

Lesson Title: Produce Stand Rummy

Grade: 3rd/ 4th

Content Standard: 3.NF.1 Understand a fraction $1/b$ as a quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size (see detail of standard).

4.NF.1, 4.NF.2, 4.NF.3, 4.NF.4 (look them up yourself)

Materials: Set of Produce Stand Rummy cards. Cards are made of laminated 3 x 5 index cards. A deck has 50 cards consisting of 8 cards each of the following fraction pieces: $\frac{1}{2}$ (pumpkin-orange), $\frac{1}{3}$ (green pepper-green), $\frac{1}{4}$ (tomato – purple), $\frac{1}{6}$ (watermelon-red), $\frac{1}{8}$ (corn-brown), $\frac{1}{12}$ (squash-tan). Two wild cards are also added to each deck. One face of each card has the fraction and vegetable written on it in the assigned color.

Set of Fraction Factory pieces that include 10 pieces that represent each fraction/vegetable.

Shared experience and procedure details: Divide class into small groups of 2-4 students. Each group needs 1 set of cards and 1 set of Fraction Factory pieces.

Rules: 1. Deal 7 cards to each player. The remaining cards are put facedown on the table to create the deck. Turn the top card of deck face up and place next to deck to create a discard pile.

2. Player to left of dealer draws one card from either the deck or the discard pile. If the player has cards in hand to create 1 or more baskets (i.e. $\frac{1}{2}$ and $\frac{1}{2}$ or $\frac{1}{3}$ and $\frac{1}{3}$ and $\frac{1}{6}$ and $\frac{1}{6}$), those cards are laid down in a pile on table. Player then chooses one card from hand and places it on the discard pile. That turn is over and the next player plays.

3. Play ends when a player uses all the cards in hand making baskets during a turn or uses the last card in hand for discard at the end of turn.

4. Each player receives one point for every basket they have created.

Note: The Fraction Factory pieces may be used at any time during play to assist a player in creating or checking whether or not a basket can be created from available cards. They may also be used to challenge a basket that has been laid down by another player.

Possible Picture: At some point during play, ask the students to stop and assign the following task: Draw a picture and write about a basket you or another player has made during the course of play. Make sure your picture shows the pieces used to make the basket and how you determined that it was equal to a basket.

Pictures may show different combinations of pieces the equal 1 basket. The pictures may show pieces laid on top of a rectangular basket and covering it or they may be set alongside the rectangular basket. Pictures may also show a non-geometric representation of a basket with pieces in or next to it.

Possible People Talk: Observations that may arise when discussing pictures of baskets: There are many ways to make a basket. Two or more smaller pieces can equal a larger piece. Some pieces are harder or easier to use in making a basket.

Feature Talk: pieces, fractions, basket, vegetables, put together, add, equal, same as, exchange, more, less

Possible Symbolic Representation:

$$T + T + T + T = B \quad (T \text{ is tomato} = \frac{1}{4}, B \text{ is basket} = 1)$$

$$4 \times T = B \quad \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1$$

Various pictures may be used to represent pieces that can be put together to equal a basket.

Note: This game is played after students have become familiar with the pieces while playing the produce Stand board game.

The game can be modified by removing or adding cards that represent a certain fraction.

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