## Hardwicke Whole School Mathematical Vocabulary Progression Document

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Place Value | tens <br> ones <br> digit <br> number <br> position <br> More <br> less <br> greater <br> larger <br> smaller | tens exchange regroup ones digit column position between | hundreds tens exchange ones digit column position decrease increase tenths decimal point | hundreds thousands exchange tens ones digit columns value position increase decrease round multiple negative zero | hundred thousands ten thousands thousands hundreds tens ones exchange digit columns value position increase decrease round multiple negative positive zero | million hundred thousands ten thousands thousands hundreds tens ones exchange digit columns value position increase decrease round multiple negative positive zero |
| Addition and Subtraction | digit <br> plus <br> total <br> altogether <br> addend <br> subtract <br> take away <br> left <br> partition | addend sum total altogether partition tens ones digit column regroup commutative subtract difference | zero regroup ones tens hundreds total plus sum addend subtract minuend subtrahend exchange | sum thousands hundreds tens ones exchange bridge subtract difference partition regroup minuend subtrahend exchange | addition subtraction exchange regroup efficient | addition subtraction order of operations brackets |
| Multiplication and Division |  | multiply equal groups array rectangular columns rows product commutative divide grouping sharing factor product multiple odd even divisible | factor product multiple odd even divisible partition product regroup dividend divisor remainder | zero factor product multiple odd even divisible commutative multiplier dividend divisor remainder quotient | tenths hundredths thousandths column digit multiplier dividend divisor _ times larger _ times smaller prime composite factor multiple integer common factor divisible squared square cubed cube multiplier multiplicand product dividend divisor remainder | multiples common divisible factors prime multiplier multiplicand product divisor dividend quotient remainder multiplication division order of operations indices squared cubed |
| Fractions | whole part equal divided shared | part whole equal denominator numerator third quarter threequarters half equivalent | denominator numerator unit fraction non-unit fraction equivalent fifths sixths sevenths eighths ninths tenths |  | multiples denominator numerator unit fraction non-unit fraction equivalent tenths hundredths thousandths percentage | simplify denominator numerator equivalent improper common multiple factor equivalent percent proper fraction improper fraction mixed number common denominator numerator denominator sum |
| Ratio and Proportion |  |  |  |  |  | equivalent percentage scale factor dimension similar |
| Decimals |  |  |  |  | thousandths hundredths tenths ones digit column round decimal place | tenths hundredths thousandths column digit |

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|  |  |  |  |  |  | multiplicand multiplier dividend divisor _ times larger - times smaller |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Geometry | between on top of above, below middle up, down left, right forwards, backwards position turn half quarter three-quarter solid 3-D shape face cuboid rectangle cube | 2-D shape straight sides pentagon hexagon octagon <br> symmetry 3-D shape vertex vertices edge face above below left right clockwise anti-clockwise quarter half three-quarter right angle sequence pattern rule repeating scale heavier than lighter than heaviest lightest gram kilogram half three-quarter right angle sequence pattern rule repeating | horizontal vertical parallel perpendicular equi-distant polygon triangle quadrilateral square hexagon pentagon octagon polyhedron cuboid cube prism pyramid cylinder cone sphere face edge vertex curved surface | angle acute obtuse right angle <br> equilateral isosceles scalene quadrilateral parallel parallelogram rhombus trapezium kite adjacent classify property symmetry reflection | net square rectangle triangle polygon cube cuboid prism pyramid congruent translate translation reflect reflection parallel axes object image | coordinates axes x-axis $y$-axis quadrant negative positive origin translate reflect object image |
| Measurement | longer than shorter than longest shortest taller than shorter than tallest shortest centimetre | quarter past quarter to past to minute hour day part whole total sum spend change pence pounds coins notes | part whole total sum spend change pence pounds coins notes |  | convert metres centimetres millimetres litres millilitres kilograms grams metric imperial perimeter rectilinear inch pint pounds (lbs) | convert miles kilometres metres centimetres millimetres litres millilitres kilograms grams triangle parallelogram area perimeter base perpendicular height volume cuboid cube squared cubic cubed |
| Algebra |  |  |  |  |  |  |
| Statistics |  |  |  |  |  |  |

Quick Reference:
Minuend - a quantity or number from which another is to be subtracted.
Subtrahend - a quantity or number to be subtracted from another.
Addend- a number which is added to another.
Commutative - you can swap numbers around and still get the same answer when you add, or when you multiply.
Quotient- The answer after we divide one number by another.
Dividend- The amount that you want to divide up.
Multiplicand - The number that gets multiplied.

If you are unsure of the meaning of any of the vocab used, please visit the NCTEM Glossary https://www.ncetm.org.uk/media/hpihrj3s/national-curriculum-glossary.pdf

