## Fraction Cards

1. Find all cards that represent equivalent fractions. Pick two equivalences to argue how a student could know they are equivalent.
2. Benchmarks are an effective way for students to develop fraction number sense. Students can begin by comparing numbers to whole numbers, and later to half numbers. Find a number to fill in each blank from the fraction cards. For each, evaluate what number knowledge a student would need to make the comparison.
(a)
(b)
(c)
$0<\square<\frac{1}{2}<\square<1 \ll$
3. Put 10 of the fraction cards in order from least to greatest. No more than 3 with the same denominator, please.


Which step would be the most difficult for students to evaluate? Why? How could they see the relationship?
4. Fill in the following spaces using fraction cards with cards that have different denominators.

|  | + |  | $=$ |  |  | $\times$ |  | $=$ |  |
| :--- | :---: | :---: | :---: | :---: | :--- | :--- | :--- | :--- | :--- |
|  | - |  | $=$ |  |  |  | $\div$ |  | $=$ |

5. Play War (you can call it More if you are of a peaceful nature) with a partner using the fraction cards.

## Fraction Catch

A fraction ordering card game for 2-6 players. (For 5 and 6 players you may want two decks.)
Materials: Fraction cards
Set-up: Each player is dealt three cards, and hold them so others can't see. Turn over the top card of the remaining deck. The player to the left of the dealer goes first.

Gameplay: On the play, a player places a card in order among the other fractions. If their card goes between two other cards, the can catch the lower fraction for a score. After a card is played that player draws a card for their hand. Play continues until no more plays can be made. If a player can't make a play they pass their turn.

Winning: the player with the most captures wins.

## Example:

P 1 : is dealt $1 / 2,5 / 6,7 / 8$
P 2 : is dealt $1 / 10,1 / 12,1 / 6$
P3: is dealt $1 / 4,3 / 4,9 / 10$
The dealer flips over $2 / 4$.
P1: plays $7 / 8$ (no catch) and draws $1 / 3$.
P2: plays $1 / 6$ (no catch) and draws $5 / 8$.
The board looks like:

| Catches |  |  |  |
| :--- | :--- | :--- | :--- |
| P1: | $1 / 6$ | $2 / 4$ | $7 / 8$ |
| P2: |  |  |  |
| P3: |  |  |  |

Hands
P1: $1 / 2,1 / 3,5 / 6$
P2: $1 / 10,1 / 12,5 / 8$
P3: 1/4, 3/4, 9/10

P3: plays $3 / 4$ and catches $2 / 4$ and draws $1 / 8$.
P1: plays $1 / 2$ and catches $1 / 6$ and draws $6 / 8$.

## Catches

P1: 1/6
P2:
P3: 2/4


P2: plays $5 / 8$ and catches $1 / 2$ and draws $2 / 3$.
P3: plays 9/10 (no catch) and draws 7/6.

## Catches

P1: 1/6
P2: 1/2
P3: 2/4

| $5 / 8$ | $3 / 4$ | $7 / 8$ | $9 / 10$ |
| :--- | :--- | :--- | :--- |

Hands
P1: $1 / 3,5 / 6,6 / 8$
P2: $1 / 10,1 / 12,5 / 8$
P3: $1 / 4,1 / 3,9 / 10$

## Variations:

Open hand - players play with hands revealed and help each other. Good way to learn.
Scoring - players play for a score, where you total your catches to find out who wins. Can shade in a score sheet divided into 24ths for a variation on this variation.
Quickie - play until someone has a set number of catches, such as 5 or 7 .
Calculator check - play with a calculator, where players convert to decimals to check placement and total scores.

