



Around the House

Game 22 from *Math Fact Fluency*

Using Around the House for Math Fact Fluency:

- Purpose: Derived Fact Strategy Game for Addition and Subtraction
- Targeted Facts: Sums and differences that equal 10 or less
- Mastery of the addition facts within 10 and related subtraction facts requires intensive and extensive opportunities to practice the strategies.
- Once students have automaticity with foundational facts, they are ready to find any addition or subtraction fact within 20, using a derived fact strategy.
- Near Doubles, Making 10, and Pretend a Ten are accessible, commonly used, and powerful strategies students may use during Around the House.

About Games and Math Fact Fluency:

Games are fun. But, more importantly, games are effective ways to support *learning*. Games provide opportunities for:

- low-stress practice of (1) facts and (2) strategies (both outcomes are critical to math beyond the basic facts!).
- think aloud, an effective learning strategy. Therefore, students should develop the habit of verbalizing their mathematical thinking out loud.
- student listening and learning from peers. Therefore, discussing strategies before and after playing allows students opportunities to learn from each other.
- teachers to formatively assess and plan instruction. Therefore, at times, use an observation tool to record how students are progressing.

Effective math fact fluency games remove time pressure and allow students time to think. That means no time component. **Each** player has their own cards or dice to roll, so they are not racing each other. Scoring is de-emphasized. **Thinking strategies are front and center.**

Around the House

2-3 players

Materials: three dice, one student game board per student, one Score Card Sheet per student, and one pencil or marker per player.



Score Card	
Player	Number
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How to Play:

1. Player 1 rolls all three dice.
2. The player can use 2-3 of the numbers rolled to try to make an expression equal to 1.
3. If the player can make an expression equal to 1, they record that equation on their score card and mark off the 1 outside the house on their game board.
4. Without rerolling, the player then tries to make an expression equal to 2, then 3, and so on. Each equation they are able to make should be recorded on their Score Card.
5. The player's turn is over when an expression cannot be made with the three numbers showing.
6. Play goes to the next player, who rerolls the dice and repeats the process.
7. The first player who crosses out all the numbers around their house, in order, is the winner.

Game in Action:

1. Player 1 has rolled a 4, 3, and 2.
2. The player uses the numbers rolled to make the following equations:



- Equation 1: $4 - 3 = 1$
- Equation 2: $4 - 2 = 2$
- Equation 3: $4 - 3 + 2 = 3$



3. Player 1 marks off the numbers 1, 2, and 3 on his/her house. The player cannot make an equation equal to 4, so the turn is over and play goes to the next person. On his/her next turn, Player 1 will begin by attempting to roll the dice and make an equation equal to 4.

Possible Variations:

1. Use 10-sided dice and include numbers through 20.
2. Allow students to mark off numbers in any order instead of moving sequentially.
3. Draw a softball or baseball diamond instead and mark off all the positions with numbers. The player who is the first to "hit" to each of the positions on the field wins.