

Maths Curriculum – Key Knowledge and Skills

(Bold-Statutory Statements from NC;

		2/R	Daycare	Nursery Pre-School (3s)	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			, in the second s			FI	DPRP				
ü					Со	unting in	Fraction	ıl Steps			
DECLARATIVE KNOWLEDGE	Facts and formulae(Fluency) Polationshins, hotween, facts.						Pupils should count in fractions up to 10, starting from any number and using the 1/2 and 2/4 equivalence on the number line	count up and down in tenths	count up and down in hundredths. Extend the use of the numberline to connect numbers, fractions and measures.	Count forward and backwards in differing fractions. Count up and down in decimals and fractions including bridging through 0 on a numberline.	Count forward and backwards in differing fractions bridging whole numbers. Count up and down in decimals and fractions including bridging through 0 on a numberline.



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	Daycare 2/Rising 3	Nursery Pre-School (3s)	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					Recognisi	ng Fractions			
DECLARATIVE KNOWLEDGE: Facts and formulae(Fluency) Relationships between facts			Knows that objects can be cut into two equal halves of the same whole	Knows that half is two equal parts of a whole. Knows that quarters are 4 equal parts of a whole	Knows that fractions are relative to the whole Know that fractions are equal parts to the whole Knows that thirds are three equal parts of the whole	Knows that fractions are relative to the whole and can be represented in different ways Knows unit and non-unit fractions as numbers on the number line and how to represent equivalence. Knows that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10.	Knows that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	Knows that percentages, decimals and fractions are different ways of expressing proportions.	



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Knows how to	Knows how to	Knows how to	knows how to make	Knows how to	
find and name	recognise, find,	recognise, find and	connections between	use	
half/quarter of	name and write	write fractions of a	fractions of a length	thousandths	
quantity and	fractions 1 / 3 , 1 /	discrete set of	of a shape and his	and relate them	
whole objects	4 , 2 / 4 and 3 / 4	objects: unit	representation of one	to tenths,	
or shapes.	of a length, shape,	fractions and non-	whole or a set of	hundredths and	
	set of objects or	unit fractions with	quantities.	decimal	
	quantity.	small denominators.		equivalents	
			Knows how to use	(appears also in	
	How to calculate	Knows how to find	factors and multiples	Equivalence)	
	half and quarters	fractions of amounts	to recognise	-	
	in the context of	in context.	equivalent fractions		
	length mass and		and simplify where		
	capacity.		appr o priate.		



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	, , , , , , , , , , , , , , , , , , ,		Сотро	ring Fract	tions					
					Knows how to compare and order unit fractions, and fractions with the same denominators. Knows how to solve problems including fractions.	Knows how to solve problems involving harder fractions to calculate quantities and fractions to divide quantities.	Knows how to compare and order fractions whose denominators are all multiples of the same number	Knows how to compare and order fractions, including fractions >1		
	Comparing Decimals									
						Knows how to compare numbers with the same number of decimal places up to two decimal places	Knows how to read, write, order and compare numbers with up to three decimal places	Knows how to identify the value of each digit in numbers given to three decimal places		
			Rounding i	ncluding	Decimals					
						Knows how to round decimals with one decimal place to the nearest whole number	Knows how to round decimals with two decimal places to the nearest whole number and to one decimal place.	Knows how to solve problems which require answers to be rounded to specified degrees of accuracy		



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	Equivalence (including Fractions, Decimals & I	Demontages)	
			•
		knows thatknows tdecimals andwhen thefractions ofnumeraldifferent ways oflarger theexpressingdenomingnumbers andis an immediationproportions.fraction	e tors ran a rated it proper
DECLARATIVE KNOWLEDGE: Facts and formulae(Fluency) Relationships between facts		Knows decimal notation and the language associated with it include the context of measure and money knows t percenta decimal fractions (repeate Recognit Knows t cent syn (%) knows t rectates t "numbe	r is is is is is is is is is is



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		- 30acacorg, 12a	1			/		
							parts per hundred",	
AL KNOWLEDGE				Knows how to write simple fractions e.g. 1 / 2 of 6 = 3 and recognise the equivalence of 2 / 4 and 1 / 2	Knows how to recognise and show, using diagrams, equivalent fractions with small denominator	Knows how to recognise and show, using diagrams, families of common equivalent fractions	Knows how to identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	Knows how to use common factors to simplify fractions; use common multiples to express fractions in the same denomination
PROCEDUAL						Knows how to write decimal equivalents of any number of tenths or hundredths	Knows how to read and write decimal numbers as fractions (e.g. 0.71 = 71 / 100)	Knows how to associate a fraction with division and calculate decimal fraction equivalents



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					Knows how to	Knows how to	(e.g. 0.375) for
					recognise and	recognise and	a simple
					write decimal	use	fraction (e.g. 3
					equivalents to	thousandths	/8)
					1/4;1/2;	and relate	
					3/4	them to tenths,	Knows how to
						hundredths	recall and use
						and decimal	equivalences
						equivalents	between simple
						recognise and	fractions,
						write decimal	decimals and
						equivalents to	percentages,
						1/4;1/2;3	including in
						/4	different
							contexts.
						Knows how to	
						write	
						percentages as	
						a fraction with	
						denominator	
						100 as a	
						decimal	
						fraction	
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	Aa	dition & Su	piracuon	oj Fracuoi	15		
				Knows how to	Knows how to	Knows how to	Knows how to
				add and	add and subtract	add and	add and
				subtract	fractions with	subtract	subtract
				fractions with	the same	fractions with	fractions with
				the same	denominator	the same	different
				denominator		denominator	denominators
				within one		and multiples	and mixed
				whole (e.g. 5 /		of the same	numbers, using
				7+1/7=6/		number	the concept of
				7)			······································
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						Knows how to	equivalent
						recognise	Fractions
						mixed numbers	
						fractions and	
						improper	
						fractions and	
						convert from	
						one form to the	
						other and	
						write	
						mathematical	
						statements > 1	
						as a mixed	
						number (e.g. 2	
						/ 5 + 4 / 5 = 6	
						/5=11/5)	
	Mul	tiplication	& Division	r of Fractio	ms		I
		-				Knows how to	Knows how to
						multiply	multiply simple
						proper	pairs of proper
						fractions and	fractions,
						mixed numbers	writing the
						by whole	answer in its
						numbers,	simplest form
						supported by	(e.g. 1 / 4 × 1 /
						materials and	2 = 1 / 8)
						diagrams	2 1/0)
						ungruns	
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							Knows how to multiply one- digit numbers with up to two decimal places by whole numbers Knows how to divide proper fractions by whole numbers (e.g. $1/3 \div 2 =$
	Mul	tiplication	& Division	of Decim	als		1/6)
					Knows how to find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Knows how to find the effect of dividing a one- or two- digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Knows how to multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places. Knows how to identify the value of each digit to three decimal places Knows how to associate a fraction with division and



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				calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3 /8)
				Knows how to use written division methods in cases where the answer has up to two decimal places



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Vocabulary			Reception	Year 1 half quarter equal part whole	Year 2 equivalent third non- unit fraction numerator denominator	Year 3 tenths unit fraction non unit fraction denominator equivalence fractions of	common equivalent fraction hundredth tenth whole number decimal place decimal equivalent proportion	denominator mixed number improper proper thousandth percent percentage proportion operator	Year 6 simplify express simplest form decimal fraction equivalent decimal notation
							decimal notation	scaling complements of 1	