

1135-VT-2310 **Lori McCune***, Missouri Western State University, 4525 Downs Dr, St. Joseph, MO 64507, and
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The cooperative game "Count your Chickens!" teaches preschoolers counting and subtracting by moving a number of chicks in or out of a chicken coop each turn based on each player's spin. Similar to "Chutes and Ladders" or "Monopoly", this game involves movement of a token on a game board in which the movement is determined by pure chance. Such games can be analyzed using the probabilistic tool of Markov Chains. We discuss the use of Markov Chains to determine the win probability for "Count Your Chickens!" and the win probability for variants of the game in which we change the structure of the underlying game board. (Received September 25, 2017)