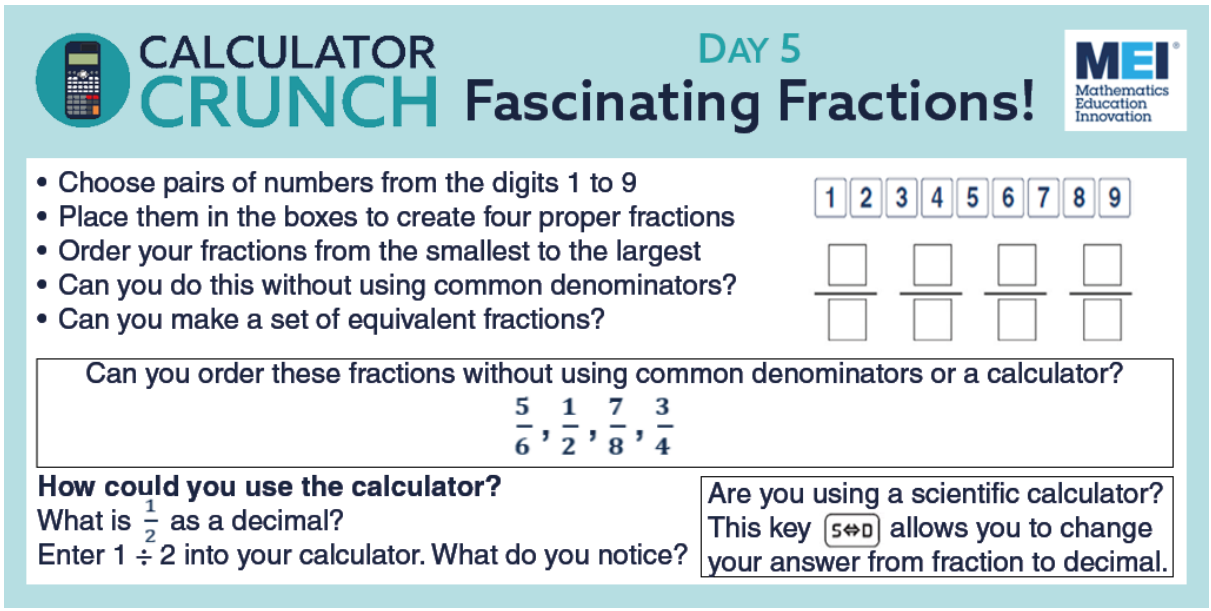
Fascinating Fractions!



Aim of the activity

This activity is all about creating and ordering fractions
You may be used to using common denominators to order fractions but are there other ways you can do it?

Make 4 different fractions using the digits 1 to 9
Make sure that the fractions are proper fraction so less than 1

Now order your fractions from the smallest to the largest.

How could you do it without using common denominators?

Can you order my fractions?

Can you order these fractions without using common denominators or a calculator?

$$\frac{5}{6}, \frac{1}{2}, \frac{7}{8}, \frac{3}{4}$$

What do you notice about these fractions?
How can that help you to order the fractions without using a common denominator?

Have you spotted that the numerator (top number) is one less than the denominator (bottom number) in all the fractions?
How can this help you to order the fractions?

Using a calculator

Your calculator possibly doesn't look as though it will be much use with fractions but have a look at these suggestions.

How could you use the calculator?

What is $\frac{1}{2}$ as a decimal?

Enter $1 \div 2 =$ into your calculator. What do you notice?

Is $\frac{3}{4}$ as a decimal the same as the answer to $3 \div 4 =$?

Can you use this to help order your fractions?

You should see that if you divide the numerator by the denominator, you can convert a fraction into its decimal value.

We can think of $\frac{1}{2}$ as 1 divided into 2 equal parts or $1 \div 2$

Now you have another way of ordering fractions by converting them into decimals first.

If you have a scientific calculator, there is a key to convert answers between fractions and decimals.

Are you using a scientific calculator?
This key 

will allow you to change your answer from a fraction to a decimal.