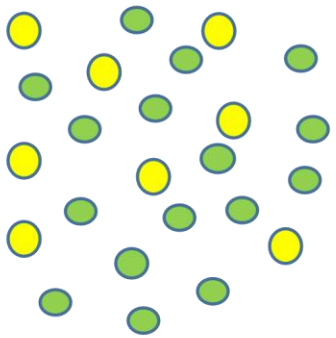
# Set Fractions: Modelling word problems to show equivalent fractions

***Apples and Bananas*** (Van de Walle, Karp and Bay-Williams)

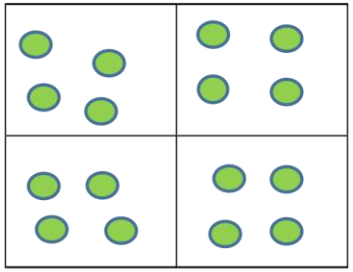
Pupils lay out a specific number of counters/cubes e.g. 24 counters. Here 16 green counters represent apples and 8 yellow counters represent bananas. The 24 make up the whole set. The task is to group the counters into different fractional parts of the whole set and to use the parts to create fractions that are apples and fractions that are bananas. Record the fractional parts and their relationships in pictorial and abstract form.

16 and 8



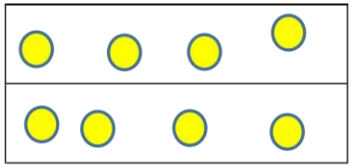
$\frac{16}{24}$ apples $\frac{8}{24}$ bananas

Make 16 into 4 groups of 4



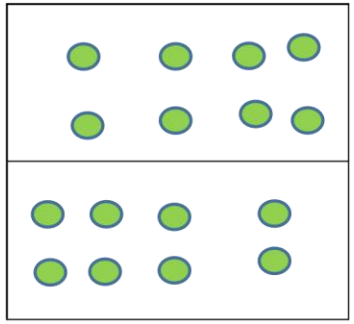
$\frac{4}{6}$ groups are apples

Make the 8 into 2 groups of 4



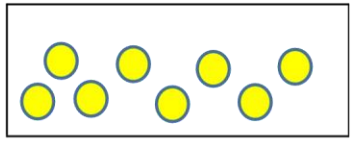
$\frac{2}{6}$ groups are bananas

Make 16 into 2 groups of 8



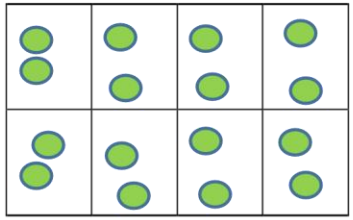
$\frac{2}{3}$ groups are apples

Make the 8 into 1 group of 8



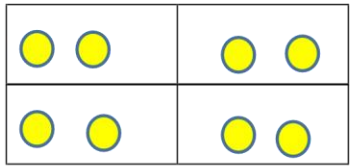
$\frac{1}{3}$ groups are bananas

Make 16 into 8 groups of 2



$\frac{8}{}$ groups are apples

Make the 8 into 4 groups of 2



$\frac{4}{12}$ groups are bananas

Apples are $\frac{16}{24} = \frac{4}{6} = \frac{2}{3} = \frac{8}{12}$

Bananas are $\frac{8}{24} = \frac{2}{6} = \frac{1}{3} = \frac{4}{12}$