



FRACTION ACTION: RICH TASK AND ACTIVITY IDEAS

Fraction Action is a great game for building number knowledge with fractions. It can also be used for other activities and rich tasks. Here are some ideas.

IDEA 1: MAKING ONES

Make as many ones as you can using all of the cards.

EQUIPMENT

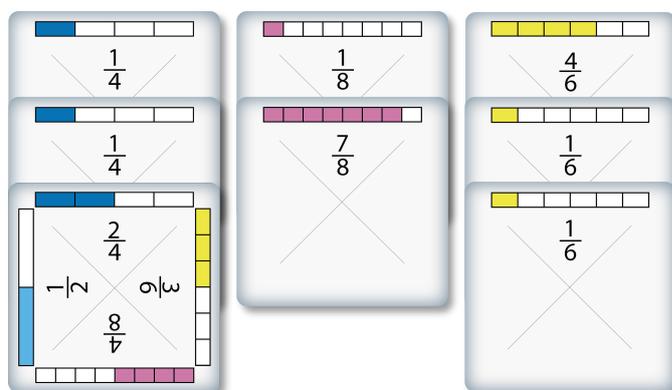
One Fraction Action pack per group

INVESTIGATION

In this investigation groups look at how many sets of cards with a sum of one can be created. Each set must show a common denominator, as in the game.

Give the groups time to explore on their own, then ask questions about what they have found.

- What do you notice? What do you wonder?
- How many sets that add to one do you have?
- Can you form more sets?
- How do you know that you cannot make any more sets with the left-over cards?
- Do you think it is possible to make more sets by rearranging your current sets? How can you be sure your thinking is correct?



NOTES

The total sum of fractions in a pack indicates the most possible ones that can be made. Encourage students to notice and reason this for themselves.

A complete pack of Fraction Action cards will make 20 sets adding to one, with no cards left over. Mixed or incomplete packs will give different results.

IDEA 2: MAKING TWOS

Try to make sets that add to two but cannot be split into two ones.

EQUIPMENT

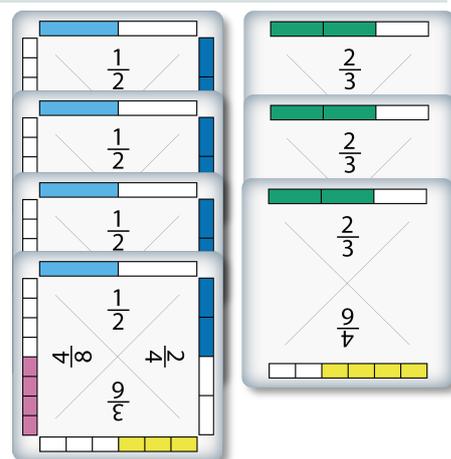
One Fraction Action pack per group

INVESTIGATION

A set of four half cards adds to two but can also be split into two sets that each add to one. Have groups investigate whether it is possible to make a set of cards that adds to two but cannot be split into sets that add to one.

As the groups find sets, write the sum on the board. Challenge the class to find as many different sets as they can. They will need to think about how to check each set meets the criteria and what makes different sets (for example, are sets of the same cards in a different order, different sets?).

Once you have enough of a list ask the students to notice and wonder about the list. Look at which sets have the most cards and which have the least. How many cards in the smallest possible set? How many in the largest possible?



EXTENSIONS

Using just one pack of Fraction Action cards, how many such sets can be formed without reusing cards.

Is it possible to make a set of cards that adds to three but cannot be split into sets that add to one or two?

IDEA 3: ORDERING

Order sets of fraction cards.

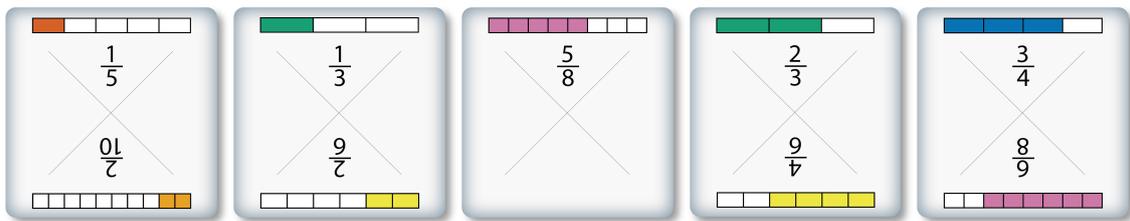
EQUIPMENT

A set of fraction cards for each group

ACTIVITY

Lay out the cards in your set from smallest to largest. Write down the fractions in order using the fraction with the smallest denominator on each card.

The ordering can be visually checked by using the bar models on the cards.



IDEA 4: FRACTION SUMS

Use the cards to add fractions and show working.

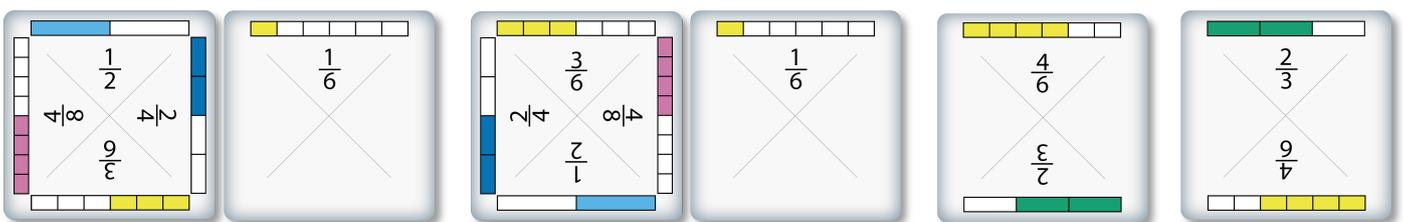
EQUIPMENT

One Fraction Action pack per group

ACTIVITY

Fraction Action cards can be used to show the working for adding fractions. Show the class an example, such as the following.

The sum $\frac{1}{2} + \frac{1}{6}$ can be represented by two cards showing $\frac{1}{2}$ and $\frac{1}{6}$ at the top. To add these fractions needs a common denominator of 6. Use two different cards for this, showing $\frac{3}{6}$ and $\frac{1}{6}$ at the top. The sum is $\frac{4}{6}$, use



another card to show this. This can be simplified to $\frac{2}{3}$. Use one last card with $\frac{2}{3}$ at the top.

On the board, write some fraction sums that can be found using Fraction Action cards. Have the students show the sum, the working and the result using fraction cards. Not all solutions will need to be simplified. Include some examples where both fractions start with the same denominator.

ALTERNATIVE

Have students choose two or three fraction cards, then write down the addition equation they represent.

Where to next? More ideas at CreativeMaths.net – and do give us feedback as to what worked for you and any other activities you try using Fraction Action cards.

10 May 2019