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

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|  | **Numbers** | **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)  count in ones, twos, fives, tens (Exceeding)  is the same as  more, less  odd, even  few  pattern  pair | 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  teens  balance  equal | 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  count in twos, fives and tens (Exceeding) | half of  halving  share between  sharing  equal groups  sets  count in twos, fives and tens (Exceeding) |

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|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 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/backwards  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  nearly  close to | 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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|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 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 |

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|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 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  adjust near double  combine  rounding  empty box | 100 less  decrease  exchanging  number sentence  calculate  column subtraction  estimate  mental method  formal method  fact family  adjust  empty box | 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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|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 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 |

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|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 5 | millions  thousandths  5 and 6 digit number  mixed number  decimal fraction  square number  cube number  prime number  composite number  decimals with 2 and 3  decimal places | prime  common factor  common multiple  squared  cubed  integer  decimal  improper fraction  mixed number  percentage  % | approximate | approximate | prime number  composite number  multiple  common factor  common multiple  square number  cube number  squared,  cubed  long multiplication  expanded method  multiplier | compact short  scale down  test of divisibility |

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|  | **Numbers** | **Place Value** | **Addition** | **Subtraction** | **Multiplication** | **Division** |
| Year 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**

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| **Year 6** | formulae  linear sequence  express  unknowns | equations  equivalent expression  number pattern  express | generate  symbols  variables |

**Vocabulary for Fractions, Decimals and Percentages**

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| --- | --- | --- | --- | --- |
|  | **Fractions** | **Decimals** | **Percentages** | **Ratio and proportion** |
| **EYFS** | Share |  |  |  |
| **Year 1** | half  two quarters, quarter, three quarters  equal parts  equal groups  quantity  object  one whole |  |  |  |
| **Year 2** | third  equivalence |  |  |  |
| **Year 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 |  |  |
| **Year 4** | hundredth  divided by 100  non- unit fraction  common equivalent fractions | decimal equivalent decimal places rounding |  |  |
| **Year 5** | improper fraction  mixed number  proper fractions  thousandths  convert | decimal fraction  nearest whole number | per cent symbol %  number of parts per hundred  percentage  percentage equivalent |  |
| **Year 6** | simplest form | simplest form |  | relative size quantity scale factor comparison ratio/ proportion unequal sharing/grouping similar shapes |

**Vocabulary for Geometry**

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|  | **2-D shape** | **3-D shape** | **Position and direction** | **Angles** | **Coordinates** |
| **EYFS** | square  circle  rectangle  triangle  side | cube  cuboid  sphere  pyramid | in front  behind  on top of  under  above  below  next to |  |  |
| **Year 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 |  |
| **Year 2** | vertices  heptagon  nonagon  octagon  decagon  semi-circle  line of symmetry  vertical line  reflection  symmetry  compare | vertices  edges  prism  surface  compare | clockwise  anticlockwise  rotation | right angle  90 degrees |  |
| **Year 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 |  |
| **Year 4** | geometric shapes quadrilateral  tetragon (4 sided shape)  trigon (3 sided shape) kite  trapezium  rhombus (lozenge) parallelogram  isosceles triangle  scalene triangle equilateral triangle  dodecagon  hendecagon  dissect  classify  breadth  width |  | translation  congruent  oblique | acute  obtuse  degrees | first quadrant coordinate  points |
| **Year 5** | regular polygon irregular polygon  bisect  congruent  dimension  quindecagon  rotational symmetry |  | adjacent  intersection  rotational  on a line | reflex  base angles interior exterior |  |
| **Year 6** | radius  diameter  circumference |  | enlargement equidistant  at a point  vertically opposite |  | fourth quadrants  positive  negative |

**Vocabulary for Measures**

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|  | **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 | heavy  light | full empty more less |  |
| **Year 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 |  |
| **Year 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  5 to, 10 to, 20 to, 25 to  24 hours in a day | standard unit  cm  metre  half a metre  quarter of a metre  estimate  measure  length | standard unit  kilogram  half a kilogram  quarter of a kilogram  grams  degrees  positive/negative  estimate  measure | standard unit  litre  half a litre  quarter of a litre  estimate  measure  millilitre  measuring vessel |  |
| **Year 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 |
| **Year 4** |  | analogue  digital  24 hour |  |  |  | area  square centimetres  rectilinear shape  counting |
| **Year 5** |  |  | imperial  inches  feet  approximate | imperial  pounds  ounces  stones  approximate | imperial  pints  approximate  cuboids  cubic centimetres | standard units  square metres  compound area |
| **Year 6** |  |  | miles |  | formulae  cubic kilometres  cubic millimetres | formulae |

**Vocabulary for Statistics**

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| **EYFS** | chart  tally |
| **Year 1** | tally chart  pictogram  sort |
| **Year 2** | block graph/bar charts Venn diagram Carroll diagram  table  category  total  compare scale  calendar  How many more?  How many fewer? |
| **Year 3** | axis  interpret  key subset  timetable  information  graph |
| **Year 4** | discrete data continuous data time graphs  comparison  sum  difference |
| **Year 5** | frequency chart  line graph |
| **Year 6** | mean, average  median, mode  pie 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.