# Roll for One 

Objective of Game: Be the first player to model the addition of tenths and hundredths to make one unit whole.

Math Concepts: Model tenths and hundredths. Read and write decimal numbers. Add tenths and hundredths. Understand one unit whole.

Vocabulary: one unit whole, tenths, decimal number, hundredths, addend, sum

Number of Players: 2
Materials: $\quad$ 1-6 Number Cube
Roll for One Grids
Roll for One Accountability Sheets
Roll for One Script Card
Background Teaching:

1. CONCRETE/MANIPULATIVES: Make one flat equal to one unit whole. Use Base 10 pieces to show that ten units is equal to a tenth rod and ten tenth rods are equal to a flat.
2. PICTORIAL: Use a $10 \times 10$ grid to show that ten hundredths is equal to a tenth and ten tenths is equal to a one unit whole.
3. ABSTRACT: Write and solve addition problems with decimals using tenths and hundredths.

## Directions:

1. Player1 rolls the number cube. Player 1 then decides and states out loud whether he/she will take that number in tenths or hundredths. After making the decision, Player 1 shades in the amount equivalent to their choice on his/her grid. Player 1 also records the numerical representation on his/her accountability sheet, keeping a running total.
2. Players alternate turns in the same manner as above. The goal is to have one unit whole shaded in without going over. If a roll would force a player to go over one unit whole, the player forfeits that turn.
3. Before each toss, players must state the total they have collected so far (shaded area) and how much more is needed to get to one unit whole (unshaded area). (Example: I have forty-five hundredths. I need fifty-five hundredths.)

Differentiation:

1. FURTHER MODELING: Model with money. Pennies are one hundredth of a dollar because it takes one hundred pennies to equal a dollar. Ten pennies are equal to one dime and dimes are one tenth of a dollar.
2. EXTENSION: Make one unit whole equivalent to two $10 \times 10$ grids. Use a 4-9 number cube to make one unit whole.
3. VARIATION: Change to game to Roll for Zero. Start with one unit whole and subtract the value of the number cube roll from one until player gets to zero. Instead of shading this on a $10 \times 10$ grid, have students start with a Base 10 flat and trade/remove pieces based on numbers rolled.

Assessment:

1. Look for accuracy on Accountability Sheet.
2. Listen for accurate use of vocabulary while students are playing the game.

## I have I need ___ to complete one unit whole.



Name $\qquad$
Roll for One


| Round Number | Tenths | Hundredths | Total |
| :---: | :--- | :--- | :--- |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 |  |  |  |
| 13 |  |  |  |
| 14 |  |  |  |

