

## Fractions with Playing Cards

**Objective:** Investigate fraction relationships using cards.

**Materials:** Playing Cards  
Colored Transparency Strips  
Fractions with Playing Cards Game Board

### Procedures:

1. Participants should play in pairs.
2. Remove face cards from deck. Distribute "game board" and different colored transparent strips to each participant. The ace will be one. Instruct participants to make the largest possible proper fraction. (Yes, if they have two of the same number, they will have one, but this doesn't happen often.)
3. Participants will use the colored transparency strip to "shade" their fractions on the game board. The person with the largest fraction will say "I have the largest fraction; --- is greater than ---." Example: "I have the largest fraction;  $\frac{3}{7}$  is larger than  $\frac{1}{5}$ ."
4. If the participant says the comparison correctly, s/he gets all the cards. Otherwise, the participant that corrects receives all the cards. In case of a tie, participants keep their own cards.

### Extensions:

1. Use face cards to expand the fractions that are compared.
2. Have participants play the game without the game board.
3. Have participants make their own number cards to play the game.

- Notes:**
1. The purpose of the game board is to help participants compare fractions that they have not had a lot of experience with, such as  $\frac{2}{7}$ .
  2. Included is a game board with labels on the fractional parts and a game board without labels.

Fractions with Playing Cards  
Labeled

1											
$\frac{1}{2}$						$\frac{1}{2}$					
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{7}$											
$\frac{1}{8}$											
$\frac{1}{9}$											
$\frac{1}{10}$											
$\frac{1}{11}$											
$\frac{1}{12}$											

