Activity 61: Average Expenses	Practice 39: Figuring Out Your Fixed Expenses
Activity 62: Day-to-Day Expenses	Practice 40: Figuring Out Your Day-to-Day Expenses
Activity 63: Complete the Budget	Practice 41: Five Steps to a Balanced Budget

Unit 3: Borrowing Wisely

Activity 64: Financing a Car	Practice 42: Interest
Activity 65: Types of Loans	Practice 44: Credit Cards
Activity 66: Annual Interest Rates	Practice 45: Term Loans
Activity 67: Rolling for Rates	Practice 45: Term Loans
Activity 68: Find the Error	Practice 46: More About Term Loans
Activity 69: Paying for Education	Practice 47: Interest-Only Loans
Activity 70: Installment Loans	Practice 48: Installment Loans with Interest
Activity 71: Make a Deal	Practice 48: Installment Loans with Interest
Activity 72: Credit Card Debt	Practice 49: Installment Loans with Compound Interest
Activity 73: Find the Payment	Practice 50: Comparing Interest Rates
Activity 74: Comparing Loans	Practice 51: Comparing Loans with Different Terms and Interest Rates

Use Chart

POWER BASICS WORKBOOK

Activity 75: Down Payment Comparison
Activity 76: Earning Points
Activity 77: Debt Ratios
Activity 78: Reducing Spending
Activity 79: Determining the Highest Rate
Activity 80: Types of Bankruptcy

STUDENT TEXT PRACTICE

Practice 52: Down Payments
Practice 56: Ranking Your Credit Application
Practice 58: What is Too Much Debt?
Practice 58: What is Too Much Debt?
Practice 59: Getting Out of Debt
Practice 60: When You Cannot Pay Your Bills

Unit 4: Banking, Insurance, and Taxes

Activity 81: Writing Checks
Activity 82: Types of Checks
Activity 83: Fill in the Register
Activity 84: Know Your Checking Account
Activity 85: ATM Safety
Activity 86: Compound Interest
Activity 87: Another Balancing Act
Activity 88: Comparing Interest
Activity 89: Compounding Quarterly
Activity 90: Compounding Daily
Activity 91: Ways to Save
Activity 92: Tax Time
Activity 93: Using Tax Tables
Activity 94: Filing a Tax Return
Activity 95: Life Insurance

Practice 61: What is a Personal Check?
Practice 61: What is a Personal Check?
Practice 64: Other Debits and Credits
Practice 65: Checking Account Statements
Practice 65: Checking Account Statements
Practice 68: Interest Compounded Yearly
Practice 68: Interest Compounded Yearly
Practice 69: Interest Compounded Quarterly
Practice 69: Interest Compounded Quarterly
Practice 70: Finding the Best Interest Rates
Practice 70: Finding the Best Interest Rates
Practice 72: Income Report Forms
Practice 72: Income Report Forms
Practice 73: Filing Your Income Tax Form
Practice 76: Life Insurance

Unit 1: Dollars and Sense

This unit introduces students to the basics of money management. In Lesson 1, students learn how to identify the most commonly used coins and bills. Lesson 2 teaches students how to add, subtract, multiply, and divide small amounts of money. Students also learn how to make change. Lesson 3 builds on this concept and has students adding, subtracting, multiplying, and dividing combinations of dollars and cents. Finally, in Lesson 4, students move on to adding, subtracting, multiplying, and dividing larger amounts of money.

Lesson 1—Coins

Goal: To learn to identify commonly used coins and their values

WORDS TO KNOW

cent	1 hundredth of a dollar; a penny is worth 1 cent.
cent sign	the symbol (¢) used to mean the word cents
dime	coin worth 10 hundredths of a dollar, or 10 cents
dollar	a unit of money equal to 100 cents
dollar sign	the symbol (\$) used to mean the word dollar
nickel	coin worth 5 hundredths of a dollar, or 5 cents
penny	coin worth 1 hundredth of a dollar, or 1 cent
quarter	coin worth 25 hundredths of a dollar, or 25 cents

Lesson 2—Making Change in Coins

Goal: To add, subtract, multiply, and divide small amounts of money

WORDS TO KNOW

dividend	the number being divided in a division problem
divisor	the number you are dividing by in a division problem
shortchanged	gave less than the correct amount of change to

Lesson 3—Making Change in Dollars and Coins

Goal: To add, subtract, multiply, and divide combinations of dollars and cents

Lesson 4—Using Larger Amounts of Money

Goal: To add, subtract, multiply, and divide larger amounts of money

WORDS TO KNOW

bills	pieces of paper money
five-dollar bill	piece of paper money worth \$5.00
one-dollar bill	the smallest bill; piece of paper money worth \$1.00 and equal to 100 pennies, 20 nickels, 10 dimes, or 4 quarters
ten-dollar bill	piece of paper money worth \$10.00
twenty-dollar bill	piece of paper money worth \$20.00

Notes on Application Activities in Student Text

Activity	Skills Applied	Product
Getting to Know Your Money	gathering information, reasoning	completed chart
<p>You may choose to have students work independently, in pairs, or in small groups.</p> <p>As an additional activity, ask students to find out what is on the current half dollar and silver dollar. (Half dollar—John F. Kennedy, presidential seal; silver dollar—Dwight D. Eisenhower, American bald eagle landing on the moon)</p>		

Activity	Skills Applied	Product
The Art of Money	observing, listing information (optional activity: creative thinking, preparing a visual presentation)	drawing
<p>Bring in dollar bills for each student or for partners or small groups to share. Depending on your circumstances, you can ask each student to bring a dollar bill to class. You may want to point out a few features of the dollar bill before students begin their examination. Another option is to let them discover as much as they can on their own.</p> <p>For the second part of the activity, provide five-, ten-, and twenty-dollar bills for students to examine. (Note: For everyone's sake, you may want to list the denomination and number of each bill you make available to the class before you pass them out. This will allow you to check them when they are returned.)</p>		

Activity	Skills Applied	Product
The Slang of Money	reasoning, problem-solving, listing information (optional activity: gathering information, organizing information, preparing a written presentation)	research paper
Begin the discussion by asking students to answer the three questions given. Then allow time for students to complete the exercise independently, in pairs, or in small groups.		

Additional Activity Suggestions

- Have students brainstorm situations in which they use change in their daily lives (example: to get a drink out of a vending machine).
- Bring in paper coin rolls to show students the relationship of size among coins that equal one dollar.
- Have students research the following facts about money:
 - History
 - Mint locations
 - Metals used for each coin
 - Meaning of “This note is legal tender for all debts, public and private.”
 - What is a Federal Reserve Note?
 - Who is the current secretary of the Treasury? Who is the current treasurer of the United States?
 - What is the meaning of “E Pluribus Unum”?



Mental Math

- Students can work on doing math in their heads by adding and subtracting amounts of change. Have students take out a blank sheet of paper and a pencil. Give them addition and subtraction problems such as “I had three quarters. I spent one dime. How much do I have left?” or “I had one nickel and two pennies. I found another seven pennies in my pocket. How much do I have now?” Encourage students to write only the answers to these problems; they should do all of the math in their heads. If they become confident with addition and subtraction problems, try giving them some simple multiplication and division problems to work on, such as, “Nails cost one nickel each. How much would six nails cost?” or “Three pieces of candy cost 75 cents. How much would one piece cost?”

As a variation, this exercise could be done out loud, with students calling out the answers as they figure them out.

Unit 2: Spending Wisely

Unit 2 teaches students how to get the best value for their money and how to create and balance a personal budget. In Lesson 5, students learn to compare products and services. They learn about comparison shopping, reading labels, making complaints, and shopping around. In Lesson 6, students practice figuring discounts and comparing sale prices. Lesson 7 teaches students how to compare the unit prices of products. Students learn about unit pricing with fluid measures, measures of length, and measures of weight. Lesson 8 covers fixed expenses and day-to-day expenses. They learn to add up their income and expenses and create a balanced budget.

Lesson 5—How to Comparison Shop

Goal: To learn to compare products and services to make sure you get the best value for your money

WORDS TO KNOW

Better Business Bureau (BBB)	a private, non-profit organization that will take your complaint about a company and can also give you information about a company
consumer	a person who buys something
estimate	a written statement from a person or a company that tells how much work will cost
guarantee	a formal promise that states a product or service will be satisfactory to the buyer
manufacturer	the maker of a product
recall	to have unsafe or unfixable items returned to the manufacturer
receipt	a piece of paper that tells how much was paid for something
refund	when one returns a product where it was bought and gets his or her money back

Lesson 6—Discounts

Goal: To learn to figure discounts and compare sale prices

WORDS TO KNOW

discount price	price an item is offered at that is lower than the regular price
discount stores	special stores that offer lower prices for items every day
regular price	the price that an item sells for every day

Lesson 7—Unit Pricing

Goal: To learn to compare unit prices of products

WORDS TO KNOW

centimeter	common measurement of length equal to one hundredth of a meter
fluid ounce	common measurement of volume equal to $\frac{1}{128}$ of a gallon
foot	common measurement of length equal to 12 inches
gallon	common measurement of volume equal to 4 quarts
gram	common measurement of weight equal to $\frac{1}{1000}$ of a kilogram
inch	common measurement of length equal to $\frac{1}{12}$ of a foot
kilogram	common measurement of weight equal to 1000 grams
meter	common measurement of length
ounce	common measurement of weight equal to $\frac{1}{16}$ of a pound
pound	common measurement of weight equal to 16 ounces
quart	a common measurement of volume equal to $\frac{1}{4}$ gallon
unit	a single quantity of something
unit price	how much 1 unit of a product costs
yard	common measurement of length equal to 3 feet

Lesson 8—Budgeting

Goal: To learn to add up income and expenses and create a balanced budget

WORDS TO KNOW

balanced budget	a plan for spending money in which expenses are equal to income
budget	a plan for spending money
day-to-day expenses	money that is paid for things like food, clothing, and entertainment
deductions	the different amounts that are taken out of a person's paycheck
expenses	things a person must pay for
FICA	abbreviation for the Federal Insurance Contributions Act, the federal law that taxes both employers and employees to fund Social Security and Medicare
fixed expense	money that must be paid for something such as rent, a utility such as electricity, or insurance
gross pay	a person's pay before taxes and other deductions are taken out
net pay	amount of pay a person takes home after taxes and other amounts have been taken out; also called take-home pay
total expenses	the sum of the expenses a person must pay regularly plus other expenses that the person chooses to pay

Notes on Application Activities in Student Text

Activity	Skills Applied	Product
Time to Paint	critical thinking, reasoning (optional activity: problem-solving, decision-making)	job plan
Explain to your students that it is important to think every job through from start to finish. It may seem like a lot of work, and it can be very tempting to just jump in and get started. But planning carefully will save time and money in the long run. You may want students to work on this activity independently, with partners, or in small groups. Give students a brief lesson in finding area—just enough so that they will know how to deal with the second part of the activity.		

Activity	Skills Applied	Product
Budgeting	evaluating information, decision-making, computing, problem-solving (optional activity: collecting data, analyzing information, reasoning)	record of spending habits for one week
<p>Review the opening paragraph and directions. Be sure learners know to choose a variety of items, and that they must buy enough for five complete lunches. It's okay to have extras if an item is prepackaged (e.g., variety chips). You may want to go over the items in the "store" so packaging and pricing are not confusing. You may also want to fill in the first line as an example of how to enter information for each column. Do not discuss Part 2 with learners at this time, as it may influence their choices.</p> <p>For a follow-up discussion, ask students to share how they decided to adjust the items they selected in order to stay in budget. How did this affect their lunches? You might also ask students how they felt about planning in advance for so many days. Some may have found it difficult; others, no problem. Try to get some specific examples of what they found to be easy and difficult about the activity. Discuss how this type of planning would be a good idea for them in their daily lives. Also, ask if they can think of any other areas to which they could apply such planning.</p>		

Additional Activity Suggestions

- Have students discuss ways to help stay within their grocery budget (coupons, sales, using shelf labels for price comparison, shopping with a list to avoid buying a lot of things you really don't need, trying to shop when you aren't hungry, and so forth).
- Use newspaper inserts or in-store circulars from two different grocery stores to comparison "shop." Have students list items that are advertised by both stores. Add up the prices to see how one store compares with another.
- Have students use the phone book or go on-line to locate: 1) the Better Business Bureau, 2) consumer organizations, and 3) local, state, and federal government consumer protection agencies.
- Have students go to the library or use the Internet to find specific consumer information for their "dream car." They should give the base price for the make and model they choose; a list of options and their prices; performance ratings from at least two different consumer sources; and what they have determined to be a fair price for their "dream car."
- Have a "contest" to see who can find the lowest price of a specific item such as a current CD, video game, or DVD using catalogs, sale advertisements, and on-line resources. Students must bring in "proof" of their low prices.

- One source of material for discussion of consumer topics is the “Consumer Information Catalog” from the U.S. General Services Administration. This catalog has an excellent selection of free or inexpensive publications on a wide variety of consumer topics. The catalog can be found on-line at www.pueblo.gsa.gov/catalog.pdf. The catalog may also be available at your local library in sufficient quantity to distribute to your students. Alternatively, you may want students to send for their own catalogs and/or booklets. This would be another excellent consumer activity. For information on obtaining catalogs, visit the Federal Citizen Information Center on-line at www.pueblo.gsa.gov or call 1-888-878-3256.



Differentiation

- To give students a hands-on lesson in balancing a budget, try bringing some play money to class. Put the money in a box, and have students draw 10 to 15 bills each, depending on the size of the class. Students can count up their money and use what they have to figure out a budget. The budget should include fixed expenses, such as housing, and day-to-day expenses, such as food and entertainment. Depending on your group, you may need to give students an idea of what a realistic percentage of their “income” would be for rent, food, and so forth.