

## **Trade To 100 Base 10 Blocks!!**

### **Materials**

- base ten blocks (or printouts)
- dice (either regular dice, or modified with only 1s and 2s)

This game is played in pairs. Each player will roll one die to determine who goes first; whoever rolls the higher number gets to go first.

**Version One** (Older Students): Played with two dice and goes up to one hundred.

**Version Two** (Younger Students): Played with one die (with only 1s and 2s) and goes up to ten.

### **Instructions**

1. Player 1 rolls two dice and adds up the numbers.
2. Player 1 retrieves the corresponding number of Base 10 units.
3. Player 1 continues to roll the dice and add the numbers. The player continues to collect the number of Base 10 units that match the sum of the dice.
4. When the player has 10 units, they will trade them for a rod (10).
5. If a 1 is rolled the next player gets a turn. If two 1s are rolled the player loses all of his or her points.
6. Keep playing until someone has 10 tens that can be traded for a flat (100). The first player to trade to 100 wins!

## Where is the Math??

This game helps students develop their number sense. Number sense refers to a general understanding of number and operations as well as the ability to apply this understanding to develop useful strategies for solving problems. Students develop their understanding of number by learning about different ways of representing numbers and about the relationships among numbers. In this game students get a lot of practice adding numbers. They also get a chance to explore place value, for example, that 10 units (ones) are the same as 1 rod (ten), and that 10 rods are the same as 1 flat (hundred).

As they play the game, students can develop strategies for efficiently trading their units and rods. For example, if a student has already collected 5 units and then rolls two fours (8), they might decide to collect 8 units and add them to their 5 units to make 13 units and then trade 10 of the units for a rod of 10 **OR** they might collect a rod and return two of their units (because  $10 - 2 = 8$ ).

Playing this game also strengthens students' recognition of math facts, both from adding the numbers on the dice (up to  $6+6$ ) and by keeping a running total of all of their rolls (unless they roll two ones!)