## UNIT FRACTION COVER UP

Unit Fraction Cover Up is a fraction game designed to help with finding unit fractions of numbers. A unit fraction is a fraction where the numerator is 1.

**Grade:** 4<sup>th</sup> Grade and up **Number of players**: 2-3

Learning: unit fractions of numbers, strategy and logical thinking

#### You will need

- Each player will need 15-20 counters of their own color.

- calculator (optional)

2 smaller different counters for the top two grids.

#### Instructions

- At the start of the game, the two smaller counters are placed in the center of each of the mini grids at the top; one counter on  $\frac{1}{2}$  and one counter on number 15.
- The first player to start can move each of the smaller counters along the lines one space, either horizontally or vertically. The first player then works out the fraction of the number they have made. Example: if player 1 moves the first counter to  $\frac{1}{10}$  and the second counter to number 20, then they must find  $\frac{1}{10}$  of 20. If the first player gets the answer correct, they may place one of their counters anywhere on the board to cover up that answer.
- The second player now moves each of the mini-counters one place along the lines to a new fraction and a new number. The second player then finds the new fraction of this number. If they are correct, they may place one of their counters anywhere on the board to cover up that answer.
- Play continues until a player manages to cover up 4 counters in a row. If playing a 3 player game, then only 3 counters in a row are needed.
- If a player cannot go, or gets an answer wrong, then play passes to the next player.
- The first player that covers up 4 in a row (horizontally, vertically or diagonally) is the winner! If playing a three player game, then 3 counters in a row are needed to win.

### **Variations**

- Optional rule a player can check another player's product using a calculator and dividing the number by the denominator.
- Play the game for a set amount of time. Each time a player makes **3** counters in a row, they may remove one of their opponent's counters from the board. The winner is the player with the most counters on the board at the end of the time.



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1/3	1/4		1/5		10	12	30
1/6	1/2	H	1/10	of	24	15	36
1/4	1/5	H	1/3		18	20	45

2	10	6	5	3	8
4	5	3	6	15	12
6	1	20	4	2	5
9	3	5	12	6	4
2	2 6		10	9	3
5	18	15	6	2	10





