

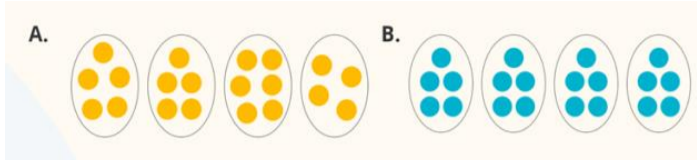
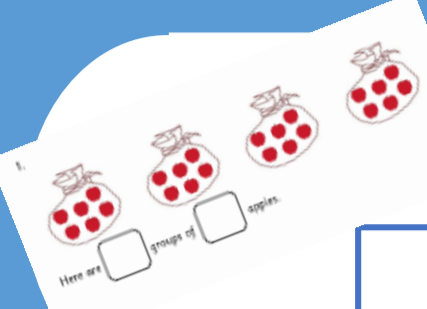
# St Anne's Primary School Maths Progression: FRACTIONS



## Reception ← Nursery

- Share quantities evenly to 10.

- Solve real world mathematical problems with numbers up to 5.

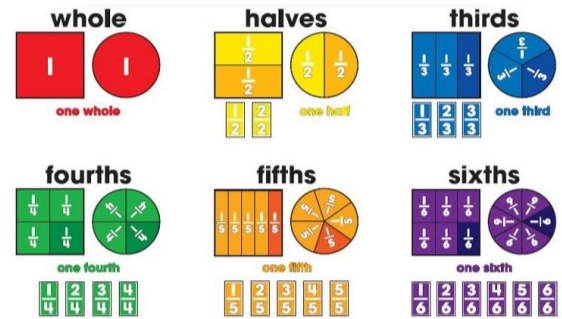
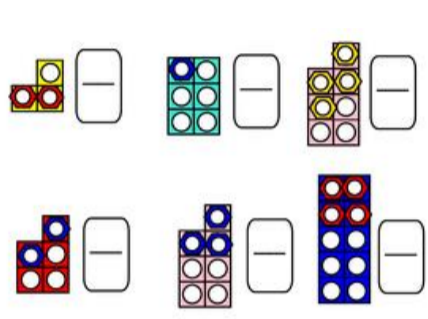


- Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

- Count in steps of  $\frac{1}{2}$  and  $\frac{1}{4}$

## YEAR 1 → YEAR 2

- Key**
- Number Bonds
  - Mental Calculation
  - Written Methods
  - Problem Solving



- Recognise, find and write  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$ , and  $\frac{3}{4}$  of length, shape, objects and quantity.

1											
$\frac{1}{2}$					$\frac{1}{2}$						
$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$		
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$	
$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$	
$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$	
$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$	
$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$	
$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$	

- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- Compare and order unit fractions, and fractions with the same denominators
- Count in unit fractions beyond 1.

## YEAR 3 ← YEAR 4

### Vocabulary

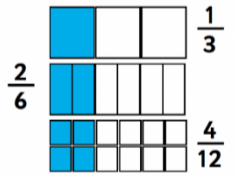
- Half
- Denominator
- Numerator
- Quarter
- Divide
- Equal parts
- Equivalent
- Proper fraction
- Third
- Whole
- Shared equally
- Common factor

- Recognise and show, using diagrams, families of common equivalent fractions.
- Add and subtract fractions with the same denominator (using diagrams).

- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts.
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators

- Understand that a fraction is one whole number divided by another (e.g.  $\frac{3}{4}$  can be interpreted as  $3 \div 4$ ).
- Recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators.

- Add and subtract fractions with the same denominator within one whole [for example,  $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ ]



Simplify these fractions to their lowest terms:

$\frac{6}{12} = \frac{1}{2}$	$\frac{10}{15} = \frac{2}{3}$	$\frac{20}{24} = \frac{5}{6}$	$\frac{6}{10} = \frac{3}{5}$
$\frac{6}{12} = \frac{1}{2}$	$\frac{10}{15} = \frac{2}{3}$	$\frac{20}{24} = \frac{5}{6}$	$\frac{6}{10} = \frac{3}{5}$

- Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Recognise and write decimal equivalents of any number of tenths or hundredths.

## YEAR 5 ← YEAR 6

- Recognise mixed numbers and improper fractions and convert from one form to the other.

- Read and write decimal numbers as fractions (e.g.  $0.71 = \frac{71}{100}$ ).

Order the fractions and decimals in descending order.

greatest												smallest
	$\frac{3}{4}$	$\frac{21}{25}$	$\frac{6}{16}$	$\frac{12}{15}$	$\frac{8}{20}$	0.7	0.85	0.49				

- Solve problems involving fractions.

- Compare and order fractions whose denominators are all multiples of the same number (including on a number line).
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.

## YEAR 6

- Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g.  $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ).
  - Divide proper fractions by whole numbers (e.g.  $\frac{1}{3} \div 2 = \frac{1}{6}$ ).

- Compare and order fractions, including fractions  $> 1$  (including on a number line).
- Find simple percentages of amounts.
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.