Chapter 10
Adding and Subtracting Larger Numbers

Chapter 10 focuses on a variety of models and strategies for multi-digit addition and subtraction that involve groupings of hundreds, tens, and ones. Children work with money, where they can use their own experiences as a context for thinking about adding and subtraction in terms of groupings of 10s. Later in the chapter, children move to a more abstract representation of multi-digit addition and subtraction, using Cross Number Puzzles to record computation.
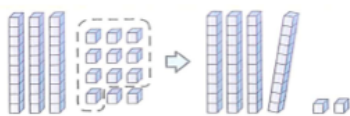
About the Math

- Counting by fives, tens, and twenty-fives with coins foreshadows multiplication.
- Using the letters P, N, D, and Q to represent money amounts previews algebraic notation.
- Trading with coins is more complex than base-ten trading, but it follows the same principals- never use more objects than you need.
- In money, the decimal point marks the ones place so a number can be properly read.
- Numbers written as the sum of multiples of powers of tens are written in *expanded notation* or *expanded form*. The expanded form of 743 is $700 + 40 + 3$ and it can also be written as $(7 \times 100) + (4 \times 10) + 3$.

see attached for more information about Cross Number Puzzles

Vocabulary

trade   value

693
The **value** of the blue digit is 90.

difference

$6 - 4 = 2$

The **difference** is 2.

In the Car Activities

★ Ask: I have a dollar and you take ___ cents. How much is left?

★ Add and subtract 8 or 12 with two and three digit numbers

Family Fun

Counting Coins

Work with your child to play this game. Your child will play a similar game in Lesson 2.

- **You will need a recording sheet, like the one shown below, and a cup with at least 5 pennies, 5 nickels, 5 dimes, and 5 quarters.**

Q	D	N	P	Total Value	Fewest Coins?
1	2	1	1	51¢	no

- **You and your child take turns picking any 5 coins from the cup and recording in the table.**

- **Is your amount shown with the fewest coins? If not, then trade to show the fewest coins. Return the coins to the cup each time. Shake the cup before each turn.**

- **Play until you and your child each take 5 turns.**

Shopping for Bargains

Work with your child to identify money amounts in dollar and cents notation.

- **Look through store flyers listing prices for items in dollar and cents notation.**

- **Have children look for patterns in the prices. For example, many of the prices have 99 cents such as $5.99 or $499.99.**

TV CITY

$399.99

- **Together, make up stories about going to the store to buy one of the items.**

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