

RAFT IDEAS

Topics: Counting, Colors, Probability

Materials List

- ✓ Blank cubes
- ✓ Stickers, pens, or paints of various colors

This activity can be used to teach:

Common Core Math Standards:

- Counting (Grade K, Counting and Cardinality, 1, 2, 4, 5, 6)
- Classify objects (Grade K, Measurement and Data, 3)
- Addition and Subtraction (Operations and Algebraic Thinking, Grade K, 1, 2, 5; Grade 1, 5 & 6)
- Represent and interpret data (Grade 1, Measurement and Data, 4)



Roll Over... and Over

Count up the Rolls



Children learning how to add will enjoy this simple game that reinforces color knowledge and basic addition, plus teaches gaming skills (i.e.- taking turns).

Assembly

Create 4 identical cubes by adding a different color to each side of each cube with stickers, pens, or paints.

(Note: Each cube can have a different color on each side, such as blue, green, red, orange, yellow, pink. Or, it can have 2 each of 3 colors, such as blue, blue, green, green, yellow, yellow. Any combination of colors works, but all dice should be the same.)

Playing the Game (for 2-4 players)

1. In round 1, players roll for the first color on the score sheet (see sample below). In this sample case, players would roll for green first.
2. The player sets aside any dice that come up green. The remaining cubes are rolled again. The player continues in this fashion until all 4 cubes show green. The first player records the number of rolls it took to roll all green.
3. The dice are passed to the next player, who also rolls for green.
4. Players continue until all players roll for all colors and record their scores.
5. **Winning the Game:** The Player with the lowest total score wins the game.

Score Sheet Sample:

Color	Number of Rolls
Green	
Blue	
Yellow	
Red	
Orange	
Pink	
Total	

Taking it Further

Older students can investigate probability, data collection, and statistics using the color-coded dice. After some initial observations, students can create their own dice variations and continue investigations.

Web Resources (Visit www.raft.net/raft-idea?isid=356 for more resources!)

- Teacher designed math courses from the New Jersey Center for Teaching & Learning – <https://njctl.org/courses/math>