

Let's Roll



Strands:

Number & Quantity

X

Algebra

Functions

Geometry

Statistics & Probability

Materials:

- Dice, 4 per person
- 4 large dice



Where:

Outside

Inside

On-line

On-site

X

Roll dice then rearrange the numbers to create a number as close as possible to the target.

Set-Up:

- Provide each player a set of 4 dice.
- Keep 4 dice in the center of the playing surface to roll the Ideal Number.
- The youngest player rolls the first Ideal Number.

Object of the Game: Understand the role of place value in multi-digit numbers. Practice multi-digit subtraction and addition.

Playing the Game:

1. Roll the four large dice and place them in any order you choose to form a 4-digit number. This number is called the Ideal Number.
2. Roll your four dice. Arrange the dice to create a number as close to the Ideal Number as possible.
3. Find the difference between the Ideal Number and your number. Record the difference.
4.
 - a. Play moves to the left until each player completes Steps 2 and 3.
 - b. The round ends.
 - c. The person to the left of the last player begins the next round at Step 1.
5. Play continues until every player has rolled the Ideal Number for a round.
6. Once each player has rolled an Ideal Number and all rounds are played, players add up their differences from each round.

To Win: The player with the lowest combined differences is the winner.

Think About It:

- When the target number has a first digit of 1 or 6, there tends to be the biggest difference between players' numbers and the Ideal Number. Why do you think this is the case?

Variations:

Winning Big: First place goes to the player with the lowest combined differences and second place goes to the player with the largest combined differences.

Rolling Negative: Always subtract your number from the target number. This allows for negative numbers. (Seventh and eighth grade)

Order the Numbers: Instead of finding the difference between a player's roll and the Ideal Number, players list everyone's number in order from highest to lowest. (First and second grade)

Mini Let's Roll: Use two dice instead of four. (Second and third grade)