Fraction Games with Cards

Fraction Battle

This game's purpose is to compare fractions. Start by shuffling the cards. Leave the face cards and aces in. Aces = 11, Jacks = 12, (no 13's for this) Queens = 14, Kings = 15. Kids need either scratch paper and a pencil or whiteboards and a marker to do a bit of problem solving.

Split the deck(s) and each player turns over 2 cards that he/she will use to make a fraction. The smaller number is the numerator and the larger is the denominator. Kid's compare fractions and the larger fraction wins and keeps the cards (unless you use a more/less coin as explained above). If the fractions are equivalent, the cards are put in the middle and the winner of the next round takes those too.

Simple Simon Fractions Race (Simplifying Fractions)

To prepare for this game, take out the aces. Make the Jacks 12, Queens 14, and the Kings 15 (no 13's again). Split the deck and shuffle the cards. Each player flips over the top two cards from his/her pile and makes a fraction with the smaller number on top. The first player (yes it's a race) to correctly simplify his/her fraction may keep the cards from that round. If there is a tie, cards are put in the middle for the next round's winner. If a player's cards can not be simplified, the other player may keep the cards IF he she simplifies his/her own fraction correctly. If not, cards go back in the center for the next round. The player with the most cards at the end wins.

Improper Fraction War

Students will need scratch paper or a whiteboard to work out some of their problems in this game. For this game, Aces are one, Jacks are 12, Queens are 14, and Kings are 15. Shuffle the deck and split the cards evenly. Players turn over the top 2 cards and make an improper fraction (big number on top). Each player converts that improper fraction to a mixed (or regular) number and the largest number wins (or use the more/less coin again). Winner keeps the cards and play continues. If there is a tie, the cards go in the middle to be taken by the winner of the next round.

Five Strategies for Comparing Fractions
http://theelementarymathmaniac.blogspot.com/2015/02/fly-on-math-teachers-wall-squashing.html

We split the deck and each flipped two cards and made a fraction. The first card flipped became the numerator and the second card the denominator. This allowed us to make all kinds of fractions.   The person with the largest fraction won all of the cards. Some of our fractions were less than one, some were equal to one and some were more than 1. It was a great way for students to practice comparing fractions. Out of the 5 strategies for comparing fractions, I saw students use comparing to a benchmark most frequently during this game. It was a great way to reinforce the idea of one half, one whole and improper fractions. I also saw students using common numerators to compare fractions and quite a bit of unit fraction reasoning. My favorite use of unit fraction reasoning was when a student used the idea of unit fractions and the distance from one to compare 10/11 and 11/12. "They are both missing one piece. 11/12 is missing 1/12 and 10/11 is missing 1/11. Since 11/12 is missing a smaller piece, it is greater."