Year 3

| Children know how to: | Opportunities and ideas for journaling. <br> "How do mathematicians.." | Problem Solving and reasoning opportunities | NCETM Spine and Assessment Materials |
| :---: | :---: | :---: | :---: |
| AUTUMN |  |  |  |
| Number: Place Value (3 WEEKS) | White Rose Activities <br> Numbers to 1,000 on a place value grid |  | Year 3 Spine 1 |
| Hundreds |  | NRICH <br> Which scripts? <br> Coded hundred square | 1.17: TP 1.1-1.7 (explores composition of 100) 1.17: TP 3.4-3.8 |
| Represent numbers to 1000 |  |  |  |
| 100s, 10 s and 1s (1) |  |  |  |
| 100s, 10 s and 1s (2) |  | Number differences | 1.18: TP 5.4 |
| Number line to 1000 | How do mathematicians order numbers? | Magic Vs Number match |  |
| Find 1, 10, 100 more or less than a given number |  |  |  |
| Compare objects to 1000 |  | Sitting round the party |  |
| Compare numbers to 1000 | How do mathematicians find more or less? | tables <br> Take three numbers <br> That number square | 1.17: TP 1.5 |
| Order numbers |  |  |  |
| Count in 50s |  | I See Reasoning Page 6-22 | $\frac{\text { materials }}{\frac{\text { Page } 9-12}{}}$ |
| Number: Multiplication and Division (1) (3 WEEKS) |  |  | Year 3 Spine 2 |
| Multiplication- equal groups | How do mathematicians multiply by... | NRICH <br> Ordering cards <br> Music to my ears <br> A square of numbers Follow the numbers | 2.8: TP 1.1-1.10 (moves on to $6 x$ and $9 x$ table but at this stage secure $3 x$ table) |
| Multiply by 3 |  |  |  |
| Divide by 3 |  |  |  |
| The 3 times table |  |  |  |
| Multiply by 4 |  |  | 2.7: TP 1.1-1.11, 2.1-2.8, 3.1- |
| Divide by 4 |  |  | 3.10, 4.1-4.13, 5.1-5.7 |
| The 4 times table |  | I See Reasoning |  |
| Multiply by 8 |  | Page 54-87 |  |
| Divide by 8 |  |  |  |
| The 8 times table |  |  |  |
| Number: Fractions (2 WEEKS) (YEAR 2 UNIT) |  |  | Year 2 Spine 3 |
| Make equal parts | White Rose Activities <br> Working with parts and wholes |  | 3.0: Guidance on the teaching of fractions at KS1 |
| Recognise a third |  |  |  |
| Find a third |  |  |  |
| Unit factions |  |  |  |


| Non-unit fractions | Problem solving with fractions <br> How do mathematicians find equivalent fractions? <br> How do mathematicians find count in fractions? |  | Yr2 NCETM assessment |
| :---: | :---: | :---: | :---: |
| Equivalence of 1/2 and 2/4 |  |  | materials |
| Find three quarters |  |  | Page 19-22 |
| Count in fractions |  |  |  |
| Number: Addition and Subtraction (5 WEEKS) |  |  | Year 3 Spine 1 |
| Add and subtract multiples of 100 | How do mathematicians add 3 digit numbers? | NRICH <br> Buying a balloon Super shapes Strike it out Dicey addition Half time Play to 37 Build it up <br> Finding fifteen <br> Domino square Got it <br> Consecutive numbers Dice in a corner 4 Dom | 1.20: TP 1.1-1.3, 2.1-2.4, |
| Add and subtract 3-digit and 1-digit numbers- not crossing 10 |  |  | 3.1-3.5, 4.1-4.7, 5.1-5.5 |
| Add and subtract 3-digit and 1-digit numbers- crossing 10 |  |  | 1.21: TP 1.1-1.6, 2.1-2.10 |
| Subtract a 1-digit number from a 3-digit number- crossing 10 |  |  |  |
| Add and subtract 3-digit and 2-digit numbers- not crossing 100 |  |  | Teach this first 1.17: TP 2.1-2.11 3.1-3.13, |
| Add 3-digit and 2-digit numbers- crossing 100 |  |  | 4.1-4.10 (mental calculation |
| Subtract a 2-digit number from a 3-digit number- crossing 100 |  |  | strategies around the number 100). |
| Add and subtract 100s |  |  |  |
| Spot the pattern- making it explicit |  |  | 3.1-3.11, 4.1-4.4 (mental strategies up to 999) |
|  |  |  | 1.18: TP 5.1-5.15 (mental addition within 1,000) |
|  |  |  | Yr3 NCETM assessment materials Page 13-15 |
| SPRING |  |  |  |
| Number: Addition and Subtraction (2 WEEKS) |  |  |  |
| Add and subtract a 2-digit and 3-digit numbers- not crossing 10 or 100 | Continued from Autumn unit |  |  |
| Add a 2-digit and 3-digit numbers- crossing 10 or 100 |  |  |  |
| Subtract a 2-digit number from a 3-digit number- crossing 10 or 100 |  |  |  |
| Add two 3-digit numbers- not crossing 10 or 100 |  |  |  |
| Add two 3-digit numbers- crossing 10 or 100 |  |  |  |


| Subtract a 3-digit number from a 3-digit number- no exchange |  |  |  |
| :---: | :---: | :---: | :---: |
| Subtract a 3-digit number from a 3-digit number-exchange |  |  |  |
| Estimate answers to calculations |  |  |  |
| Check answers |  |  |  |
| Number: Multiplication and Division (2) (3 WEEKS) |  |  |  |
| Comparing statements |  |  |  |
| Related calculations |  |  |  |
| Multiply 2-digits by 1-digit (1) |  |  | Yr3 NCETM assessment |
| Multiply 2-digits by 1-digit (2) |  |  | materials |
| Divide 2-digits by 1-digit (1) |  |  | P16-18 |
| Divide 2-digits by 1-digit (2) |  |  |  |
| Divide 2-digits by 1-digit (3) |  |  |  |
| Scaling |  |  |  |
| How many ways? |  |  |  |
| Measurement: Time (1 WEEK) |  |  |  |
| Months and years |  |  |  |
| Hours in a day |  |  |  |
| Telling the time to 5 minutes |  |  |  |
| Telling the time to the minute |  |  |  |
| Statistics |  |  |  |
| Pictograms | To be taught in Geography |  |  |
| Bar charts |  |  |  |
| Tables |  |  |  |
| Measurement: Length and Perimeter (3 WEEKS) |  |  |  |
| Measure length |  |  |  |
| Equivalent lengths- m and cm |  |  |  |
| Equivalent lengths- mm and cm |  |  |  |
| Compare lengths |  |  |  |
| Add lengths |  |  |  |
| Subtract lengths |  |  |  |
| Measure perimeter |  |  |  |
| Calculate perimeter |  |  |  |
| Number: Fractions (2 WEEKS) |  |  |  |
| Unit and non-unit fractions |  |  |  |
| Making the whole |  |  |  |
| Tenths |  |  |  |
| Count in tenths |  |  |  |
| Tenths as decimals |  |  |  |


| Fractions on a number line |  |  |  |
| :---: | :---: | :---: | :---: |
| Fractions of a set of objects (1) |  |  |  |
| Fractions of a set of objects (2) |  |  |  |
| Fractions of a set of objects (3) |  |  |  |
|  | MER |  |  |
| Number: Fractions (3 WEEKS) |  |  |  |
| Equivalent fractions (1) |  |  |  |
| Equivalent fractions (2) |  |  |  |
| Equivalent fractions (3) |  |  |  |
| Compare fractions |  |  |  |
| Order fractions |  |  |  |
| Add fractions |  |  |  |
| Subtract fractions |  |  |  |
| Measurement: Time (2 WEEKS) |  |  |  |
| Months and years | Consolidate from Spring |  |  |
| Hours in a day |  |  |  |
| Telling the time to 5 minutes |  |  |  |
| Telling the time to the minute |  |  |  |
| Using a.m. and p.m. |  |  |  |
| 24-hour clock |  |  |  |
| Measuring time in seconds |  |  |  |
| Measurement: Monev (1 WEEK) |  |  |  |
| Pounds and pence | Big focus on add and subtract |  |  |
| Convert pounds and pence |  |  |  |
| Add money |  |  |  |
| Subtract money |  |  |  |
| Give change |  |  |  |
| Geometry: Properties of Shape (2 WEEKS) |  |  |  |
| Turns and angles |  |  |  |
| Right angles in shapes |  |  |  |
| Compare angles |  |  |  |
| Draw accurately |  |  |  |
| Horizontal and vertical |  |  |  |
| Parallel and perpendicular |  |  |  |
| Recognise and describe 2D shapes |  |  |  |
| Recognise and describe 3D shapes |  |  |  |
| Make 3D shapes |  |  |  |
| Measurement: Mass and Capacity (3 WEEKS) |  |  |  |


| Measure mass (1) |  |  |  |
| :--- | :--- | :--- | :--- |
| Measure mass (2) |  |  |  |
| Compare mass |  |  |  |
| Add and subtract mass |  |  |  |
| Measure capacity (1) |  |  |  |
| Measure capacity (2) |  |  |  |
| Compare capacity |  |  |  |
| Add and subtract capacity |  |  |  |

