Crossing
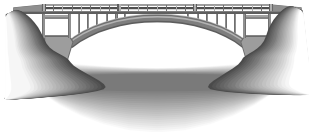

the River

Crossing the River

Introduction

"Crossing the River" is a renamed version of "Cross the Appomattox River" which was presented by Sharon Emerson-Stonnell (from Longwood University, Virginia) in a seminar I attended. I renamed it because, even in the seminar, I mispronounced the name of the river. Many thanks to Sharon for permission to format this game for our website and newsletter.

As students play "Crossing the River" they use trial and error, discover patterns, and develop mathematical strategies to enable them to successfully compete in this integer addition game.

Rules for "Crossing the River"

"Crossing the River" is a game for two players.

1. Each player starts with 15 chips (or beans or other markers). Use more or less to change the length of the game.
2. Decide how to divide your chips among the numbers on the board. Place them above the numbers.
3. Take turns. On your turn roll two number cubes and find the sum. (The white cube is positive and the red cube is negative.)
4. Move one chip, from the sum rolled, across the river to the other side.
5. If you cannot remove a chip you lose your turn.
6. You win if you are the first to move all of your chips across the river.

"Crossing the River" Game Notes

1. "Crossing the River" provides helpful practice in adding integers. It also promotes critical thinking skills. Have students look for winning strategies as they play the game.
2. After students have played the game a number of times you can have them create a chart to mathematically determine the probability of each sum. Then a discussion can take place regarding the difference between theoretical and experimental probability.

Possible Sums:	-5	-4	-3	-2	-1	0	1	2	3	4	5
Sums Totaling #:	1	2	3	4	5	6	5	4	3	2	1

For example, the sum -4 can be found in two ways (-5 + 1 and -6 + 2) out of 36 possible combinations. Therefore, the theoretical probability of rolling a sum of -4 is 2/36 or 1/18.
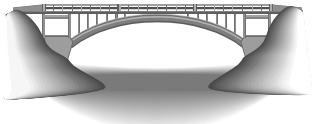
Crossing the River

Game Sheet

-5   -4   -3   -2   -1   0   1   2   3   4   5

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