## Name of Activity: My Turn to Earn

Book Used: Less Than Zero by Stuart J. Murphy

## Purpose of the Game:

1. To help children understand the life skills of saving, spending, and borrowing money

## Benefits of the Game:

1. Helps children with number identification, adding, subtracting, and graphing skills
2. Integrates movement into a mathematics activity that reinforces important life lessons
3. Encourages cooperation through students helping one another with the math portion of this activity

Suggested Grade Level: K-2 (as a group activity with teacher assistance)
Grades 3-5 on their own

## Materials Needed:

1. Paper with a graph of 20 numbers above 0 and 20 numbers below zero. (See graph on separate sheet.) It helps children if the boxes below zero are in red and the boxes above zero are in grey/black. This lets them visualize being in a positive or negative financial situation. Each child will have a graph. (Older students can actually have a line graph with the numbers on the lines. I used boxes for my numbers because younger students better understand placing an X in a box rather than a dot on a line.)
2. A variety of exercise cards for each group. Different decks can be divided among all the groups playing the game. (Cards from Various Fit Decks, Yoga Cards, etc., work well.)
3. One die per group. (A larger, foam die works well because it is easier for everyone to read.)
4. If desired, one polyspot per group. This sometimes gives members of the group a specific area in which to keep the die, rather than rolling it across the gym floor.

## 5. One or two pencils per group

Organization of students: 2-3 students in a group spread out on the gym floor. Each group will have one die, one polyspot, one pencil, and one paper per person.

## Explanation of Graph:

Across the top of the graph are the days of the week. There is a negative sign (-) and an arrow that points down on Sunday, Tuesday, and Thursday. It should be explained to children that these are days when they have borrowed money. Monday, Wednesday, and Friday have a positive sign (+) and an arrow that points up. These are the days when the children have earned money. The arrows are meant to help students know whether they should be going down or up the graph when they count squares. All squares above zero are in a grey/black color and all squares below zero are red ("In the red" is considered owing money and "in the black" is considered having money.)

## Description of the Game:

The first person in each group will roll the die. Since this book addresses saving, spending, and borrowing, the first roll of the die will be recorded in the Sunday column as a negative number, as students are told this is how much they have initially borrowed from their parents to help buy a scooter. After the first person records his roll of the die on his own sheet in the appropriate box on Sunday as a negative number, he will draw a card from the deck. The entire group will perform the exercise the number of times denoted on the die. The next members of the group will take their turns and follow the same procedure - roll the die, mark the number on their own papers in the negative area on Sunday, draw a card from the deck, and perform the exercise as a group. After everyone in the group has rolled once, the first person will roll the die again and add that number to the negative number by starting at the " $X$ " on Sunday, sliding over to the next day of the week, and counting up the number of boxes indicated on the die. An " $X$ " will be placed in that box. A card is drawn, the group performs the exercise, and the next person takes his turn. This continues for each group member and each day of the week. The alternating of addition and subtraction continues for each day of the week until Friday. (The students quickly learn that they are hoping for a high number on positive days and a low number on negative days.) On Friday, each student will be able to tell if he/she is in the "black" (has money) or are in the "red" (owes money). In this game, the scooter costs $\$ 8.00$. At the end of the week, students can see if anyone earned enough to buy the scooter.

## Suggestions:

1. Before playing the game, the teacher should give a simple explanation of being in the "black" or "red."
2. It is helpful to talk to children about saving money and balancing money earned with money spent.

## Adaptations:

1. Use all seven days of the week, ending with a negative number on Saturday.
2. Use all seven days of the week but start with a positive number on Sunday and end with a positive number on Saturday. This may allow students a greater opportunity to finish "in the black." The teacher must decide whether the lesson should provide more opportunities to end up in the "black" or "red."
3. To make the activity move faster, do it as a group, with everyone alternating rolls of the die and marking on only one graph. It is important, however, to keep an uneven number in the group. In this way, individuals do not always take only the positive or only the negative rolls of the die. This will help prevent ill feelings because one person is not always responsible for the score going down.
4. With older students, this game can be played using red and black checkers to symbolize money. Each student gets 10-20 red checkers and 10-20 black checkers. On the first roll, the student will put down red checkers to symbolize money borrowed. On the second roll (which is positive) red checkers are picked up first until the number on the die is reached. If the number rolled goes past the number of red checkers that were down and then picked up, the rest of the number is completed with black checkers. (NOTE: If students go past the amount of red or black checkers that they have on hand, they must go to the teacher for more checkers.) This more "hands on" approach shows students whether the money they have is money earned (black) or money borrowed (red).
