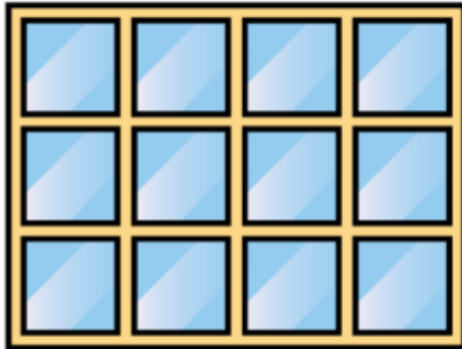# Can I investigate and record equivalent fractions? (Y4)

Reasoning and problem solving

This page does not need to be printed. In your book, write the short date you do the work and the above question, underlining them neatly with a ruler.

1) How many equivalent fractions can you see in this picture?

2) Eva says,

   I know that $\frac{3}{4}$ is equivalent to $\frac{3}{8}$ because the numerators are the same.

   Is Eva correct? Explain why.

3) Ron has two strips of the same sized paper.
   He folds the strips into different sized fractions.
   He shades in three equal parts on one strip and six equal parts on the other strip.
   The shaded areas are equal.

   What fractions could he have folded his strips into?

How many equivalent fractions can you see in this picture?

Children can give a variety of possibilities. Examples:

$$\frac{1}{2} = \frac{6}{12} = \frac{3}{6}$$

$$\frac{1}{4} = \frac{3}{12}$$

Eva says,

I know that $\frac{3}{4}$ is equivalent to $\frac{3}{8}$ because the numerators are the same.

Is Eva correct?
Explain why.

Eva is not correct. $\frac{3}{4}$ is equivalent to $\frac{6}{8}$ When the numerators are the same, the larger the denominator, the smaller the fraction.

Ron has two strips of the same sized paper.
He folds the strips into different sized fractions.
He shades in three equal parts on one strip and six equal parts on the other strip.
The shaded areas are equal.

What fractions could he have folded his strips into?

Ron could have folded his strips into sixths and twelfths, quarters and eighths or any other fractions where one of the denominators is double the other.