Name:

Maths Assessment Year 3 Term 3: Fractions

1. Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
2. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
3. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
4. Recognise and show, using diagrams, equivalent fractions with small denominators.
5. Add and subtract fractions with the same denominator within one whole [for example, 6/7].
6. Compare and order unit fractions, and fractions with the same denominators.
7. Solve problems that involve all of the above.

Name: Date:

20 total marks

Maths Assessment Year 3 Term 3: Fractions

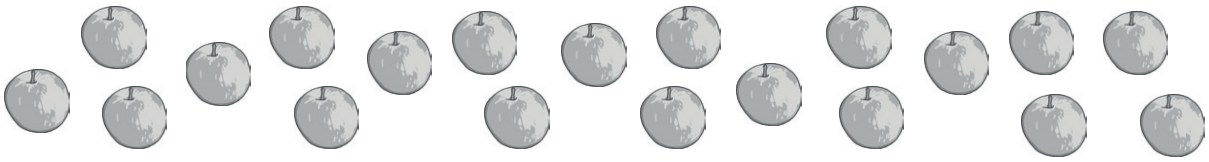
1. Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.

a) Complete the missing boxes in this sequence:

				$\frac{4}{10}$	$\frac{3}{10}$	$\frac{2}{10}$

1 mark

b) Ring $\frac{8}{10}$ of these apples.



1 mark

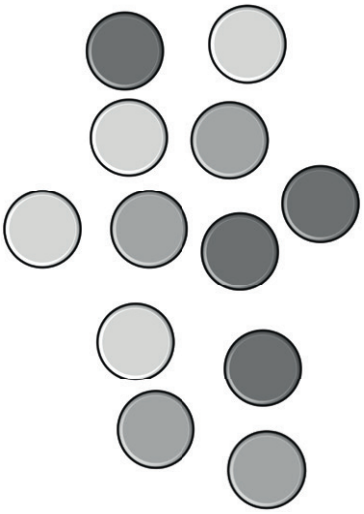
c) Write the answer to this calculation as a fraction.

4 ÷ 10 = ☐

1 mark

2. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.

There are 12 counters on the table. Calculate:



$\frac{1}{2}$ of 12 = ☐

$\frac{1}{4}$ of 12 = ☐

$\frac{3}{4}$ of 12 = ☐

$\frac{1}{6}$ of 12 = ☐

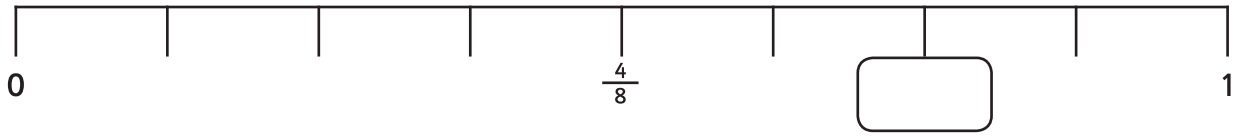
$\frac{2}{3}$ of 12 = ☐

5 marks

Total for this page

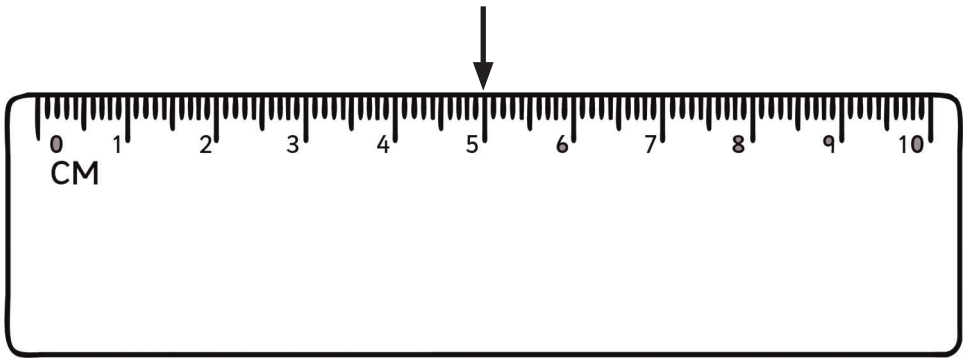
3. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.

a) Write the missing fraction in the box on the number line.



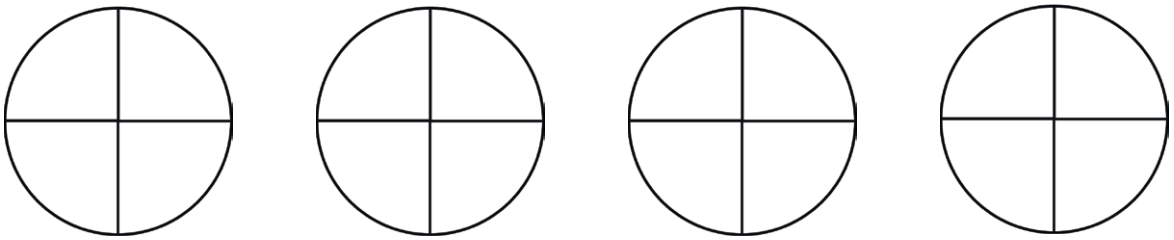
1 mark

b) The arrow on the ruler shows 5cm. Draw an arrow to show $8\frac{1}{2}$ cm.



1 mark

c) Shade 2 ¾ of these shapes.



1 mark

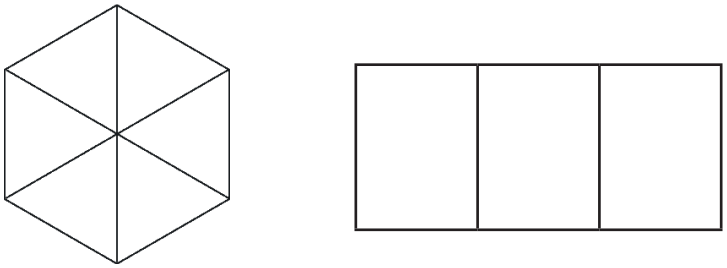
4. Recognise and show, using diagrams, equivalent fractions with small denominators.

a) Ring the fractions that are equivalent to $\frac{1}{2}$.

$\frac{3}{6}$ $\frac{5}{8}$ $\frac{2}{4}$ $\frac{3}{7}$ $\frac{6}{12}$

2 marks

b) Shade the same fraction of these 2 shapes.



1 mark

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5. Add and subtract fractions with the same denominator within one whole.

$\frac{2}{9} + \frac{5}{9} =$ ☐

$\frac{7}{8} - \frac{5}{8} =$ ☐

2 marks

6. Compare and order unit fractions, and fractions with the same denominators.

Write these fractions in order of size, smallest first:

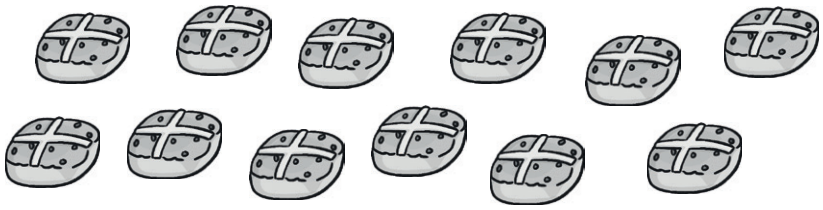
$\frac{1}{3}$ $\frac{1}{5}$ $\frac{1}{2}$ $\frac{1}{8}$

smallest largest

1 mark

7. Solve problems that involve all of the above.

a) Janet has 12 buns. Her friends and her eat $\frac{1}{3}$ of them? How many do they have left?



☐

1 mark

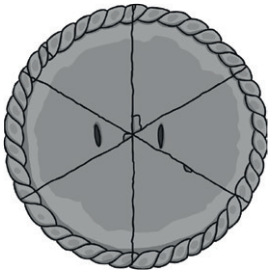
b) Jack and Chen have 12 sweets each. Jack eats $\frac{1}{3}$ of his sweets. Chen eats $\frac{1}{4}$ of her sweets.

Who eats more sweets?

☐

1 mark

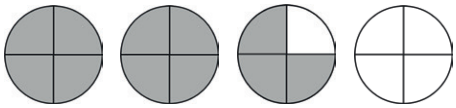
c) Tom bakes an apple pie. If he cuts it into 6 pieces, and serves $\frac{1}{3}$ of the pie. How many pieces are left?



☐

1 mark

Total for this page

question	answer	marks	notes
1. Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.			
a	$\frac{8}{10}$ $\frac{7}{10}$ $\frac{6}{10}$ $\frac{5}{10}$ $\frac{4}{10}$ $\frac{3}{10}$ $\frac{2}{10}$	1	
b	16 apples circled	1	
c	$\frac{4}{10}$	1	Accept $\frac{2}{5}$ or any other equivalent.
2. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.			
	$\frac{1}{2}$ of 12 = 6 $\frac{1}{4}$ of 12 = 3 $\frac{3}{4}$ of 12 = 9 $\frac{1}{6}$ of 12 = 2 $\frac{2}{3}$ of 12 = 8	5	Award 1 mark for each correct answer.
3. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.			
a	$\frac{6}{8}$	1	
b	arrow pointing to $8\frac{1}{2}$	1	
c		1	Award the mark as long as 11 segments are shaded.
4. Recognise and show, using diagrams, equivalent fractions with small denominators.			
a	$\frac{3}{6}$, $\frac{2}{4}$, $\frac{6}{12}$,	2	2 marks for all correct. 1 mark for 2 correct with neither incorrect fractions ringed.
b	Same fraction shaded in each shape: $\frac{2}{6}$ of hexagon and $\frac{1}{3}$ of rectangle $\frac{4}{6}$ of hexagon and $\frac{2}{3}$ of rectangle $\frac{6}{6}$ of hexagon and $\frac{3}{3}$ of rectangle (all of each)	1	Allow 1 mark if children have shaded half of each, or any other equal fraction, where the children have only shaded parts of a segment.
5. Add and subtract fractions with the same denominator within one whole.			
	$\frac{2}{9} + \frac{5}{9} = \boxed{\frac{7}{9}}$ $\frac{7}{8} - \frac{5}{8} = \boxed{\frac{2}{8}}$	2	Award 1 mark for each correct answer.

question	answer	marks	notes
6. Compare and order unit fractions, and fractions with the same denominators.			
	$\frac{1}{8}$ | $\frac{1}{5}$ | $\frac{1}{3}$ | $\frac{1}{2}$	1	All must be correct for the mark.
7. Solve problems that involve all of the above.			
a	8	1	1 mark for showing they eat 4.
b	Jack	1	
c	4 slices are left	1	
		Total 20	