**Vocabulary for numbers, place value and four rules of calculation.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| EYFS | zeronumberone, two, three … to twenty and beyond teens numbers,eleven, twelve …twentyfirst, second, third…twentiethcount, count (up) to,count on (from, to),count back (from, to)count in ones, twos, fives, tens (Exceeding)is the same asmore, lessodd, evenfewpatternpair | onesthe same number as, asmany asmore, larger, bigger,greaterfewer, smaller, lessfewest, smallest, leastmost, biggest, largest,greatestone more, ten moreone less, ten lesscomparelast, last but onebefore, afternextbetweenguesshow many …?about the same asjust over, just undertoo many, too fewenough, not enoughteensbalanceequal | number sentenceadd, more, and maketotalaltogetherdoubleone morehow many more to make …?how many more is … than …?how much more is …?equalsbalances | number sentencetake awayhow many are left/leftover?how many havegone?one lesshow many fewer is … than …?how much less is …?difference betweenequalsbalances | doubledoublingsets ofpairsnumber patternsobjectsgroupscount in twos, fives and tens (Exceeding) | half ofhalvingshare betweensharingequal groupssetscount in twos, fives and tens (Exceeding) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 1 | twenty-one, twenty-two … one hundrednumeralthirtyfortyfiftysixtyseventyeightyninety(one) hundred | digitnumber/ numeralsametens and onesmore than/less thanlessmost/leastcount from ...count in ....forwards/backwardsnumber patternoddevenequal sign =greater than/ smallerthanfewer/ fewestlargestsmallestleastequal tomanynumber bonds/pairsmissing numbersestimateordinalcardinalnearlyclose to | Add+additionsumtotalaltogetherdoubleone moretwo (ten) moreplusequalsnear doubleis the same asnumber bonds/pairsmissing numbercount up | how many more?leavehow many left?two lessten lesshow many fewerminussubtractsubtractioncount upcount back | multiplicationmultiplied bymultiplylots ofgroups ofscalingtwicetimes as ...arraymultiplecount up | share intodivisiondividinggroupingcount backunequalequal |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 2 | twohundred … onethousandcount on in 3s,tallytwenty-first, twenty-second … | greater than, >less than, <equal (to), =columnpartitionmost/greatestnumber patternequivalent tomultiple of | increasetens boundarycommutativepartitionfact familyregroupingpartitioningbridgingempty boxinverseten morenumber bonds for 20number bonds within20check | differencebetweenequalsis the same asminusorderexchangingpartitionten lesscheckinverse | times tablemultiplicationrowcolumnfact familyoddevencommutativemultiplication factmultiplication tablerepeated additionmultiple of 2multiple of 5multiple of 10multiply | arrayrow columnfact familyinversedivide, divided by,divided intoleft, left overrepeated subtraction |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 3 | onestenshundredsthousandthree digit numbertenths | exactpositionestimatedecimalapproximatedescendingascendingintegerroundrepresentascendingdescending | 100 moreincreasecolumn digitcolumnarcolumn additionmental methodformal methodadjustingestimatewritten methodboundaryadjust near doublecombineroundingempty box | 100 lessdecreaseexchangingnumber sentencecalculatecolumn subtractionestimatemental methodformal methodfact familyadjustempty box | missing numberscalingmultiplied by... times larger/smallerproducttimes table factsfact familypartitiongridempty box | missing numbertimes tableremainderpartitionfact familyinverse operationempty box |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 4 | 1 I2 II3 III4 IV5 V6 VI7 VII8 VIII9 IX10 X50 L100 C500 D1000 M4 digit numberthousandten thousandhundred thousandhundredths | Roman Numeralsroundnegativeconvertpositivefactorfactor pairmultiple | decimal addition | decimal subtraction | factorfactor paircompact methodshort multiplication | quotientdivisordividendfactors |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 5 | millionsthousandths5 and 6 digit numbermixed numberdecimal fractionsquare numbercube numberprime numbercomposite numberdecimals with 2 and 3decimal places | primecommon factorcommon multiplesquaredcubedintegerdecimalimproper fractionmixed numberpercentage% | approximate | approximate | prime numbercomposite numbermultiplecommon factorcommon multiplesquare numbercube numbersquared,cubedlong multiplicationexpanded methodmultiplier | compact shortscale downtest of divisibility |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 6 | millionsbillions | sequencepatterntermfirst term etc.ruleproportionratiopowerdigital root | formulatermorder ofoperationsprecedencemeanbracketsaverage | formulatermorder ofoperationsprecedencebrackets | approximateformulatermorder ofoperationsprecedencebrackets | bracketsbalanceorder ofoperationsprecedence |

**Vocabulary for Algebra**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year 6** | formulaelinear sequenceexpressunknowns | equationsequivalent expressionnumber patternexpress | generatesymbolsvariables |

**Vocabulary for Fractions, Decimals and Percentages**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Fractions** | **Decimals** | **Percentages** | **Ratio and proportion** |
| **EYFS** | Share |  |  |  |
| **Year 1** | halftwo quarters, quarter, three quartersequal partsequal groupsquantityobjectone whole |  |  |  |
| **Year 2** | thirdequivalence |  |  |  |
| **Year 3** | fifth, sixth, seventh, eighth, ninth, tenthtwo thirdstenthsdivided by tenunit fractionnumeratordenominatorequivalent fractiondiscrete setdiagramadd/subtract within one whole | Decimal point |  |  |
| **Year 4** | hundredthdivided by 100non- unit fractioncommon equivalent fractions | decimal equivalent decimal places rounding |  |  |
| **Year 5** | improper fractionmixed numberproper fractionsthousandthsconvert | decimal fractionnearest whole number | per cent symbol %number of parts per hundredpercentagepercentage equivalent |  |
| **Year 6** | simplest form | simplest form |  | relative size quantity scale factor comparison ratio/ proportion unequal sharing/grouping similar shapes |

**Vocabulary for Geometry**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **2-D shape** | **3-D shape** | **Position and direction** | **Angles** | **Coordinates** |
| **EYFS** | squarecirclerectangletriangleside | cubecuboidspherepyramid | in frontbehindon top ofunderabovebelownext to |  |  |
| **Year 1** | pentagonhexagonedgecornerpatternsort | cylindersquare based pyramidtriangular basedpyramidfacesort | underneathorientationleftright | turnwhole turnhalf a turnquarter of a turnthree quarters of a turn |  |
| **Year 2** | verticesheptagonnonagonoctagondecagonsemi-circleline of symmetryvertical linereflectionsymmetrycompare | verticesedgesprismsurfacecompare | clockwiseanticlockwiserotation | right angle90 degrees |  |
| **Year 3** | perpendicular line parallel linepolygondiagonalaxis of symmetryregular / irregular | netsbasedimensionspolyhedron | orientation horizontal line vertical line | greater thanless thanprotractor |  |
| **Year 4** | geometric shapes quadrilateraltetragon (4 sided shape)trigon (3 sided shape) kite trapezium rhombus (lozenge) parallelogram isosceles triangle scalene triangle equilateral triangledodecagonhendecagon dissectclassifybreadthwidth |  | translationcongruentoblique | acute obtuse degrees | first quadrant coordinatepoints |
| **Year 5** | regular polygon irregular polygonbisectcongruentdimensionquindecagonrotational symmetry |  | adjacentintersectionrotationalon a line | reflexbase angles interior exterior |  |
| **Year 6** | radius diameter circumference |  | enlargement equidistantat a pointvertically opposite |  | fourth quadrantspositivenegative |

**Vocabulary for Measures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Money** | **Time** | **Length and height** | **Weight and mass** | **Volume and capacity** | **Area and perimeter** |
| **EYFS** | coinnoteone pence | quicker slower before afternext firsttoday morning afternoon evening clockMondayTuesdayWednesdayThursdayFridaySaturdaySunday | long short tall/shortlongestshortest | heavylight | full empty more less |  |
| **Year 1** | poundpence2p,5p,10p | long handshort handhouro’clockhalf pasthalf hourmonths of theyearquicker thanslower thanquickestquicker thanslower thanslowesttomorrowyesterdaydayweekmonthyearminutesecondcalendarchronologicalordertell the time | longer thanshorter thantaller thansmaller thandouble/halfrulertape measuremetre sticktrundle wheelscale | heavier thanlighter thanhotcoldhotter thancolder thantemperaturethermometerscalesscale | half fullhalf emptymore thanless thanquarterhalfjugmeasuring cylinderscale |  |
| **Year 2** | 20p,50p,£1,£2,£5,£10total costchange | minute handhour handquarter pastquarter to5 past, 10 past,20past, 25 past5 to, 10 to, 20 to, 25 to24 hours in a day | standard unitcmmetrehalf a metrequarter of a metreestimatemeasurelength | standard unitkilogramhalf a kilogramquarter of a kilogramgramsdegreespositive/negativeestimatemeasure | standard unitlitrehalf a litrequarter of a litreestimatemeasuremillilitremeasuring vessel |  |
| **Year 3** | decimal notation ofmoney | 12 hour24 hourdecadeleap yearcenturynoonmidnightampmRoman numeralsEstimateduration | metricmillimetrekilometreperimeterbreadthwidthconvert | metricconvertdifference | metricconvert | centimetreperimetermillimetremetre |
| **Year 4** |  | analoguedigital24 hour |  |  |  | areasquare centimetresrectilinear shapecounting |
| **Year 5** |  |  | imperialinchesfeetapproximate | imperialpoundsouncesstonesapproximate | imperialpintsapproximatecuboidscubic centimetres | standard unitssquare metrescompound area |
| **Year 6** |  |  | miles |  | formulaecubic kilometrescubic millimetres | formulae |

**Vocabulary for Statistics**

|  |  |
| --- | --- |
| **EYFS** | charttally |
| **Year 1** | tally chartpictogramsort |
| **Year 2** | block graph/bar charts Venn diagram Carroll diagramtablecategorytotalcompare scalecalendarHow many more?How many fewer? |
| **Year 3** | axisinterpretkey subsettimetableinformationgraph |
| **Year 4** | discrete data continuous data time graphscomparisonsumdifference |
| **Year 5** | frequency chart line graph |
| **Year 6** | mean, average median, modepie chart scatter graph |

**Common words and Phrases within 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.