

| | EYFS/Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|----------------|--|---|--|---|---|--|
| Addition | <p>Combining two parts to make a whole: part whole model.</p> <p>Starting at the bigger number and counting on using cubes</p> <p>Regrouping to make 10 using ten frame</p> | <p>Adding three single digits.</p> <p>Column method with base 10</p> | <p>Column method- regrouping.</p> <p>Using place value counters (up to 3 digits)</p> | <p>Column method- regrouping.</p> <p>(up to 4 digits children should move quite quickly to the use of pictorial and abstract)</p> | <p>Column method- regrouping.</p> <p>(with more than 4 digits and decimals- with the same amount of decimal places)</p> <p>Use of place value counters for decimals</p> | <p>Column method- regrouping.</p> <p>Abstract methods for all except introduce decimals- with different amounts of decimal places using place value counters</p> |
| Subtraction | <p>Taking away ones</p> <p>Counting back</p> <p>Find the difference</p> <p>Part whole model</p> <p>Make 10 using the ten frame e.g. 14-5 children will take 4 and then 1</p> | <p>Counting back</p> <p>Find the difference</p> <p>Part whole model</p> <p>Make 10</p> <p>Column method- with base 10</p> | <p>Column method with regrouping.</p> <p>(up to 3 digits using place value counters)</p> | <p>Column method with regrouping.</p> <p>(up to 4 digits move quite quickly to the use of pictorial and abstract)</p> | <p>Column method with regrouping.</p> <p>Abstract for whole numbers</p> <p>Start with concrete for decimals- with the same amount of decimal places</p> | <p>Column method with regrouping.</p> <p>Children should be 100% confident with abstract.</p> <p>place value counters for decimals- with different amounts of decimal places</p> |
| Multiplication | <p>Repeated grouping using cubes/numicon- draw this pictorially too.</p> | <p>Arrays- showing commutative multiplication</p> | <p>Arrays</p> <p>2d x 1d using base 10</p> | <p>Column multiplication- introduced with place value counters. (2 and 3 digit multiplied by 1</p> | <p>Column multiplication</p> <p>Abstract only but might need a</p> | <p>Column multiplication</p> <p>By this point,</p> |

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| | Counting in multiples | | | digit) | repeat of year 4 first(up to 4 digit numbers multiplied by 1 or 2 digits) | children should be secure with the abstract (multi digit up to 4 digits by a 2 digit number) |
| Division | <p>Sharing objects into groups</p> <p>Division as grouping e.g. I have 12 sweets and put them in groups of 3, how many groups? Use cubes and draw round 3 cubes at a time.</p> | <p>Division as grouping</p> <p>Division within arrays- linking to multiplication</p> <p>Repeated subtraction</p> | <p>Division with a remainder using lollipop sticks, times tables facts and repeated subtraction.</p> <p>2d divided by 1d using base 10</p> | <p>Division with a remainder</p> <p>Short division (up to 3 digits by 1 digit- concrete and pictorial)</p> | <p>Short division</p> <p>(up to 4 digits by a 1 digit number interpret remainders appropriately for the context)</p> | <p>Short division</p> <p>Long division (up to 4 digits by a 2 digit number- interpret remainders as whole numbers, fractions or round)</p> <p>Children should be 100% confident with the abstract.</p> |

Every time the children use concrete apparatus, they should be encouraged to represent it pictorially too- this will help them understand the maths and be able to work with the abstract.