Fraction Reaction/Conversion Catch

Number of players: two or more

Materials needed: one deck of Fraction Reaction or Conversion Catch cards (4x13 sets of equivalent fractions)

Goal: collect the most pairs of fraction equivalents or conversions from your opponent by recognizing the match and calling "slap!" before your opponent does.

To play either version:

1. Shuffle fraction cards well and deal equally between players, face down. Players should not look at their cards.

2. Players place their piles of cards in front of them, face down.

3. Simultaneously, players flip one card from their piles face up in front of them. Players continue to flip up cards, one atop the other, as they move through their individual decks. If the two cards are equivalent fractions, the first player to call Slap! is able to claim the opponent's flipped up pile of cards.

4. If the fractions are not equivalent, play continues, with both players keeping their individual piles of card. Each continues flipping up a new card on top of their other flipped up cards.

5. When a Slap! is called, provided the equivalency is correct, the winning player gets the opposing players full pile of flipped up cards, and not just the individual fraction card.

6. Once a player has flipped over all of his/her cards, he/she turns over the flipped up pile and continues to play.

7. The game is over when one player collects all the fraction cards.

Hint: Teach players the "trick" behind understanding fractions: that if you divide the numerator into the denominator, you get the smallest possible fraction. Or, if it's not an

easy divisor, then look for a common number (often a two, three, four or five) that can be divided into both numerator and denominator. So, for 6/24, 24÷6=4. 6 goes into 6 one time, and into 24 four times, and that equals 1/4. For 4/6, the number two is the only one that can divide both the numerator and denominator: 2 goes into 4 twice, and into 6 three times. So, 4/6 becomes 2/3.

Fraction Equivalents used for play:

1/4 = 6/24 = 4/16 = 2/8
1/2 = 2/4 = 4/8 = 3/6
3/4 = 6/8 =9/12 = 12/16
1/5 = 2/10 = 3/15 = 4/20
4/4 = 1/1 = 2/2 = 5/5
1/3 = 2/6 = 3/9 = 4/12
1/6 = 2/12 = 3/18 = 4/24

1/8 = 2/16 = 3/24 = 4/32
2/3 = 4/6 = 6/9 = 8/12
3/5 = 6/10 = 9/15 = 12/20
5/6 = 10/12 = 15/18 =20/24
1/10 = 2/20 = 3/30 = 4/40
1/9 = 2/18 = 3/27 = 4/36

Variation

Conversion Catch: This version is played exactly the same way, but with two sets of equivalent fractions, plus the decimal and percent equivalent. This is a bit more challenging, as players must learn how to equate percentages and decimals to like fractions while playing. The cards would look as follows:

1/4 = 2/8 = 0.25 = 25%
1/2 = 2/4 = 0.5 = 50%
3/4 = 6/8 = 0.75 = 75%
1/5 = 2/10 = 0.2 = 20%
4/4 = 5/5 = 1.0 = 100%
1/3 = 2/6 = 0.33 = 33%
1/6 = 2/12 = 0.17 = 17%
1/8 = 3/24 = 0.13 = 13%
2/3 = 4/6 = 0.67 = 67%
3/5 = 6/10 = 0.6 = 60%
5/6 = 10/12 = 0.83 = 83%
1/10 = 2/20 = 0.10 = 10%
1/9 = 2/18 = 0.11 = 11%

While Conversion Catch is definitely trickier, there will be times when it will be "just a guess" in deciding whether or not the conversion is correct. Remind players what they already do know: ie., that 20% is equal to 20/100, or 2/10, for example, or that 3/4 equals 75%, or 0.75 of 1 whole. That knowledge can become a benchmark to gauge the equivalency of other conversions in the deck.