

The Dime Store

Purpose

Students will round two-place decimals to tenths or to the nearest whole number by using dimes.

Materials

For the teacher: chalk, chalkboard

For each student: copy of Black Line Master (BLM) *The Dime Store*

Activity

A. Introduction

1. Tell students that in this activity they will be learning to round to tenths. Write a number on the chalkboard that includes digits to the tenths. Ask students which number is in the tenths place.
2. Explain to students that they will be using dime cut-outs to help them learn to round numbers to the correct tenths place.
3. Tell students to imagine that there is a store named "The Dime Store." For payment, it only accepts dollar bills and dimes, and it only gives change in dimes and dollars.
4. Explain to students that if their purchase comes to a price that has four or less in the cents position, the store will lower the price to the 10 cents below the actual price. If a purchase amounts to a price that has five or more in the cents position, however, the store will raise the price to the 10 cents above the actual price.
5. Give an example of a purchase price that would be lowered and one that would be raised.

B. Class Activity

1. Write the price of six or seven items on the chalkboard.
2. Have students determine the price they would pay at "The Dime Store" if they bought each item separately. Include one or two items that will round to a whole dollar. Write the price they would pay for each item next to the original price.
3. Explain to students that they are rounding numbers to the nearest tenth.

(continued)

connecting
across the
curriculum



English/ Language Arts

Have students create their own stores named "The Quarter Store," "The Nickel Store," etc. Have them write down the rules they would use for rounding. Ask them to explain why it would be difficult to create a store named "The Penny Store."

MEETING
INDIVIDUAL
NEEDS



For students having difficulty deciding the correct dime or whole dollar to which they would round, give them dollar and dime cutouts. Work with them in laying out the correct price. Help them decide by the number in the cents position whether they would raise the price to the next dime or lower it to the previous one.

Standards Links
4.2.9, 4.5.10

Activity (continued)

4. Repeat the exercise with the same items above having students imagine that the name of the store is “The Dollar Store.” At this store, everything is rounded to the nearest dollar. Have students find the price they would pay at “The Dollar Store” for the six or seven items listed on the chalkboard.
5. Explain to students that they are rounding numbers to the nearest whole number.
6. Write on the chalkboard three or four numbers that include digits to the hundredths place value. Have students round to tenths for each number. Assist as necessary.

C. Student Activity

1. Distribute a copy of the BLM *The Dime Store* to each student.
2. Review the directions on the BLM and allow students to work on it in class.

Questions for Review

Basic Concepts and Processes

During the activity, discuss the following questions with students to gauge their understanding of the Standard Indicator:

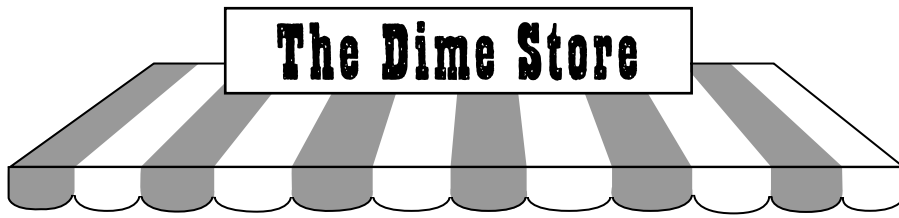


What is 1033.35 rounded to the nearest tenth? What is the same number rounded to the nearest whole number?



What number did you look at to decide how to round 1033.35 to tenths? What number did you look at to decide how to round the same number to the nearest whole number?

Name: _____



Answer the questions below by looking at the items for sale in The Dime Store.

Price rounded to tenths →

\$16.88

Price rounded to tenths →

\$0.12

Price rounded to tenths →

\$2.95

Price rounded to tenths →

\$4.34

\$18.00

Price rounded to tenths

\$25.05

Price rounded to tenths →

\$49.23

Price rounded to tenths →

EXTRA CREDIT: Choose two items from the items above to buy from The Dime Store. At The Dime Store the cost of items is rounded **ONLY** after the total price is calculated.

| ITEM | PRICE BEFORE ROUNDING |
|-------|-----------------------|
| _____ | _____ |
| _____ | _____ |

Add the prices (before rounding) of the items together. Compare the cost of purchasing the items together to the cost if you purchased them separately. Is the cost more, less, or the same to purchase the items together? Can you find two items that would cost less to purchase separately than together?

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Teacher Directions

Distribute copies of the BLM *The Dime Store*. Have students round the prices of the items to the nearest tenth, and instruct students to answer the extra credit questions if they wish.

Answer Key

The answer key displays the following items and their prices:

- Cap:** Original price \$16.88, rounded to \$16.90.
- Candy:** Original price \$0.12, rounded to \$0.10 or 10¢.
- Brush:** Original price \$2.95, rounded to \$3.00.
- Spool of thread:** Original price \$4.34, rounded to \$4.30.
- Shirt:** Original price \$18.00, rounded to \$18.00.
- Watch:** Original price \$25.05, rounded to \$25.10.
- Roller skates:** Original price \$49.23, rounded to \$49.20.

EXTRA CREDIT: answers will vary