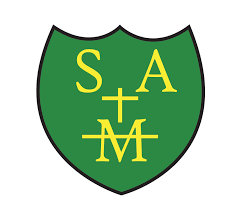
**Vocabulary Progression**

**St Augustine’s Catholic Primary School**

**Vocabulary Progression**

**Reception – Year 6**





*‘There is an association between the quality and frequency of mathematical language used by carers, parents and teachers as they interact with young children, and children’s development in important aspects of maths.’*

*Dunphy et al (2014)*

*Language is essential to the learning of mathematics. It provides a means for learners to express their understanding, negotiate meanings, to develop their thinking further and to share their findings with others. Language is necessary for the transition of problems between the real world of mathematics and mediates between the teacher and learner and between learners. It helps to expose understanding and develop meaning.*

*It is important to introduce children to the correct vocabulary at the appropriate time and within a suitable context. This should be done using relevant real-life objects, mathematical manipulatives and visual representations such as pictures and diagrams.*

*All children need regular, planned opportunities to develop their mathematical vocabulary in order that they become familiar with the language and are not confused by mathematical terms.*

*The Vocabulary Progression document provides a reference to support teachers in identifying the words that the children need to understand and use in order to make good progress in mathematics.*

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| --- | --- | --- | --- | --- | --- | --- |
| **Reception** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Reasoning and Problem Solving Language** | | | | | | |
| pattern puzzle what could we try next? how did you work it out? recognise describe draw compare sort | problem solving  mental, mentally  explain your thinking | show how you …  explain your method  describe the pattern  describe the rule  investigate  mental calculation  written calculation | greatest value, least value  statement | justify  make a statement |  |  |
| **Number and Place Value** | | | | | | |
| zero number one, two, three ... to twenty and beyond teens numbers, eleven, twelve ... twenty none how many ...? count, count (up) to, count on (from, to), count back (from, to) count in ones, twos, fives, tens is the same as more, less odd, even few pattern pair ones tens digit 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 order size first, second, third... twentieth last, last but one before, after next between | Numeral  twenty-one, twenty-two ... one hundred  forwards  backwards  equal to  equivalent to  multiple of  half-way between  above, below  roughly | two  hundred ... one thousand  threes, fours  and so on  Tally  sequence  continue  predict  rule  > greater than  < less than  hundreds  one-, two- or three-digit number  place, place value  stands for, represents  exchange  twenty-first, twenty-second …  exact, exactly | eights, fifties and so on to hundreds  factor of  Relationship  Roman numerals  one hundred more  one hundred less  approximate, approximately  round, nearest, round to the nearest ten,  hundred  round up, round down  consecutive | ten thousand,  hundred thousand, million  sixes, sevens, nines,  twenty-fives  next, consecutive  integer, positive, negative  above/below zero, minus  negative numbers  one  thousand more  one  Thousand less  Thousand | factorise  prime factor  formula  divisibility  square number  prime number  ascending/descending order  ≥ greater than or equal to  ≤ less than or equal to  cardinal number |  |
| **Addition and Subtraction** | | | | | | |
| add, more, and make, sum, total altogether double one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...? take away how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...? difference between  Whole | Addition  near double  half, halve  subtract  equals  is the same as  number bonds/pairs  missing number | one  hundred more  one  hundred less  Facts tens boundary | hundreds boundary | inverse |  |  |
| **Multiplication and Division** | | | | | | |
| Sharing  Double  Doubling  Half  Halving | multiplication  multiply  multiplied by  multiple  division  dividing  Grouping  array | groups of  times  once, twice, three times ... ten times  repeated addition  divide, divided by, divided into  share, share equally  left, left over  one each, two each, three each ... ten each  group in pairs, threes ... tens  equal groups of  Row, column  multiplication table  multiplication fact, division fact | Factor  Product  Remainder | inverse  square, squared  cube, cubed | factor pair |  |
| **Fractions** | | | | | | |
| Part  Whole | fraction  equal part  equal grouping  equal sharing  one of two equal parts  one of four equal parts | equivalent fraction  mixed number  numerator, denominator  two halves  two quarters, three quarters  one third, two thirds  one of three equal parts | sixths, sevenths, eighths, tenths … | hundredths  decimal, decimal fraction, decimal point,  decimal place, decimal equivalent  proportion | equivalent, reduced to, cancel |  |
| **Decimals and Percentages** | | | | | | |
|  |  |  |  | decimal point,  decimal place, | Percentage,  per cent, % |  |
| **Algebra** | | | | | | |
|  |  |  |  |  |  | formulae  equation  unknown  variable |
| **Measure** | | | | | | |
| measure size compare guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as just over, just under metre length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, near, close weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales full empty half full holds container | Measurement  Roughly  Centimetre,  ruler  metre stick  kilogram, half kilogram  litre, half litre  capacity  volume  more than  less than  quarter full | measuring scale  further, furthest,  tape measure  Gram  Millilitre  Contains  Temperature  degree  conjecture | Division  Approximately  Millimetre,  kilometre, mile  distance apart ... between ... to ... from  perimeter  Centigrade | unit, standard unit  metric unit  Breadth  edge  area, covers  square centimetre (cm2  )  mass: big, bigger, small, smaller  weight: heavy/light, heavier/lighter, heaviest/  lightest  measuring cylinder | imperial unit  Pint  Gallon  yard, foot, feet, inch, inches  Tonne, pound, ounce  square metre (m2),  square millimetre (mm2) | centilitre  cubic centimetres(cm3), cubic metres (m3),cubic millimetres (mm3), cubic kilometres(km3)  circumference |
| **Measure: Time** | | | | | | |
| time days of the week, Monday, Tuesday ... day, week birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after next, last now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time hour, o’clock clock, watch, hands | months of the year (January, February ...)  seasons: spring, summer, autumn, winter  day, week, weekend, month, year  earlier, later  First  midnight  date  how long ago?  how long will it be to ...?  how long will it take to ...?  how often?  always, never, often, sometimes  usually  once, twice  half past, quarter past,  quarter to  Clock face  hour hand, minute hand  hours, minutes | Fortnight,  5, 10, 15 ... minutes past  digital/analogue clock/watch, timer  Seconds | Century  Calendar,  earliest, latest  a.m., p.m.  Roman numerals  12-hour clock time, 24-hour clock time | leap year,  Millennium  Noon  date of birth  timetable, arrive, depart |  | Greenwich Mean Time, British Summer  Time, International Date Line |
| **Measure: Money** | | | | | | |
| money coin penny, pence, pound price, cost buy, sell spend, spent pay | change  dear, costs more  cheap, costs less, cheaper  costs the same as  how much ...?  how many ...?  total | Bought,  Sold |  |  |  | Profit/Loss |
| **Geometry** | | | | | | |
| shape, pattern flat curved, straight round hollow, solid sort make, build, draw size  bigger, larger, smaller symmetrical pattern, repeating pattern match corner, side rectangle (including square) circle triangle face, edge, vertex, vertices cube pyramid sphere cone position over, under above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge corner direction left, right up, down forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from movement slide roll turn stretch, bend whole turn, half turn | Symmetry,  symmetrical pattern  point, pointed  Cuboid  Cylinder  Underneath  Centre  Journey  quarter turn,  three-quarter turn | Surface  line symmetry  rectangular, circular, triangular  pentagon  hexagon  octagon  Route  higher, lower  clockwise, anticlockwise  right angle  straight line  Carroll diagram | Perimeter  Pentagonal  Hexagonal  octagonal  quadrilateral  right-angled  parallel, perpendicular  Hemisphere  prism, triangular prism  compass point  north, south, east, west, N, S, E, W  horizontal, vertical, diagonal  angle ... is a greater/smaller angle than  acute angle  obtuse angle | Line  Construct,  Sketch  Centre  angle, right-angled  base, square-based  reflect, reflection  regular, irregular  2-D, two-dimensional  oblong  rectilinear  equilateral triangle, isosceles triangle,  scalene triangle  Heptagon  parallelogram, rhombus, trapezium  polygon  3-D, three-dimensional  Spherical  Cylindrical  tetrahedron, polyhedron  north-east, north-west, south-east,  south-west, NE, NW, SE, SW  translate, translation  rotate, rotation  Degree  Reflection  ruler, set square  angle measurer, compass  Coordinate  x-axis, y-axis, quadrant | Octahedron  net, open, closed  Protractor  maximum/minimum value  outcome  axis of symmetry, reflective symmetry  Congruent  radius, diameter | Dodecahedron  circumference, concentric,  Arc  intersecting, intersection  plane |
| **Statistics** | | | | | | |
| count, sort group, set list | Vote  Table | Tally  graph, block graph, pictogram  represent  label, title  most popular, most common  least popular, least common | chart, bar chart, frequency table  Carroll diagram, Venn diagram  axis, axes  diagram | survey, questionnaire, data | Pie chart  database | mean (mode, median, range as estimates  for this)  statistics, distribution |