

Directions for Time Chart Activities

Objectives

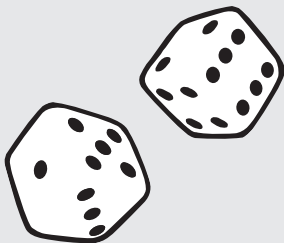
- Identify time to the hour, half-hour, 10 minutes, and 5 minutes on an analog clock.
- Practice writing time to the nearest hour, half-hour, 10 minutes, and 5 minutes in digital form.
- Recognize that the hour hand moves gradually closer to the next hour (does not stay stationary) as the minute hand progresses around the clock.
- Practice counting by fives and tens.

Materials

- Chart for each team
- Dice
- Tokens
- Colored pencils
- Clockface with movable hands (optional)

Two types of charts are used in the **Chart** activities:

- The “Find the Time” charts ask students to toss a die or dice and place a token on the corresponding clockface on the chart. (For example, the student tosses a “2” and locates the clockface showing two o’clock.)
- The “Write the Time” charts ask students to toss a die or dice, locate the corresponding clockface on the chart, and write the time in digital form below the clockface.



How to Play

- Students work in teams of two students. Each team shares a chart.
- In the **Find the Time** activities, the teams toss a die, or toss two dice and add the sum, then place a token on the clock that shows the corresponding time. When the chart is full, the team with the most tokens on the chart wins.
- In the **Write the Time** activities, the teams toss a die, or toss two dice and add the sum, then locate the analog clock on the chart that shows the corresponding time. The team writes the time in digital format under the correct clock (with each team using a different color to record the time). When the chart is full, the team with the most times filled in wins.
- Detailed directions for each activity are found on the student pages.
- Optional: Provide a clockface with movable hands for students to demonstrate specific times before finding them on the chart.
- Note: For activities in which students are asked to toss two dice, the number 1 (one o’clock) will not be a choice.

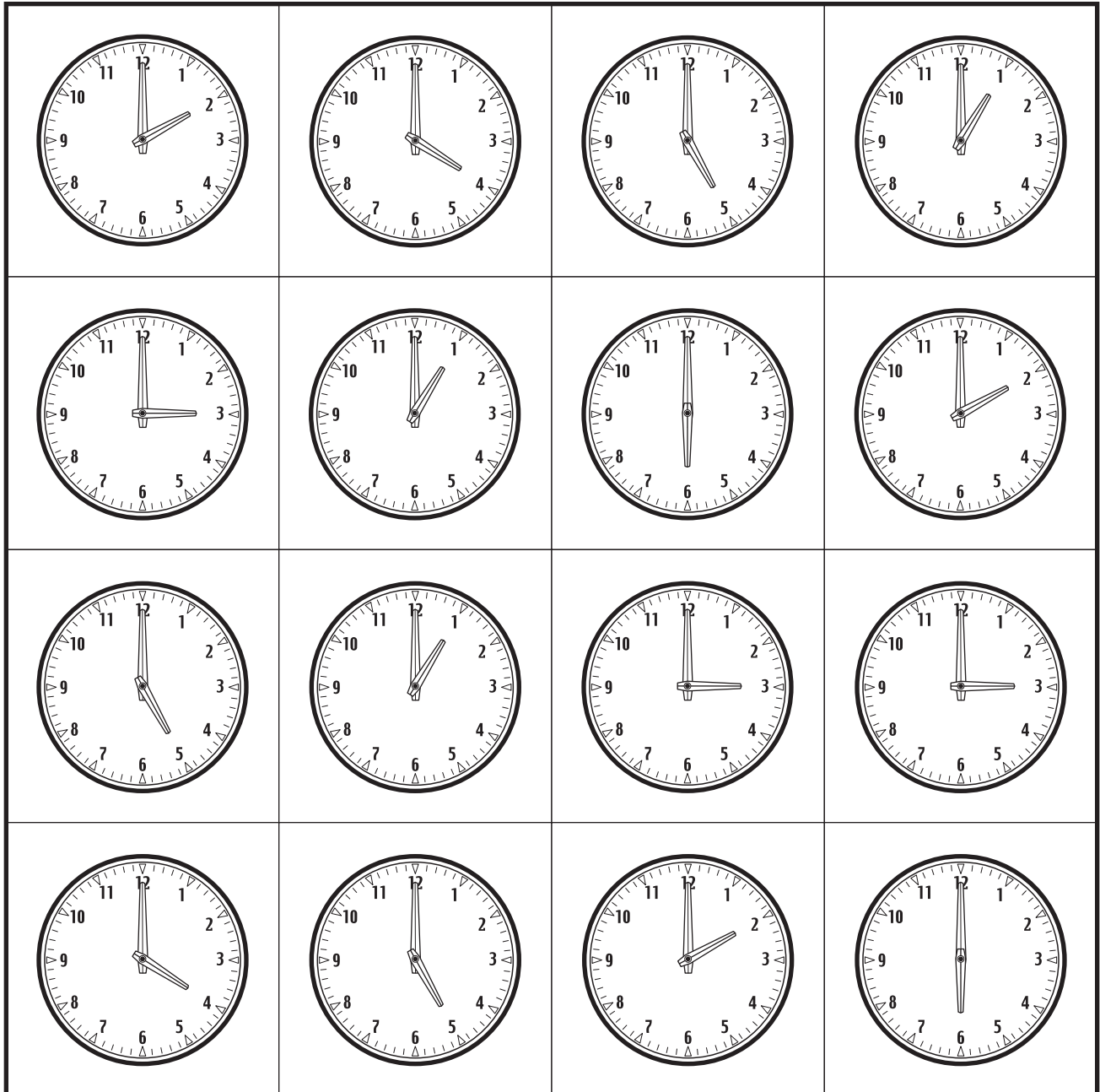
Hour Chart – Find the Time (One Die)

How to Play

- Each team tosses a die. The higher number goes first.
- The teams share a chart.



- Taking turns, the teams toss a die. The die number is the hour.
- Optional: Show the hour on the clock with movable hands.
- Place a token on a clock on the chart that shows that hour.
- If the hour is not available, lose a turn.
- When the chart is full, the team with the most tokens wins.



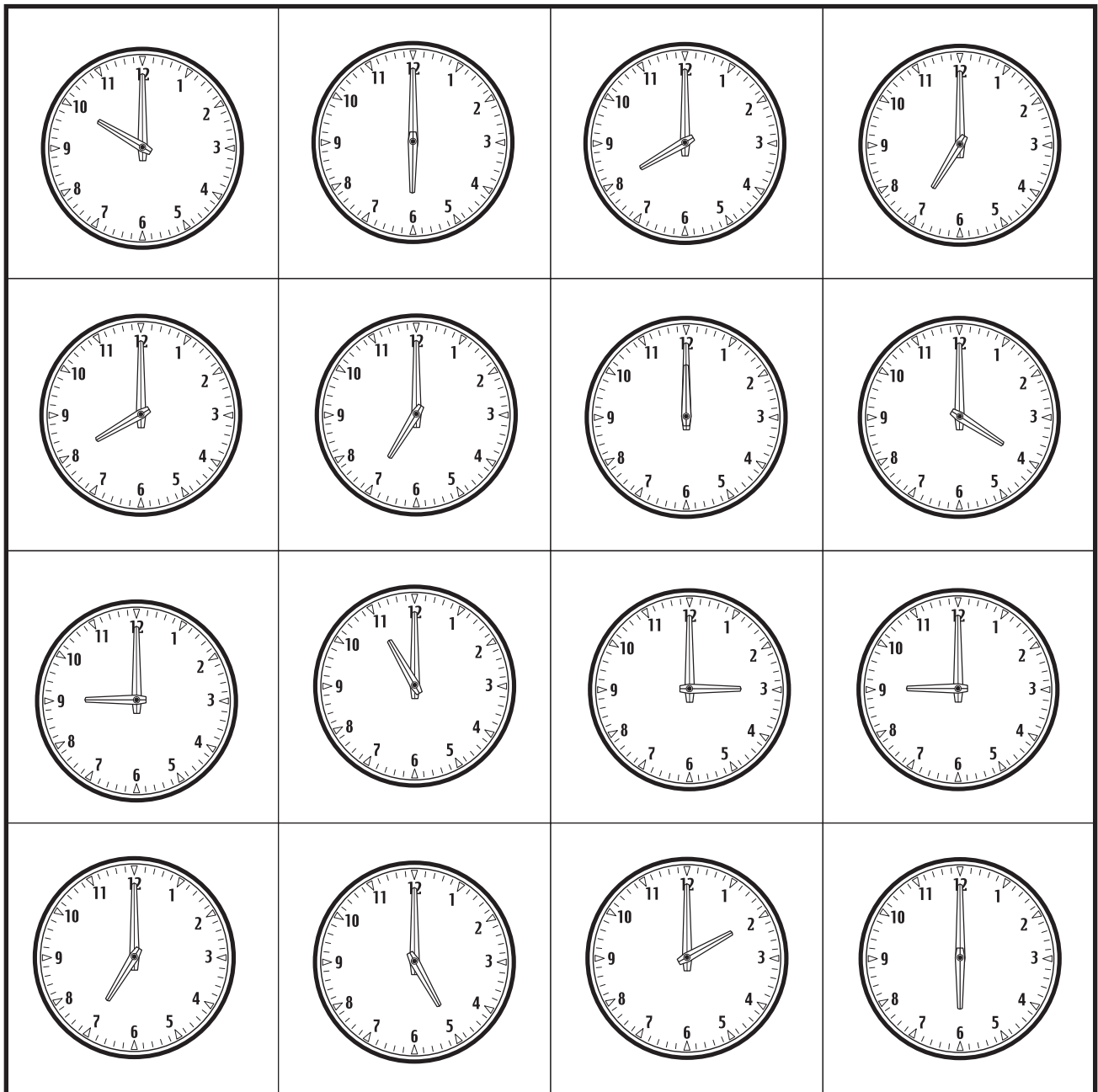
Hour Chart – Find the Time (Two Dice)

- Each team tosses a die. The higher number goes first.
- The teams share a chart.

How to Play



- Taking turns, the teams toss two dice and find the sum. The sum is the hour.
- Optional: Show the hour on the clock with movable hands.
- Place a token on a clock that shows that hour.
- If the hour is not available, lose a turn.
- When the chart is full, the team with the most tokens wins.



Half-Hour Chart – Find the Time (One Die)

How to Play

- Each team tosses a die. The higher number goes first.
- The teams share a chart.



- Taking turns, the teams toss a die. The die number is the hour.
- Optional: Show **half past that hour** on the clock with movable hands.
- Place a token on a clock that shows **half past that hour**.
- If the half-hour is not available, lose a turn.
- When the chart is full, the team with the most tokens wins.

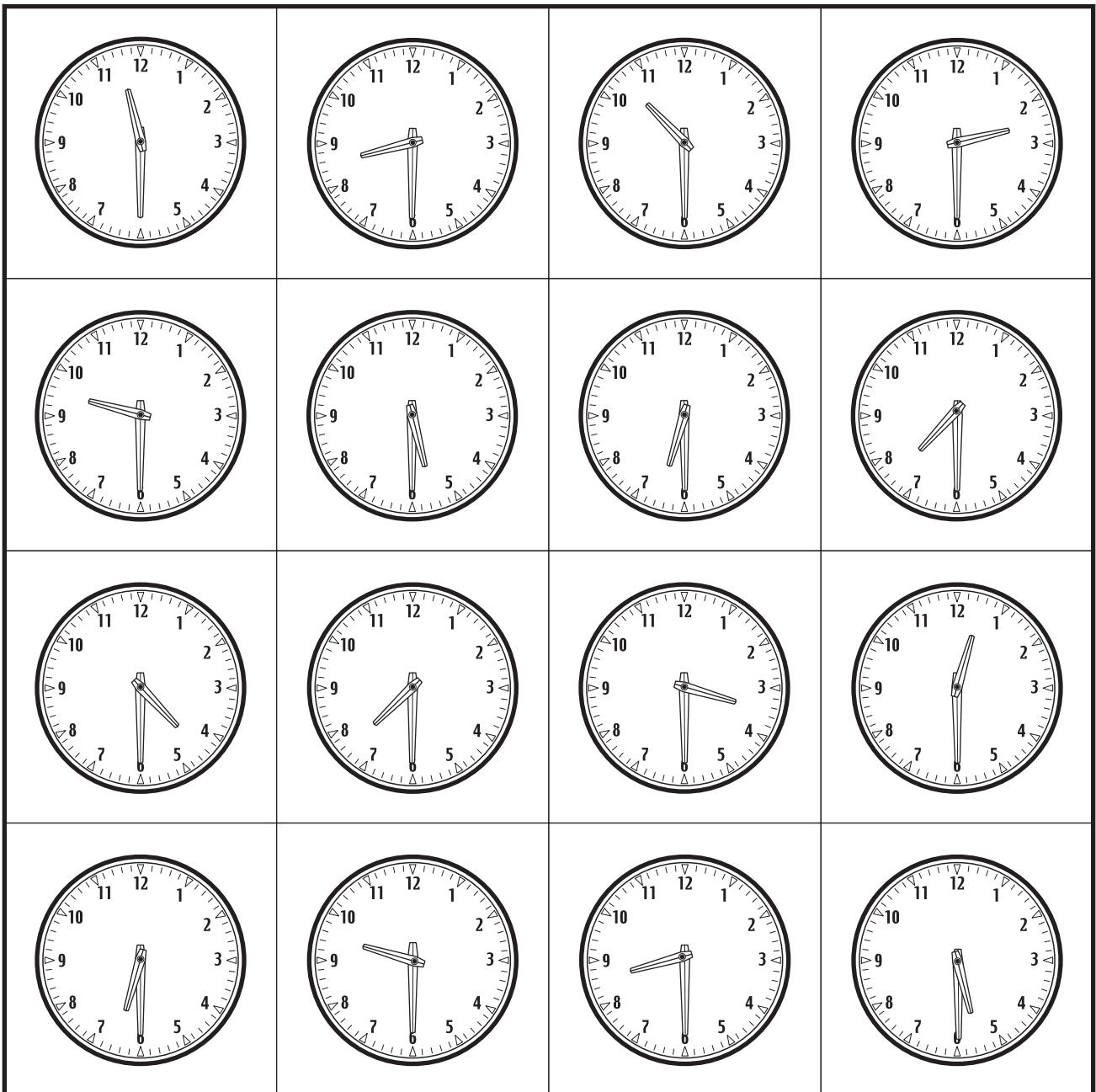
Half-Hour Chart – Find the Time (Two Dice)

How to Play

- Each team tosses a die. The higher number goes first.
- The teams share a chart.



- Taking turns, the teams toss two dice and find the sum. The sum is the hour.
- Optional: Show **half past that hour** on the clock with movable hands.
- Place a token on a clock that shows **half past that hour**.
- If the half-hour is not available, lose a turn.
- When the chart is full, the team with the most tokens wins.



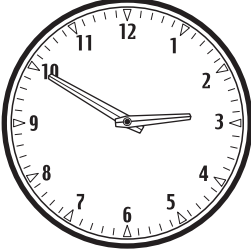
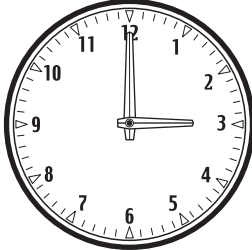
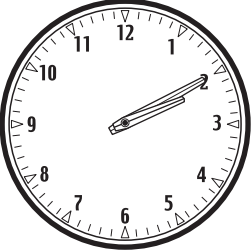
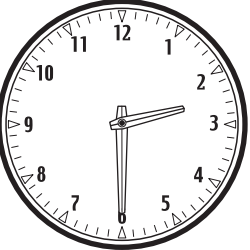
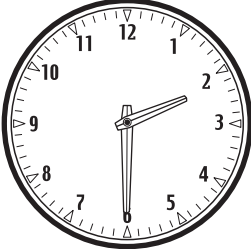
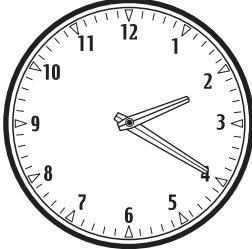
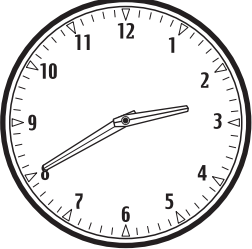
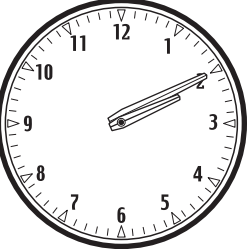
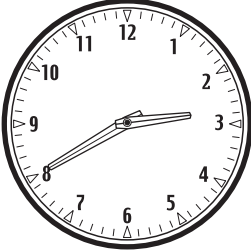
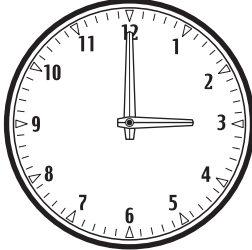
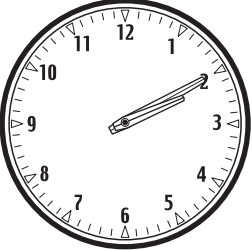
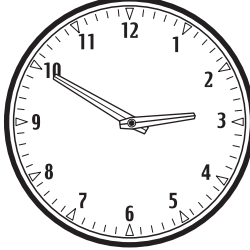
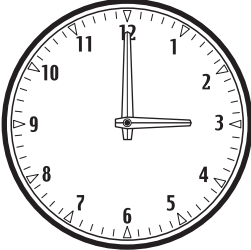
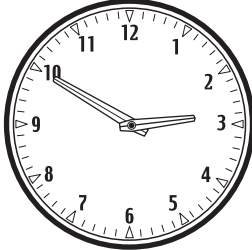
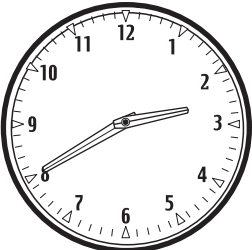
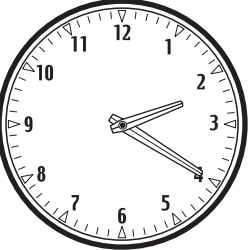
Ten-Minute Chart – Find the Time (One Die)

How to Play

- Each team tosses a die. The higher number goes first.
- The teams share a chart.



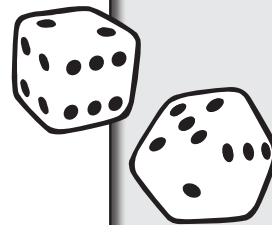
- Taking turns, the teams toss a die. Each dot = 10 minutes. Count by 10s to find the minutes **past two o'clock**.
- Place a token on a clock that shows **that many minutes past two o'clock**. (For example, toss 5; 5 = 50 minutes. Find the clock that shows 2:50.)
- If that time is not available, lose a turn.
- When the chart is full, the team with the most tokens wins.

Directions for Money Five Toss Activities

Objectives

- Practice identifying coins and coin values.
- Recognize patterns in addition when adding pennies, nickels, dimes, and quarters.
- Practice counting individual stacks of coins—pennies, nickels, dimes, and quarters.
- Develop fluency in skip-counting by fives, tens, and twenty-fives.
- Practice writing coin values using ¢ sign or a \$ sign with a decimal.



Introduce the **Five Toss** activities by demonstrating on a whiteboard or overhead. Two teams with two students on a team are suggested. Teams give students an opportunity to discuss thinking and provide a check on correct computation.

Materials

- Chart for each team
- Dice
- Coins (pennies, nickels, dimes, quarters)
- Pencil (optional)
- Calculator (optional)

How to Play

- Each team tosses a die. Higher number goes first.
- Team tosses a die.
- Team takes that many quarters, dimes, nickels, or pennies and places the coins in the coin box on their chart for Toss 1.
- Teams take turns tossing the die, taking coins, and placing coins on their charts.
- After 5 tosses, each team counts the amount of money on their chart.
- Team with the most money wins.

Suggestions

- Before teams total their coin amounts, ask, “Can you tell which team has the most money? How do you know?”
- Use as a class activity, pairing students and finding a class total.
- Encourage second- and third-graders to write the total value of each toss instead of stacking coins in the box.
- If students are struggling, introduce how to use a calculator to find the total.
- Encourage students to share strategies for efficient ways to group coins to find the totals.

Variation

- With each toss, teams total the value of the coins and record that amount in the box on their chart using either a ¢ sign or a \$ sign with a decimal. Teams then place coins on the written amount. After 5 tosses, teams find the total amount by either counting all the coins or adding the recorded amounts.

Penny Five Toss

How to Play

- Each team tosses a die.
- Higher number goes first.

- Taking turns, toss a die, take that many pennies, and place them in the box next to the coin toss.
- After 5 tosses, count the amount of money on your chart. Team with the most money wins.



Toss	Pennies
1	
2	
3	
4	
5	

Nickel Five Toss

How to Play

- Each team tosses a die.
- Higher number goes first.

- Taking turns, toss a die, take that many nickels, and place them in the box next to the coin toss.
- After 5 tosses, count the amount of money on your chart. Team with the most money wins.



Toss	Nickels
1	
2	
3	
4	
5	

Dime Five Toss

How to Play

- Each team tosses a die.
- Higher number goes first.

- Taking turns, toss a die, take that many dimes, and place them in the box next to the coin toss.
- After 5 tosses, count the amount of money on your chart. Team with the most money wins.



Toss	Dimes
1	
2	
3	
4	
5	

Quarter Five Toss

How to Play

- Each team tosses a die.
- Higher number goes first.

- Taking turns, toss a die, take that many quarters, and place them in the box next to the coin toss.
- After 5 tosses, count the amount of money on your chart. Team with the most money wins.



Toss	Quarters
1	
2	
3	
4	
5	

Directions for Money Tic-Tac-Toe Activities

Objectives

- Practice identifying coins and coin values.
- Develop fluency in skip counting by fives, tens, and twenty-fives.
- Recognize patterns in addition when adding nickels, dimes, or quarters.
- Develop communication and cooperation skills by working in teams of two students.
- Recognize the advantage of a defense strategy.

Tic-Tac-Toe is a familiar game form. **Money Tic-Tac-Toe** provides a challenging and playful variation for students to use when practicing adding pennies, nickels, dimes, and quarters.

The rules for **Money Tic-Tac-Toe** differ from the Tic-Tac-Toe activities in other books in the *Dice Activities* series. When a die is tossed, a team takes the designated amount of coins but may opt *not* to place a token on the grid, or may place more than one token on the grid.

Introduce the **Money Tic-Tac-Toe** activities by demonstrating on a whiteboard or overhead. Two teams with two students on a team are suggested. Teams give students an opportunity to discuss their thinking and provide a check on correct computation.

Materials

- Tic-Tac-Toe chart
- Dice
- Tokens (tiles, chips, cubes)
- Coins (pennies, nickels, dimes, quarters)



Warm-Up Activity: Tic-Tac-Toe

Draw a standard 3 × 3 Tic-Tac-Toe grid on the board or overhead. Review the standard **Tic-Tac-Toe** game, using Xs and Os and playing against the class.



How to Play:

- Each team tosses a die. Higher number goes first.
- Taking turns, teams toss a die and take the value of the die toss (either pennies, nickels, dimes, or quarters) from the pile of coins.
- Teams may buy a box or boxes on the Tic-Tac-Toe grid using their coins. Teams may choose to spend all, some, or none of their coins and wait for their next turn to add to their coin amount. (For example, a team tosses 3 and takes 3 nickels. The team can “buy” the box marked \$.05 for a nickel and the \$.10 box for two nickels or the \$.15 box for three nickels.)
- Once a team places a token or tokens on the grid, they return the coin amount to the coin pile.
- First team to get three in a row wins.
- Teams play 3 games. Team winning 2 out of 3 games is the winner.

Variations

- Teams must use as many coins as they can with each toss.
- Teams replace opponent’s token with their own for a solution.
- If tied, teams count their coins. The team with the largest amount wins.

Discussion

- Is it best to place as many tokens on the chart as possible or to hold onto coins?
- Does the die toss influence your strategy?
- Does the die toss influence the outcome of the game?
- Is there a fair chance of each solution being tossed?
- Is this a fair game?
- Does the side that goes first have an advantage?
- Is this a game of luck or skill?

Penny Tic-Tac-Toe

- Each team chooses a color token (tiles, chips, or cubes).
- Toss a die. Higher number goes first.



How to Play

- Toss the die and take that many pennies from the coin pile.
- Buy a box or boxes on the Tic-Tac-Toe grid using your pennies, or wait for your next turn to add to your coin amount.
- Place a token on the grid and return that amount to the coin pile.
- First team to get three in a row wins.
- Play 3 games. Team winning 2 out of 3 games is the winner.

\$0.05	\$0.10	\$0.05
\$0.01	\$0.15	\$0.10
\$0.05	\$0.10	\$0.05

Nickel Tic-Tac-Toe

- Each team chooses a color token (tiles, chips, or cubes).
- Toss a die. Higher number goes first.

How to Play

- Toss the die and take that many **nickels** from the coin pile.
- Buy a box or boxes on the Tic-Tac-Toe grid using your nickels, or wait for your next turn to add to your coin amount.
- Place a token on the grid and return that amount to the coin pile.
- First team to get three in a row wins.
- Play 3 games. Team winning 2 out of 3 games is the winner.



\$0.05	\$0.15	\$0.30
\$0.30	\$0.20	\$0.10
\$0.15	\$0.05	\$0.25

Dime Tic-Tac-Toe

- Each team chooses a color token (tiles, chips, or cubes).
- Toss a die. Higher number goes first.

How to Play

- Toss the die and take that many dimes from the coin pile.
- Buy a box or boxes on the Tic-Tac-Toe grid using your dimes, or wait for your next turn to add to your coin amount.
- Place a token on the grid and return that amount to the coin pile.
- First team to get three in a row wins.
- Play 3 games. Team winning 2 out of 3 games is the winner.



\$0.20	\$0.10	\$0.60
\$0.60	\$0.40	\$0.30
\$0.30	\$0.50	\$0.10

Quarter Tic-Tac-Toe

- Each team chooses a color token (tiles, chips, or cubes).
- Toss a die. Higher number goes first.

How to Play

- Toss the die and take that many quarters from the coin pile.
- Buy a box or boxes on the Tic-Tac-Toe grid using your nickels, or wait for your next turn to add to your coin amount.
- Place a token on the grid and return that amount to the coin pile.
- First team to get three in a row wins.
- Play 3 games. Team winning 2 out of 3 games is the winner.



\$1.50	\$0.50	\$1.25
\$0.75	\$1.00	\$0.25
\$1.50	\$0.25	\$1.25

Directions for Money Circle Race Activities

Objectives

- Recognize patterns in adding and subtracting pennies, nickels, dimes, and quarters.
- Practice counting money.
- Practice trading in 5 pennies for a nickel, nickels for dimes, and so on.
- Recognize combination of coins that equal 25¢.
- Practice doubling numbers 1 through 6.
- Develop fluency in skip counting by fives.



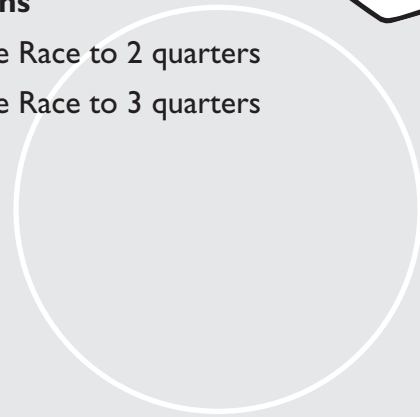
Introduce the **Circle Race** activities by demonstrating on a whiteboard or overhead. Two teams with two students on a team are suggested. Teams give students an opportunity to discuss their thinking and provide a check on correct computation.

Materials

- Chart (two teams share a chart)
- Dice
- Coins (pennies, nickels, dimes, quarters)

Variations

- Circle Race to 2 quarters
- Circle Race to 3 quarters



How to Play

- Teams toss a die. Higher number goes first.

Circle Races

- Taking turns, teams toss a die and compute the value of the toss.
- Teams add the value of the toss in coins to their circle.
- Teams “trade in” whenever possible—5 pennies for a nickel, 2 nickels for a dime, and so on.
- First team to acquire the coins needed to win the race (quarter, 4 quarters) wins.

Empty the Circle

- Teams place the specified coin or coins on their circles.
- Taking turns, teams toss a die, compute value of toss, and remove that amount in coins from their circle.
- Teams trade in a quarter for other coins to remove the amount.
- If a team can’t remove the exact amount of the toss, the team loses a turn.
- First team to empty their circle wins.

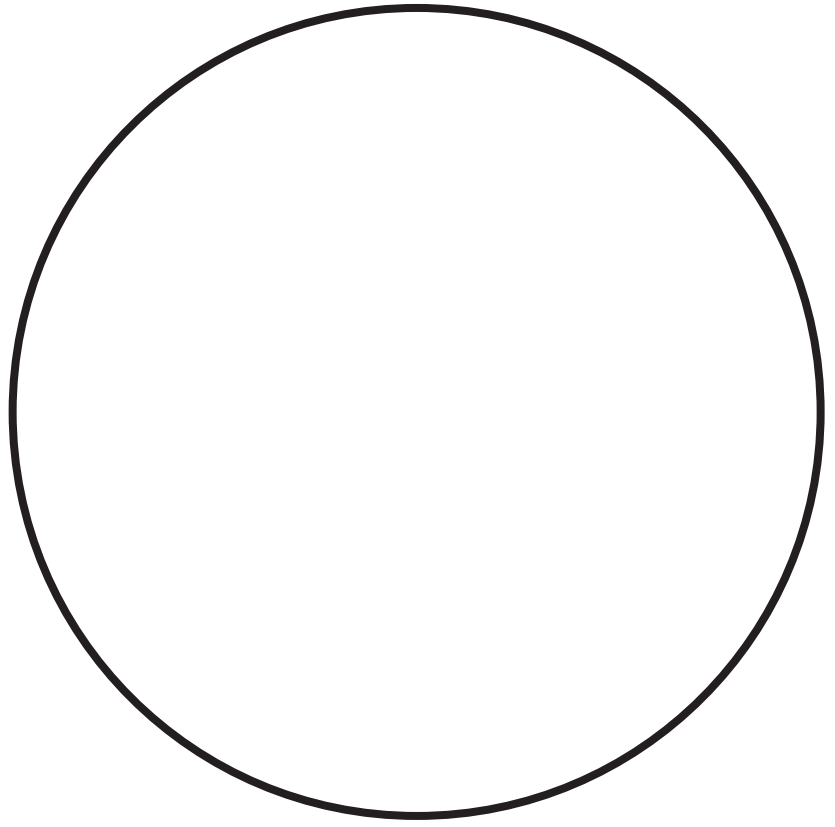
Circle Race to a Quarter



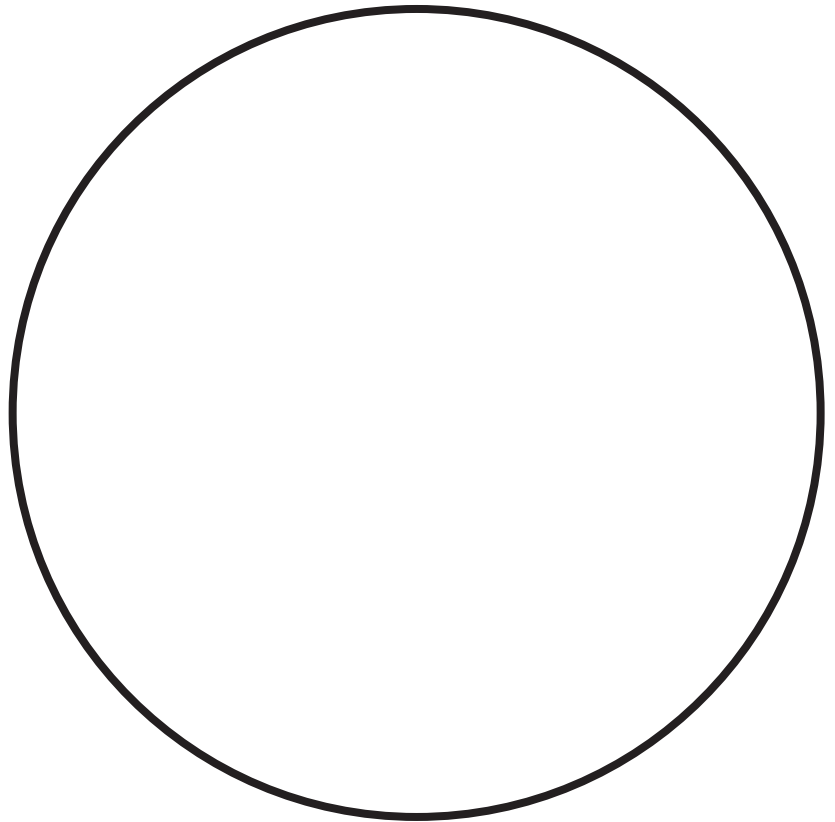
How to Play

- Each team tosses a die. Higher number goes first.
- Taking turns, toss a die. Each dot = 1¢. Add that many cents to your circle.
- First team to have exactly a **quarter** on their circle is the winner.
- Play 3 games. Team that wins 2 out of 3 games wins.

Team: _____



Team: _____



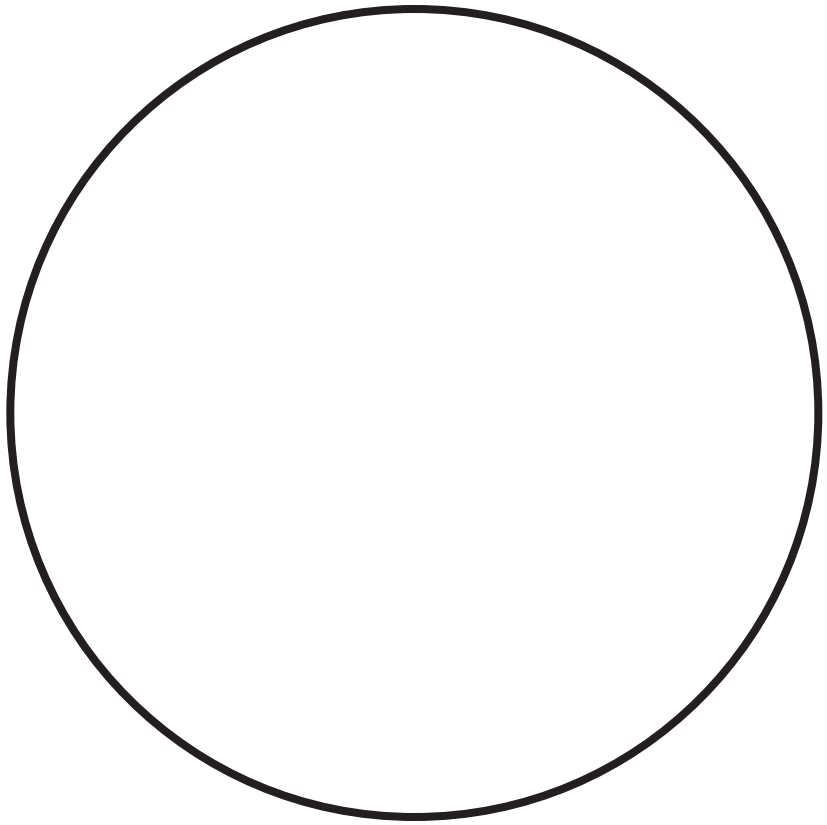
Circle Race to 4 Quarters



How to Play

- Each team tosses a die. Higher number goes first.
- Taking turns, toss a die. Each dot equals a **nickel**.
- Count by fives to find out how much money to place on your circle.
- First team to have exactly **4 quarters** on their circle is the winner.
- Play 3 games. Team that wins 2 out of 3 games wins.

Team: _____



Team: _____

