



1: Trading Faces



OBJECTIVE:

Students will use addition to determine values of coin combinations.



MATERIALS:

- Cents, nickels, dimes, quarters, half-dollars, and Golden Dollars (real coins, play money, or paper coins copied from the reproducible coin sheets (pages 29-32))
- Reproducible coin sheets (pages 29-32) two per student
- Dice, one per group
- "Coin Combos Tally Sheet" work page (page 4)
- "Trading Faces" work page (page 5)
- Coffee cans, 1 per group



PREPARATIONS:

- If you are using paper coins for the game, you will need to copy reproducible coin sheets (pages 29-32), cut out coins, laminate if possible, and put coins into coffee cans. Otherwise you should put real coins in the cans.
- Copy reproducible coin sheets (pages 29-32) for student use.
- Copy "Coin Combos Tally Sheet" work page (page 4) and "Trading Faces" work page (page 5).



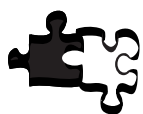
GROUPING:

- Small groups (3-4)



CLASS TIME:

- 1 class period



CONNECTIONS:

- Math



TERMS and CONCEPTS:

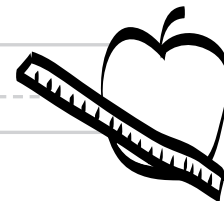
- Add
- Sum
- Trade



ANSWER KEY

"Trading Faces" (page 5)

1. 1 Golden Dollar, 1 quarter, 3 dimes, and 2 cents = \$1.57
2. 2 quarters, 4 dimes, 1 nickel, and 6 cents = \$1.01
3. 3 quarters, 2 dimes, 2 half-dollars, and 3 nickels = \$2.10
4. 2 Golden Dollars, 6 dimes, 3 nickels, and 10 cents = \$2.85



Determining the Value of Coin Combinations



STEPS:

1. Explain that the class will divide into groups to play a game in which they will add together the value of various coins.
2. Review values of the cent, nickel, dime, quarter, half-dollar, and Golden Dollar. Prompt students to come up with possible trades that can be made (e.g., two nickels for a dime).
3. With two to three student volunteers, demonstrate the game. Allow each volunteer to take a turn.
4. Distribute dice, cans of coins, and the "Coin Combos Tally Sheet" work page (page 4).
5. Allow groups 20 minutes to play the game. At end of 20 minutes, direct students to the "Coin Combos Tally Sheet" work page (page 4). Each student should record his or her coin combination by writing the value of each coin, the total number of coins he or she had, and the total value of the collection. Students should then cut and paste from the reproducible coin sheets (pages 29-32) to show an alternative combination that equals the same amount.
6. Students can complete the "Trading Faces" work page (page 5) in class or at home.

How to Play "Trading Faces":

1. Players sit in a circle with a coffee can full of coins (cents, nickels, dimes, quarters, half-dollars, and Golden Dollars) and a pile of coins (nickels, dimes, and quarters) in the middle. Students will pull coins from the can for each turn; the pile of coins will be used as a "bank," for making trades.
2. The first player rolls the die and collects the indicated number of coins from the can and determines the value of the coins he's collected. If the student has picked a Golden Dollar, he may take another turn. Otherwise, the next player rolls.
3. Remaining players take turns, repeating until time is called.
4. Throughout the game, the teacher should stop the game periodically and remind students that they may have some coins in their piles that they can trade in for other, higher-value coins. They may make trades with the money in the "bank," the pile next to the coffee can. Players who wish to trade in coins should do so only during one of their own turns, so they may explain their trades to the rest of the group.
5. When time is called, players should take turns counting their money aloud.
6. When everyone has had a chance to share their coin combinations, they should complete the "Coin Combos Tally Sheet" (page 4).



ENRICHMENT/EXTENSIONS:

The game can be made more difficult, with students reaching higher money amounts by using two dice instead of one, and/or increasing playing time.

The game could be played until a certain amount of money has been reached, instead of for a designated amount of time.

The teacher may wish to change the meaning of the Golden Dollar. For example, collecting a Golden Dollar could mean that the player must forfeit all of his coins, the player takes the coins of the person next to him, the player takes the coins of any other person in the circle, etc..




Coin Combos Tally Sheet


DIRECTIONS:


Record your final coin values and their combined value in the space below. Paste an alternative coin combination that matches your total.


“Trading Faces” Game Tally


Coin		Number	Total
Value	x	Collected	= Amount


			
\$ _____	x	<input type="text"/>	= _____

			
_____ ¢	x	<input type="text"/>	= _____

			
_____ ¢	x	<input type="text"/>	= _____

			
_____ ¢	x	<input type="text"/>	= _____

			
_____ ¢	x	<input type="text"/>	= _____

			
_____ ¢	x	<input type="text"/>	= _____

GRAND COMBO TOTAL!

My New Combo!



Trading Faces

DIRECTIONS:

For each group of coins below, add up the money and write its value. Then invent a new coin combination that could be traded for the coins.

Combo #1



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Combo Value

Combo #2



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