

# Doggone Decimal

**Strand** Operations and Computation

**Skill** Practice estimating products of decimals and whole numbers

## **Games Kit Materials** (per group)

- Everything Math Deck (number cards 0–9, 4 of each)
- 2 counters per player (to use as decimal points)

## **Additional Materials** (per group)

- 4 index cards labeled 0.1, 1, 10, and 100
- 1 calculator

**Players** 2

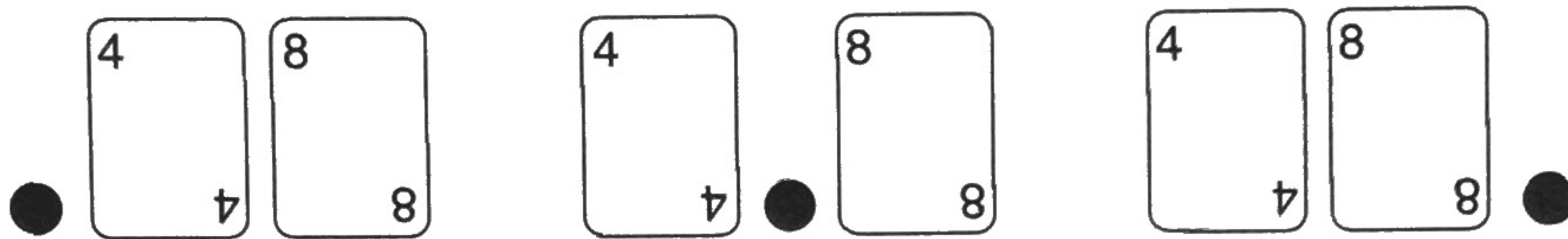
Grade 6



**Object of the game** To collect more number cards than the other player.

## Directions

1. One player shuffles the number cards and deals 4 cards facedown to each player.
2. The other player shuffles the index cards, places them facedown on the playing surface, and turns over the top card. The number that appears (0.1, 1, 10, or 100) is the **target number**.
3. Using 4 number cards and 2 decimal-point counters, each player forms 3 numbers. Numbers must have 2 digits and a decimal point.
  - Players try to form numbers whose product is as close as possible to the target number.
  - The decimal point can go anywhere in a number—for example:



4. Players compute the product of their numbers on a calculator.
5. The player whose product is closer to the target number wins all 8 number cards.
6. Four new number cards are dealt to each player and a new target number is turned over. Players repeat Steps 3–5 using the new target number.
7. The game ends when all target numbers have been used.
8. The player with more number cards wins the game. In the case of a tie, one player reshuffles the index cards and turns over a target number. One tie-breaking round is then played.

**EXAMPLE** The target number is 10.

Player 1 is dealt 1, 4, 8, and 8; he or she forms the numbers 8.8 and 1.4.

Player 2 is dealt 2, 3, 6, and 9; he or she forms the numbers 2.6 and 3.9.

Player 1's product is 12.32 and Player 2's is 10.14.

Player 2's product is closer to 10. Player 2 wins the round and all the cards.