| WEEK 1 | OBJECTIVES | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING |
| :---: | :---: | :---: |
| Number <br> Addition and Subtraction | - Apply number bonds within 10 <br> - Add and subtract 1 s <br> - Add and subtract 10 s <br> - Add and subtract 100 s <br> - Spot the pattern | Pupils now use multiples of 2, 3, 4, 5, 8, 1050 \& 100. <br> Pupils practice solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100 <br> Pupils use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex probems, building on work in year 2 (for example, $146=100+40+6$ and also 146 $=130+16$ <br> (Use concrete manipulatives to develop mental maths) <br> NRICH: Magic Vs ** <br> NRICH: How Do You See it? * <br> NRICH: Swimming Pool* <br> NRICH: First Connect Three * <br> NRICH: Sea Level * <br> NRICH: A Bit of a Dicey Problem |


| WEEK 2 \& 3 | OBJECTIVES | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING |
| :---: | :---: | :---: |
| Number <br> Addition and subtraction | - Add 1s across a 10 <br> - Add 10 s across a 100 <br> - Subtract 1 s across a 10 <br> - Subtract 10s across a 100 <br> - Make connections | Pupils now use multiples of 2, 3, 4, 5, 8, 1050 \& 100. <br> Pupils practice solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100 <br> Pupils use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex probems, building on work in year 2 (for example, $146=100+40+6$ and also 146 $=130+16$ <br> (Use concrete manipulatives to develop mental maths) <br> NRICH: Magic Vs ** <br> NRICH: How Do You See it? * <br> NRICH: Swimming Pool* <br> NRICH: First Connect Three * <br> NRICH: Sea Level * <br> NRICH: A Bit of a Dicey Problem |


| WEEK 4 | OBJECTIVES | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING |
| :---: | :---: | :---: |
| Number <br> Addition \& Subtraction: | - Add two numbers (no exchange) <br> - Subtract two numbers (no exchange) <br> - Add two numbers (across a 10 ) <br> - Add two numbers (across a 100) <br> - Subtract two numbers (across a 10) | Pupils practice solving varied addition and subtraction questions. <br> Pupils use their understanding of place value and partitioning, and practice using columnar addition and subtraction with increasingly large numbers up to three digits to become fluent. <br> (Children to learn both conceptual and procedural fluency. The use of Deines \& place value counters would support this) <br> SEE SCHOOL CALCULATION POLICY FOR PROGRESSION <br> NRICH: A Square of Numbers * <br> NRICH: Buying a Balloon* <br> NRICH: GOT IT ** <br> NRICH: Make 37 ** <br> NRICH: Consecutive Numbers ** <br> NRICH: Super Shapes * <br> NRICH: Strike it Out* |


| WEEK 5 | OBJECTIVES | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING |
| :---: | :---: | :---: |
| Number Addition and subtraction | - Subtract two numbers (across a 100) <br> - Add 2-digit and 3-digit numbers <br> - Subtract a 2-digit number from a 3-digit number <br> - Complements to 100 <br> - Estimate answers <br> - Inverse operations <br> - Make decisions | Pupils practice solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100 <br> Pupils now use multiples of 2, 3, 4, 5, 8, 1050 \& 100. <br> Pupils use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex probems , building on work in year 2 (for example, $146=$ $100+40+6$ and also $146=130+16$ <br> (Use concrete manipulatives to develop mental maths) |


| WEEK 5 | OBJECTIVES | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING |
| :---: | :---: | :---: |
|  |  | NRICH: Magic Vs ** <br> NRICH: How Do You See it? * <br> NRICH: Swimming Pool* <br> NRICH: First Connect Three * <br> NRICH: Sea Level * <br> NRICH: A Bit of a Dicey Problem |


| WEEK 6 | OBJECTIVES | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING |
| :---: | :---: | :---: |
| Number <br> Multiplication and division | - Multiplication - equal groups <br> - Use arrays <br> - Multiples of 2 <br> - Multiples of 5 and 10 <br> - Sharing and grouping <br> - Multiply by 3 <br> - Divide by 3 <br> - The 3 times-table | Pupils continue to practice their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2,4 \& 8 multiplication tables. <br> Pupils develop efficient mental methods, for example, using commutativity and associativity (for example $4 \times 12 \times 5=4 \times 5 \times 12=20 \times 12=$ 240) and multiplication and division facts (for example using $3 \times 2=6,6 \div 3=2$ and $2=6 \div$ <br> 3) to derive related facts (for example, $30 \times 2=$ $60,60 \div 3=20$ and $20=60 \div 3$ ) <br> Pupils now use multiples of $2,3,4,5,8,10,50$ and 100 <br> Pupils solve simple problems in context, deciding which of the four operations to use and why. These include ,measuring and scaling contexts, (for example, four times as high, eight times as long etc. and corresponding problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits? 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children (see fraction unit) <br> Use of Cuisenaire Rods and number tracks leading to number lines to aid mental methods. SEE SCHOOL CALCULATION POLICY <br> NRICH: Ordering Cards * <br> NRICH: Music to My Ears * |


| WEEK 7 | OBJECTIVES <br> - Multiply by 4 <br> - Divide by 4 <br> - The 4 times-table <br> - Multiply by 8 <br> - Divide by 8 <br> - The 8 times-table <br> - The 2, 4 and 8 times-tab | NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING <br> Pupils develop reliable written methods for multiplication and division, starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication and division <br> NRICH: A Square of Numbers * <br> NRICH: What do you Need? * <br> NRICH: This Pied Piper of Hamelin ** <br> NRICH: Follow the Numbers * <br> NRICH: What's in the Box? * <br> NRICH: How Do You Do It? * |
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