

Grade 1 Clarifying Lessons: Math Bargains

OLD Resources. These resources have NOT yet been updated to align with the revised elementary mathematics TEKS. These revised TEKS were adopted by the Texas State Board of Education in 2005, with full implementation scheduled for 2006–07. These resources align with the original TEKS that were adopted in 1998 and should be used as a starting point only.

What is a Clarifying Lesson?

A model lesson teachers can implement in their classroom. Clarifying Lessons combine multiple TEKS statements and may use several Clarifying Activities in one lesson. Clarifying Lessons help to answer the question "What does a complete lesson look like that addresses a set of related TEKS statements, and how can these TEKS statements be connected to other parts of the TEKS?"

TEKS Addressed in This Lesson

Number, operation, and quantitative reasoning: 1.1C; 1.3A

Underlying processes and mathematical tools: 1.11A, B, C, D; 1.12A, B; 1.13

Materials

- Store signs on construction paper: (e.g. Toy Department, Jewelry Department, Greeting Card Department)
- old greeting cards
- store items or pictures of items such as toys, jewelry, cooking utensils, clothing, etc.
- price tags from 1¢ to 49¢
- real or concrete models of pennies, nickels, dimes, quarters
- calculators

Lesson Overview

Students use real coins or concrete models of coins to solve problems involving the purchase of items.

Mathematics Overview

Students use words and numbers to identify and describe the values of coins.

Set-up (to set the stage and motivate the students to participate)

1. Generate class discussion on the following questions: (1.11A)
Did people in the United States always have coins to buy things?
What objects did Native Americans use instead of money to buy items?
Have you heard your parents talking about being on a budget?
Why do you think people have budgets?
How can a budget help when you go shopping?
2. Tell students that they are going to act out going to a bargain store to purchase items. Have them bring to school items or pictures of items for the make-believe store.
3. Have students work in pairs: one is the customer and one is the store clerk.
4. Distribute coins to each student before they begin shopping. (1.1C)
5. Give each student an amount of money. This amount will determine each student's budget. (1.1C) Students can make purchases from only two different departments.
6. The customer selects an item to purchase, selects the correct amount of money from his or her collection of coins, and gives it to the store clerk, who will check the amount. (1.1C; 1.11B, C) If a student wants to purchase two items from the same department, he or she may use the calculator to find the total cost. (1.3A, 1.11D)
7. Partners should take turns being the customer and the store clerk.
8. Each student can take a mathematics journal to the store and write down the items and the coins used to pay for each item. (1.12A, B) Calculators can be used to record the total cost of the two items. (1.3A, 1.11D)

Teacher Notes (to personalize the lesson for your classroom)**Guiding Questions (to engage students in mathematical thinking during the lesson)**

- How many of each coin do you have? (1.1C)
- What are the values of each coin? (1.1C)
- What strategy did you use to count your coins? (1.11B, C) Can you think of another way to count them? (1.11B, C)

- How did you decide what items to buy? (1.11B, C)
- How did you determine what coins were needed to buy each item? (1.1C)
- Were there more combinations of coins you could have used? (1.1C)
- How did you determine if you had enough money for the two items you wanted? (1.1C, 1.3A, 1.11D)
- Can you think of another way to find the total of what you spent? (1.3A; 1.11B, C, D)
- How can the calculator be useful in your decision making? (1.11D; 1.13)

Teacher Notes (to personalize the lesson for your classroom)

Summary Questions (to direct students' attention to the key mathematics in the lesson)

To determine how comfortable students are with the different coins and their values, ask questions such as:

- What coins did you use to make your purchase? (1.1C) Why? (1.13)
- What kinds of coins did you use the most in your purchases? (1.1C) Why? (1.13)

To encourage students to reflect on their problem-solving procedures, ask questions such as:

- What strategies did you use for counting your coins? (1.11B, C) Why did you use that strategy? (1.13)
- How does your strategy compare to someone else's? (1.11C, 1.13)

To help students reflect on the connections between their informal language and the language of mathematics and symbols, ask questions such as:

- What kinds of discussions did you and your partner have about the coins when you were purchasing items? (1.1C; 1.12A, B) How did you use mathematics in these discussions? (1.11A)
- What did you learn in this activity? (1.12A, B) How do you think you will use this information in other situations? (1.11A)

Teacher Notes (to personalize the lesson for your classroom)**Assessment Task(s) (to identify the mathematics students have learned in the lesson)**

- Have students write in their mathematics journal a description of how they chose the two items they purchased.
- Have students make a chart showing how many pennies, nickels, dimes, quarters were used to purchase each item.
- Have students make a chart showing other coin combinations that could be used to purchase each item.

Teacher Notes (to personalize the lesson for your classroom)**Extension(s) (to lead students to connect the mathematics learned to other situations, both within and outside the classroom)**

Students can use pennies and the calculator to investigate the number of tens and the number of fives in the amounts of their purchases.

Teacher Notes (to personalize the lesson for your classroom)