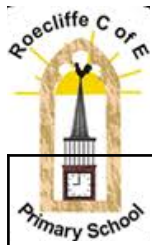# Progression in Mathematical Vocabulary
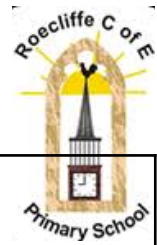
Number, place value and operations

Year Group	Number	Place Value	Addition	Subtraction	Multiplication	Division
EYFS	zero number one, two, three … to twenty and beyond teens numbers, eleven, twelve … twenty first, second, third… twentieth count, count (up) to, count on (from, to), count back (from, to) is the same as more, less odd, even few pattern pair subitise	ones the same number as, as many as more, larger, bigger, greater fewer, smaller, less, fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less compare last, last but one before, after next between guess how many …? about the same as just over, just under too many, too few enough, not enough	number sentence add, more, and make total altogether double one more how many more to make …? how many more is … than …? how much more is …? equals balances	number sentence take away how many are left/left over? how many have gone? one less how many fewer is … than …? how much less is …? difference between equals balances	double doubling sets of pairs number patterns objects groups	half of halving share between sharing equal groups sets

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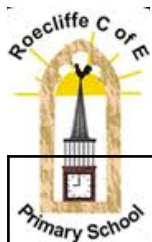
		teens balance equal				
1	twenty-one, twenty-two … one hundred numeral thirty forty fifty sixty seventy eighty ninety (one) hundred	digit number/ numeral same tens and ones more than/less than less most/least count from … count in …. forwards/back wards number pattern odd even equal sign = greater than/ smaller than fewer/ fewest largest smallest least equal to many number bonds/pairs missing numbers estimate ordinal cardinal	add + addition sum total altogether double one more two (ten) more plus equals near double is the same as number bonds/pairs missing number count up	how many more? leave how many left? two less ten less how many fewer minus subtract subtraction count up count back	multiplication multiplied by multiply lots of groups of scaling twice times as … array multiple count up	share into division dividing grouping count back unequal equal

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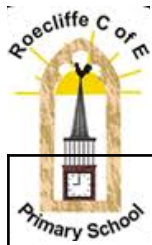
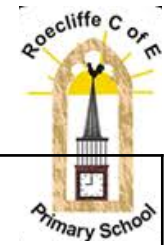|		nearly close to				
2	two hundred … one thousand count on in 3s, tally twenty-first, twenty-second …	greater than, > less than, < equal (to), = column partition most/greatest number pattern equivalent to multiple of	increase tens boundary commutative partition fact family regrouping partitioning bridging empty box inverse ten more number bonds for 20 number bonds within 20 check	difference between equals is the same as minus order exchanging partition ten less check inverse	times table multiplication row column fact family odd even commutative multiplication fact multiplication table repeated addition multiple of 2 multiple of 5 multiple of 10 multiply	array row column fact family inverse divide, divided by, divided into left, left over repeated subtraction
3	ones tens hundreds thousand three-digit number tenths	exact position estimate decimal approximate descending ascending integer round represent ascending descending	100 more increase column digit columnar column addition mental method formal method adjusting estimate written method boundary	100 less decrease exchanging number sentence calculate column subtraction estimate mental method formal method fact family adjust	missing number scaling multiplied by … times larger/smaller product times table facts fact family partition grid empty box	missing number times table remainder partition fact family inverse operation empty box

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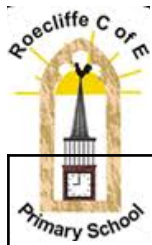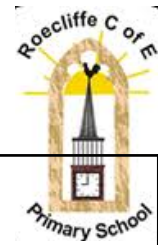
			adjust near double combine rounding empty box	empty box		
4	1 I 2 II 3 III 4 IV 5 V 6 VI 7 VII 8 VIII 9 IX 10 X 50 L 100 C 500 D 1000 M 4-digit number thousand ten thousand hundred thousand hundredths	Roman Numerals round negative convert positive factor factor pair multiple	decimal addition	decimal subtraction	factor factor pair compact method short multiplication	quotient divisor dividend factors
5	millions thousandths 5- and 6-digit number mixed number decimal fraction square number	prime common factor common multiple squared cubed integer decimal	approximate	approximate	prime number composite number multiple common factor common multiple square number	compact short scale down test of divisibility

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		cube number prime number composite number decimals with 2 and 3 decimal places	improper fraction mixed number percentage %			cube number squared, cubed long multiplication expanded method multiplier	
6	millions billions	sequence pattern term first term etc. rule proportion ratio power digital root	formula term order of operations precedence mean brackets average	formula term order of operations precedence brackets	approximate formula term order of operations precedence brackets	brackets balance order of operations precedence	

Vocabulary for Algebra

Y6	formulae linear sequence express unknowns	equations equivalent expression number pattern	generate symbols variables

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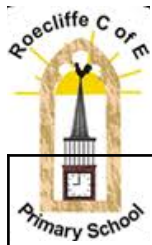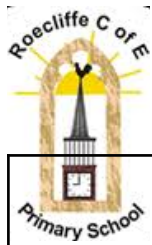
Progression in Mathematical Vocabulary

Vocabulary for Fractions, Decimals and Percentages

Year Group	Fractions	Decimals	Percentages	Ratio
EYFS	share			
1	half two quarters, quarter, three quarters equal parts equal groups quantity object one whole			
2	third equivalence			
3	fifth, sixth, seventh, eighth, ninth, tenth two thirds tenths divided by ten unit fraction numerator denominator equivalent fraction discrete set diagram add/subtract within one whole	decimal point		
4	hundredth divided by 100 non- unit fraction common equivalent fractions	decimal equivalent decimal places rounding		
5	improper fraction mixed number	decimal fraction nearest whole number	per cent symbol %	

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	proper fractions thousandths convert		number of parts per hundred percentage percentage equivalent	
6	simplest form	degree of accuracy		relative size quantity scale factor comparison ratio/ proportion unequal sharing/grouping similar shapes

Vocabulary for Geometry

Year Group	2D Shape	3D Shape	Position and Direction	Angle	Coordinates
EYFS	square circle rectangle triangle side	cube cuboid sphere pyramid	in front behind on top of under above below next to		
1	pentagon hexagon edge corner pattern sort	cylinder square based pyramid triangular based pyramid face sort	underneath orientation left right	turn whole turn half a turn quarter of a turn three quarters of a turn	
2	vertices heptagon nonagon octagon	vertices edges prism surface	clockwise anticlockwise rotation	right angle 90 degrees	

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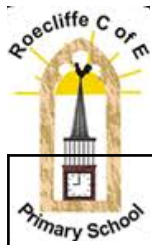
|					
	decagon semi-circle line of symmetry vertical line reflection symmetry compare	compare			
3	perpendicular line parallel line polygon diagonal axis of symmetry regular / irregular	nets base dimensions polyhedron	orientation horizontal line vertical line	greater than less than protractor	
4	geometric shapes quadrilateral tetragon (4-sided shape) trigon (3-sided shape) kite trapezium rhombus parallelogram isosceles triangle scalene triangle equilateral triangle dodecagon hendecagon dissect classify breadth width		translation congruent oblique	acute obtuse degrees	first quadrant coordinate points brackets comma

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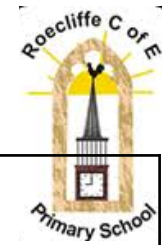
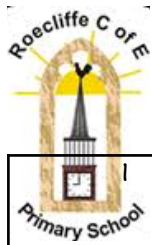| 5	regular polygon irregular polygon bisect congruent dimension quindecagon rotational symmetry		adjacent intersection rotational on a line	reflex base angles interior exterior	
6	radius diameter circumference		enlargement equidistant at a point vertically opposite		fourth quadrants positive negative

Vocabulary for Measurement

Year Group	Money	Time	Length and Height	Weight and Mass	Volume and capacity	Area and Perimeter
EYFS	coin note one pence	quicker slower before after next first today morning afternoon evening clock Monday Tuesday Wednesday Thursday Friday Saturday Sunday	long short tall short longest shortest tallest	heavy light	full empty more less	

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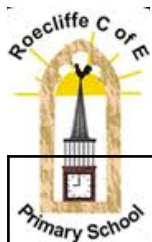
1	pound pence 2p,5p,10p	long hand short hand hour o'clock half past half hour months of the year quicker than slower than quickest quicker than slower than slowest tomorrow yesterday day week month year minute second calendar chronological order tell the time	longer than shorter than taller than smaller than double/half ruler tape measure metre stick trundle wheel scale	heavier than lighter than hot cold hotter than colder than temperature thermometer scales scale	half full half empty more than less than quarter half jug measuring cylinder scale	
2	20p,50p,£1,£2,£5,£10 total cost change	minute hand hour hand quarter past quarter to 5 past, 10 past,20 past, 25 past	standard unit cm metre half a metre quarter of a metre estimate	standard unit kilogram half a kilogram quarter of a kilogram grams degrees	standard unit litre half a litre quarter of a litre estimate measure	

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|		5 to , 10 to , 20 to, 25 to 24 hours	measure length	positive/negative estimate measure	millilitre measuring vessel	
3	decimal notation of money	12 hour 24 hour decade leap year century noon midnight am pm Roman numerals Estimate duration	metric millimetre kilometre perimeter breadth width convert	metric convert difference	metric convert	centimetre perimeter millimetre metre
4		analogue digital 24 hour				area square centimetres rectilinear shape counting
5			imperial inches feet approximate	imperial pounds ounces stones approximate	imperial pints approximate cuboids cubic centimetres	standard units square metres compound area
6			miles		formulae cubic kilometres cubic millimetres	formulae

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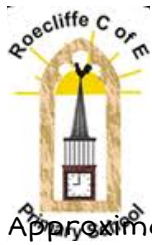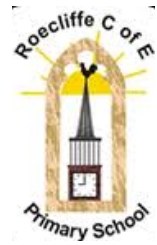
Words that can be confused in meaning within measure/number

Approximation v Estimation

An approximation is applied to a number that already exists: an estimation creates a number by making a judgement.

Capacity v Volume

Capacity is about the space available to hold something and volume is the space occupied by the object or substance. For example a bucket has a capacity of 5 litres so the volume of water needed to fill the bucket is 5 litres.
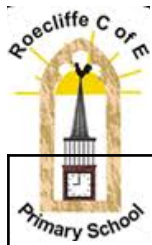
Mass V Weight

The mass of an object does not change but their weight can as weight. The difference between mass and weight is that mass is the amount of matter in a material while weight is a measure of how the force of gravity acts upon that mass. But weight is caused by gravity, so your weight on the Moon is less than here on Earth, while the mass stays the same. Weighing scales estimate the mass of the object on it.

Vocabulary for Statistics

Year Group	
EYFS	chart tally
1	tally chart pictogram sort
2	block graph / bar charts Venn diagram Carroll diagram table category total compare scale calendar How many more? How many fewer?

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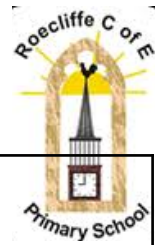
3	axis interpret key subset timetable information graph
4	discrete data continuous data time graphs comparison sum difference
5	frequency chart line graph
6	mean, average median, mode pie chart scatter graph

Common words and phrases within reasoning and problem solving

Approximately, accurately, calculate, check, correct, difference, efficient, equal, equally, equivalent, explain how you know, inverse operation, make an estimate, missing, not to scale, show your workings, to the nearest one decimal point

All of these words are used in a range of contexts; however, depending on the type of problem you are asked to solve, the interpretation of the word is different.

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