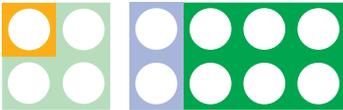


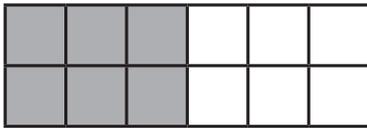


- 1) 2 quarters ( $\frac{2}{4}$ ) are the same as  $\frac{1}{2}$ .
- 2) a) A 4-shape is equivalent to  $\frac{1}{2}$  of 1 whole.  
 b) A 2-shape is equivalent to  $\frac{1}{4}$  of 1 whole.  
 c) A 1-shape is equivalent to  $\frac{1}{8}$  of 1 whole.  
 d) 4 2-shapes are equivalent to 1 whole.  
 e) 8 1-shapes are equivalent to 1 whole.  
 f) 2 4-shapes are equivalent to 1 whole.
- 3) a) 1 cube represents  $\frac{1}{6}$  of the whole  
 b) 2 cubes represent  $\frac{1}{3}$  of the whole.  
 c)  $\frac{2}{6}$  are equivalent to  $\frac{1}{3}$ .

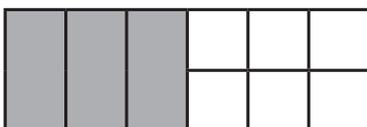
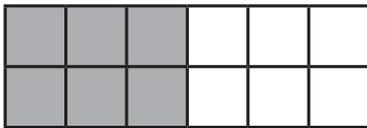
- 1) There are a wide variety of ways in which children can use number shapes and cubes to represent  $\frac{1}{4}$ . Examples include:



- 2) The diagram represents a bar model with 4 squares shaded.  $\frac{1}{2}$  (4 out of the 8 squares) are shaded in green.  $\frac{1}{4}$  of the shape is 2 squares shaded. As 4 squares are shaded, this represents  $\frac{2}{4}$ . This equivalent to  $\frac{1}{2}$ .
- 3) a) Kelsey is correct.  $\frac{1}{2}$  or  $\frac{6}{12}$  of the bar model is shaded in.



- b)  $\frac{3}{6}$  is also equivalent to  $\frac{1}{2}$  or  $\frac{6}{12}$ . ( $\frac{1}{6}$  is equivalent to  $\frac{2}{12}$ ,  $\frac{2}{6}$  to  $\frac{4}{12}$  and  $\frac{3}{6}$  to  $\frac{6}{12}$ .)



- 4) e) is the odd one out. This bar model is the odd one out because  $\frac{2}{5}$  are shaded. All the other shapes have the equivalent of  $\frac{1}{3}$  shaded





1) Both children are correct.  $\frac{4}{8}$  of the shape and  $\frac{5}{10}$  of the shape are equivalent to  $\frac{1}{2}$  ( $\frac{2}{4}$ ).



2) Ahmed is incorrect. For example,  $\frac{1}{7}$  has an odd denominator and  $\frac{2}{14}$  is equivalent.  $\frac{1}{3}$  has an odd denominator too and  $\frac{2}{6}$  is equivalent. There are many examples.

3) Sadie is incorrect.  $\frac{9}{12}$  is equivalent not equivalent to  $\frac{3}{8}$ . It is equivalent to  $\frac{3}{4}$  and  $\frac{6}{8}$ . However, all other fractions are equivalent to  $\frac{3}{8}$ .

4) There are a wide variety of possible responses. Examples include:

Equivalent to $\frac{1}{4}$	Equivalent to $\frac{1}{3}$	Equivalent to a Different Fraction
$\frac{8}{32}$	$\frac{2}{6}$	$\frac{2}{9} = \frac{4}{18}$ (example)
$\frac{4}{16}$	$\frac{8}{24}$	$\frac{3}{7} = \frac{3}{14}$ (example)
$\frac{2}{8}$	$\frac{4}{12}$	$\frac{4}{10} = \frac{2}{5}$ (example)