

Remainder Raccoon

Players: 2 to 4

Players are hungry raccoons, racing through the spoils of a human picnic. To earn their dinner, they must spin a number, divide a larger number on the board by that number, and find the remainder.

SKILLS

Division with remainders

PREPARATION

Cut out the raccoon place markers at the bottom of this page (one per player) and laminate them. Provide each playing group with a Remainder Raccoon game board (page 28), a spinner (page 27), a copy of the rules (page 26), and scrap paper.

Basic Math Skills

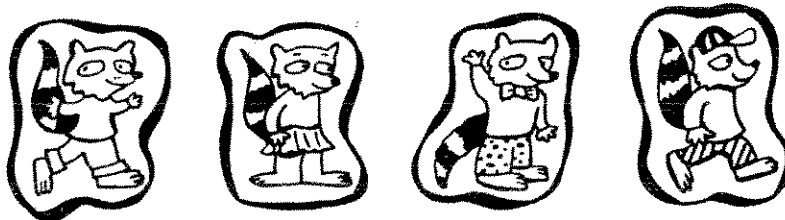
The division problems in Remainder Raccoon generate remainders. The higher the remainder, the faster the player-raccoon speeds through the picnic. (A remainder of 0 means the raccoon is stuck in place until the next turn.)

Ask the students to analyze the numbers on the game board. Which numbers will produce a lot of remainders, and why? (Prime numbers have no factors other than 1 and themselves, and so will generate a remainder for each number on the spinner.) Which numbers will be toughest to advance on? (Numbers that are multiples of several divisors, such as those at the end of the game.)

Group players by math ability.

Skill Challenge

- Urge students to create a Raccoon Remainder game with three- and four-digit numbers. They can place prime numbers toward the beginning and multiples toward the end.



Raccoon Place Markers

Remainder Raccoon

Players: 2 to 4

SKILLS Division with remainders

- MATERIALS**
- Remainder Raccoon game board
 - Remainder Raccoon spinner
 - 2 to 4 raccoon place markers
 - scrap paper

Playing the Game

You're a hungry raccoon! Divide to find the remainders (leftovers) of a human picnic. The higher the remainder, the faster you finish.

1. Place all raccoons on "Start."
2. To take a turn, spin the spinner. Divide the number on the first space by the number on the spinner. Announce the division sentence aloud. All players should do the division sentence and compare answers.

Example: You spin 4. The number on the first space is 37. Announce the division sentence: " $37 \div 4$." All players calculate to find the answer of 18 with a remainder of 1 (18 R1).

Move your raccoon the same number of spaces as the remainder—not the number of the answer. In the example, you would move 1 space. Your turn ends.

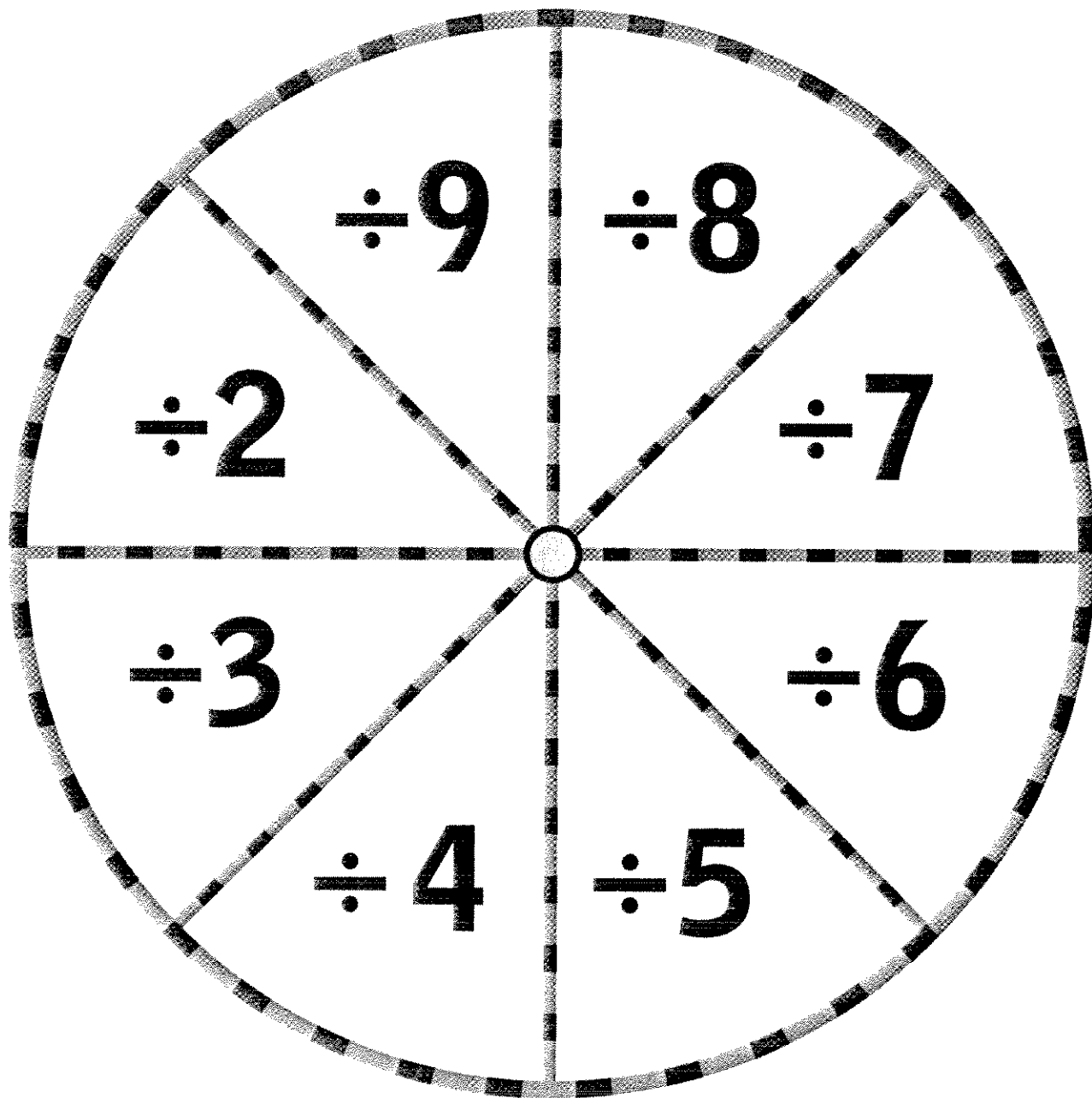
3. Take turns spinning and moving until a lucky raccoon reaches the den and wins. The winner does not need an exact number to enter the den.

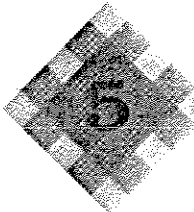
MATH STRATEGY TIP Look for shortcuts. For example, all odd numbers divided by 2 always leave a remainder of 1. For numbers divided by 5 or 10, count by fives or tens up to the number. The remainder is the number left over. For $31 \div 5$, count 10, 15, 20, 25, 30; there's 1 left over. For $93 \div 10$, count by tens up to 90. There are 3 left over.

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Remainder Raccoon

Spinner





Remainder Raccoon

Game Board

