



INTRODUCING FRACTION ACTION

FRACTION ACTION

Fraction Action is a game using fraction addition. It can be used to introduce the concepts and process required for fraction addition.

Fraction Action has a simple game play and is easy to learn. This document provides a suggestion for introducing the game to a class.

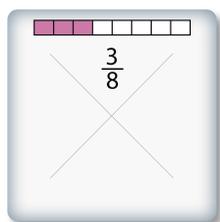
EQUIPMENT

- One pack of Fraction Action Cards for each group of four students

INTRODUCING THE CARDS

Each fraction card shows one, two or four fractions. The fraction appears as a number and using a bar model.

Have each student take a card that shows just one fraction, turned to show the fraction at the top. Explain that the bar model represents the fraction.



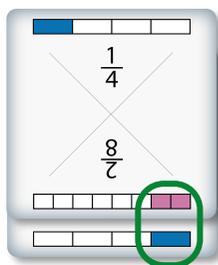
The whole bar represents the number one. The total number of pieces (coloured and not) is the denominator, 8 for the card above. The number of coloured pieces is the numerator, 3 for the card above.

Have students show others in their group how the bar model and number match on their card.

EQUIVALENT FRACTIONS

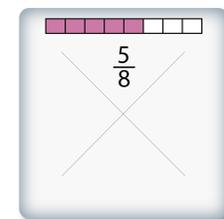
Cards are turned to show a different, equivalent fraction. For example, the quarter card can show $\frac{1}{4}$ at the top or be turned to show $\frac{2}{8}$ instead.

For equivalent fractions the coloured section of the bar models will be the same. For example, the blue section of $\frac{1}{4}$ is the same length as the purple section of $\frac{2}{8}$.



ADDING FRACTIONS

Fractions with the same denominator (same bar colour) can be added by counting the total number of coloured pieces. They add up to one when the total number of coloured pieces is the same as the number of pieces (coloured and not) on any one of the cards. So $\frac{5}{8} + \frac{3}{8} = 1$ since $5 + 3 = 8$, the denominator.



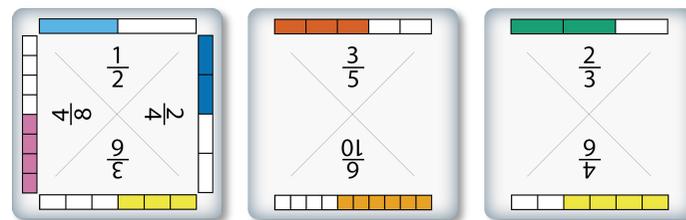
Have the groups form sets of fractions with the same denominator that sum to one. Challenge them to use different denominators and more than two cards in a sum.

THE GAME

Have one group play a demonstration game with everyone else watching.

DEMONSTRATION

Shuffle the cards, then deal three cards to each player. Place three cards face up in a row in the playing space. These cards provide starting points for three sets. It doesn't matter which fraction is showing at the top. Place the remaining cards in a face down draw pile.



For the demonstration game, players show their cards to everyone on their turn. Initially, explain all of the moves the player can make with the cards they have. Later have the player or other students suggest possible moves. Later still, players stop showing their hands.

Over the first few turns be sure to point out the following:

1. A card in the hand can be turned to show the same denominator as the pile it will be added to.
2. All cards in a pile can be turned to show the same denominator as the card added.
3. A set is complete when it adds to one. Players keep the sets they complete for scoring.
4. A card cannot be added to a set if this would make the sum more than one.
5. If a player cannot add to any set, they start a new set with any one of their cards.

After a playing a card, another is drawn from the facedown pile. Once the facedown pile is gone, play continues until all cards have been played.

The player who collected the most cards from completed sets is the winner.

GROUP GAMES

Once the demonstration game is finished. Groups play their own games. The demonstration group can visit other groups to help them get started.

You can order Fraction Action cards at CreativeMaths.net

Where to next? More ideas at CreativeMaths.net – and do give us feedback as to what worked for you.

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