

| Autumn 2022 | | | | |
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| BLOCK | WEEKS | KEY VOCABULARY | SMALL STEPS | NC OBJECTIVES |
| Number: Place Value | 1-2 | Place value Million Hundred thousand Ten thousand Partition Inequality symbols Greater than/ Less than Digit Negative number Intervals Whole numbers | Numbers to one million Numbers to ten million Read and write numbers to ten million Powers of 10 Number line to ten million Compare and order any integer Round any number Negative numbers | Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. Round any whole number to a required degree of accuracy. Use negative numbers in context and calculate intervals across zero. Solve number and practical problems that involve all of the above. |
| Number: Four Operations | 3-7 | Addition Subtraction Operation Multiply Divide Altogether Sum Total Difference between Subtract Minus Remainder Rounding Mixed operations Common factor Common multiple Prime number Composite number Order of operations Estimate | Add and subtract integers Common factors Common multiples Rules of divisibility Primes to 100 Square and cube numbers Multiply up to a 4-digit number by a 2-digit number Solve problems with multiplication Short division Division using factors Introduction to long division Long division with remainders Solve problems with division Solve multi-step problems Order of operations Mental calculations and estimation Reason from known facts | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context Perform mental calculations, including with mixed operations and large numbers Identify common factors, common multiples and prime numbers Use the order of operations to carry out calculations involving the four operations Solve problems involving addition, subtraction, multiplication and division Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy |

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| Number: Fractions A | 8-9 | Fractions Decimals Equivalent Equivalence Simplify Simplest form Integer Linear number sequence Numerator Denominator Mixed number | Equivalent fractions and simplifying Equivalent fractions on a number line Compare and order (denominator) Compare and order (numerator) Compare and order fractions Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbers Multi-step problems Subtract fractions | Use common factors to simplify fractions Compare and order fractions Add and subtract fractions with different denominators and mixed numbers Generate and describe linear number sequences (with fractions) |
| Number: Fractions B | 10-11 | Fractions Decimals Equivalent Equivalence Simplify Simplest form Integer Linear number sequence Numerator Denominator Mixed number | Multiply fractions by integers Multiply fractions by fractions Divide a fraction by an integer Divide any fraction by an integer Mixed questions with fractions Fraction of an amount Fraction of an amount – find the whole | Multiply simple pairs of proper fractions, writing the answer in the simplest form Divide proper fractions by whole numbers |
| Measurement: Converting units | 12 | Metric Imperial Convert Centimetre, metre, kilometre Millilitre, litre Gram, kilogram Length Mass Volume Miles | Metric measures Convert metric measures Calculate with metric measures Miles and kilometres Imperial measures | Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 dp. Convert between miles and kilometres |