

Grade 3

Mystery Bag

Module 9- Probability



Your child is learning about probability. Analyzing data and understanding probability are important skills for solving real-world problems. Use this game to help your child predict outcomes.

Materials:

- Paper Bag
- Ten objects that are identical except for color.
(For example, crayons, socks, or marbles)
- Piece of paper

Object of the Game:

The object of the game is to guess the number of objects of each color in a bag.

Directions:

1. Player 1 places 10 objects in a bag. The objects should be three different colors. For example, if using 10 socks, there could be 7 white socks, 2 black socks, and 1 gray sock.
2. Player 2 guesses the number of each color he or she believes is in the bag.
3. Player 2 then takes one object out of the bag and records the color on a sheet of paper.
4. Player 2 puts the object back in the bag.
5. Player 2 takes another object out of the bag, records the color on a sheet of paper, and then puts the object back in the bag.
6. Player 2 continues to do this 20 times.

7. Player 2 then decides whether he or she would like to change his or her original guess.
8. Player 2 then empties the bag and counts the actual number objects of each color. The players discuss how close the guess was to the actual number. Was the second guess closer than the first? Why?
9. Player 2 now places 10 objects in a bag and player 1 guesses the number of each color he or she believes is in the bag.
10. Player 1 completes steps 3 - 8.
11. The player whose guess came closer to the actual number of objects wins the round and the game continues.

Questions to ask your child while playing:

- How did selecting from the bag 20 times help you with your guess?
- Was the second guess closer than the first? Why?