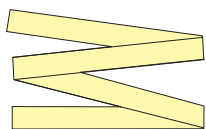# A Long Look at Decimals

Activity

Kylie folds a 1-metre-long strip of paper in half and creases it.

%

I mean "out of 100".

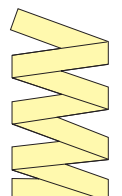She opens it up and places it along a metre ruler.

So $\frac{1}{2} = \frac{50}{100}$. That's 50% and 0.5!

1. How does Kylie know that $\frac{1}{2}$ is $\frac{50}{100}$?

2. a. Fold other 1-metre-long strips into different fractions:
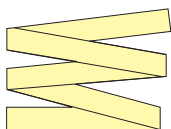
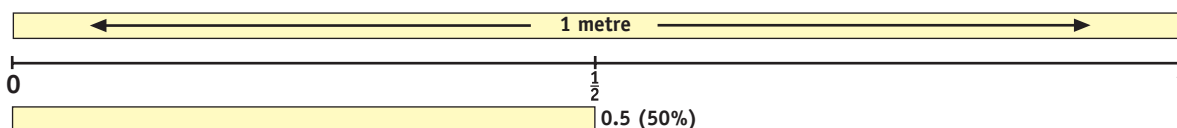   quarters $\left(\frac{1}{4}\right)$ fifths $\left(\frac{1}{5}\right)$ eighths $\left(\frac{1}{8}\right)$ tenths $\left(\frac{1}{10}\right)$

   b. Find out the decimal and percentage equivalents of these fractions by putting each folded strip along a metre ruler:

   i. $\frac{1}{4}$ ii. $\frac{3}{4}$ iii. $\frac{1}{5}$ iv. $\frac{4}{5}$

   v. $\frac{3}{8}$ vi. $\frac{7}{8}$ vii. $\frac{2}{10}$ viii. $\frac{5}{10}$

3. Kylie also uses her fraction strips to make a number line like this:

   1 metre

   0            $\frac{1}{2}$ 1

   0.5 (50%)

   She also includes the fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, and $\frac{1}{8}$.

   Draw a number line like Kylie's, including the extra fractions.

4. Which of these fractions is largest: $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$, or $\frac{5}{6}$?