

# Portreath School

## Calculation Policy Guidance



|             | 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>Use of base 10 to combine two numbers.</p> <p>Column method with regrouping( 2 digits)</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)</p>     | <p>Column method- regrouping.</p> <p>Use of place value counters for adding decimals.</p>   | <p>Column method- regrouping.</p> <p>Abstract methods.</p> <p>Place value counters to be used for adding decimal numbers.</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</p>   | <p>Counting back</p> <p>Find the difference</p> <p>Part whole model</p> <p>Make 10</p> <p>Use of base 10 and place value counters</p> <p>Column method with regrouping( 2 digits)</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)</p> | <p>Column method with regrouping.</p> <p>Abstract for whole numbers.</p> <p>Start with place value counters for decimals- with the same amount of decimal places.</p> | <p>Column method with regrouping.</p> <p>Abstract methods.</p> <p>Place value counters for decimals- with different amounts of decimal places.</p> |

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|--|---|--|---|--|---|---|
| <p style="text-align: center;"><b>Multiplication</b></p> | <p>Recognising and making equal groups.</p> <p>Doubling</p> <p>Counting in multiples<br/>Use cubes, Numicon and other objects in the classroom</p>  | <p>Arrays- showing commutative multiplication</p>  | <p>Arrays</p> <p>2d x 1d using base 10 and place value counters</p>   | <p>Column multiplication- introduced with place value counters.</p> <p>(2 and 3 digit multiplied by 1 digit)</p> | <p>Column multiplication</p> <p>Abstract only but might need a repeat of year 4 first (up to 4 digit numbers multiplied by 1 or 2 digits)</p> | <p>Column multiplication</p> <p>Abstract methods (multi-digit up to 4 digits by a 2 digit number)</p>   |
| <p style="text-align: center;"><b>Division</b></p>       | <p>Sharing objects into groups</p> <p>Division as grouping<br/>e.g. I have 12 sweets and put them in groups of 3, how many groups?</p> <p>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 or place value counters</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 including remainders)</p>  | <p>Short division</p> <p>Long division taught in the same way as short division but children are encouraged to jot down the multiples of the divisor.</p> |