

Cover / Uncover



A homemade fraction game

- You first need to create a Fraction Kit. Start with 5 colors of 12x18-inch construction paper (red, blue, green, yellow, orange - or any combination you choose). Cut each color into 3x18-inch strips. Each person gets one strip of each color.
 - Keep the red strip intact and label it as 1 whole.
 - Fold and cut the blue strip into halves and label each piece as $1/2$
 - Fold and cut the yellow strip into fourths and label each piece as $1/4$
 - Fold and cut the orange strip into eighths and label each piece as $1/8$
 - Fold and cut the green strip into sixteenths and label each piece as $1/16$

(see other sheet)

- Also make 6 small squares of paper with each fraction written on the squares ($1/2$, $1/4$, $1/8$, $1/8$, $1/16$, $1/16$) and fold into fourths. This will be the pile that each player will draw from on their turn.
- To play **Cover**:
 - Take turns mixing the square papers and choose one
 - Place the fraction piece you chose onto your 1-whole red strip
 - The goal is to cover the entire strip to the exact fraction in any combination based on what is drawn

-If you only need a $\frac{1}{8}$ piece left, for example, you must continue to draw on your turn until you get that exact piece.

- To play **UnCover**:
 - Start with the two $\frac{1}{2}$ pieces covering the 1-whole piece.
 - Chose a fraction piece. The player can either remove the fraction that they drew, exchange for equivalent fractions then remove, or pass.
 - For example, if a player draws a $\frac{1}{8}$ fraction when they have two $\frac{1}{2}$ pieces, they can trade in one $\frac{1}{2}$ piece for four $\frac{1}{8}$ pieces, then remove one of them. If no more trading is possible, the player should pass on the turn and wait for their necessary fraction to be drawn.

Burns, Marilyn. Math: Facing an American Phobia. Sausalito: Math Solutions Publications, 1998.

Quarter 1: Strand 1: PO 1: Concept 1 - Number Sense