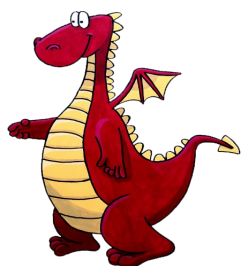


EYFS

Children will develop a secure understanding of numbers to 10 and the composition of numbers to 10. Children will subitise, compare, identify patterns and explore shape.



Year
R

Early
Years

Key
Stage
1

Year
1

Place Value: within 10 and 20

Addition and subtraction: within 10 and 20

Multiplication and division: count in 2s, 5s and 10s, make & add equal groups, make arrays & doubles and make equal groups for grouping & sharing.

Our Mathematics Learning Journey

Fractions

Find a half and a quarter

Place Value: recognise tens and ones, partition & write numbers to 100, use a place value chart, use a number line, compare objects and numbers and count in 2s, 5s, 10s and 3s

Addition and Subtraction: bonds to 10 & 100, fact families within 20, adding and subtracting across and from a ten, find 10 more & 10 less and add 2 digit numbers

Multiplication and Division: recognise, make and add equal groups, introduce the multiplication symbol, use arrays, understand odd and even numbers, divide by 2, 10 & 5 and understand the 2x, 5x & 10x times-tables.

Fractions:

Recognise and find a quarter, half and a third, unit fractions and non-unit fractions, recognise and find three quarters and count in fractions up to a whole.

Place

Value: Numbers to 1 000 000 & 10 000 000, powers of 10, compare and order any integers, round any integer and understand negative numbers.

Addition, Subtraction, Multiplication & Division: add and subtract integers, common factors & 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, long division, long division with remainders, solve multi-step problems, order of operations, mental calculations &

Ratio: Use ratio language & symbol, ratio and fractions, scale drawing, use scale factors and solve ratio problems and proportion problems.

Algebra: 1-step and 2-step function machines, form expressions, substitutions, formulae, form equations, solve 1-step and 2-step equations, find pairs of values and solve problems with two unknowns.

Year
4

Year
3

Key
Stage
2

Fractions: Understand denominators of unit fractions, compare and order unit fractions, understand the numerators of non-unit fractions, understand the whole, compare and order non-unit fractions, fractions and scales, fractions on a number line, count in fractions on a number line, equivalent fractions on a number line and as bar models, add and subtract fractions, partition the whole, unit and non-unit fractions of a set of objects and reasoning with fractions of an amount.

Year
5

Year
6

Place value: represent & partition numbers up to 1000 & 10 000, find 1, 10, 100, 1000 more or less, compare and order numbers to 1000 & 10 000, Roman numerals and round to the nearest 10, 100 and 1000.

Addition & Subtraction: add and subtract two 4 digit numbers (no exchange, one exchange, more than one exchange) efficient subtraction, estimate answers & develop checking strategies.

Multiplication & Division: understand 6,9,7,11 & 12 times-table and division facts, multiply by 1 and 0, divide a number by 1 and itself, multiply 3 numbers, factor pairs, multiply and divide by 10 and 100, multiply a 2 and 3-digit number by a 1-digit number, divide a 2-digit number by a 1-digit number, correspondence problems and efficient multiplication.

Fractions & Decimals: count beyond 1, partition a mixed number, compare and order mixed numbers, convert mixed numbers to improper fractions and vice versa, equivalent fractions (on a number line & equivalent families), add and subtract two fractions, subtract from whole amounts and mixed numbers, tenths (as fractions, as decimals, on number line, on a place value chart), divide a 1 and 2-digit number by 10 & 100, hundredths, make a whole with tenths and hundredths, partition and compare decimals, round to the nearest whole number and know halves and quarters as decimals.

Place Value: Roman numerals to 1000, negative numbers, numbers to 10 000, 100 000 and numbers to 1 000 000, powers of 10, 10/100/1000/10000/1000000 less or more, partition numbers to 1 000 000, compare and order numbers to 10 000 & 1 000 000, round to the nearest 10, 100 or 1000 and round within 1 000 000.

Addition & Subtraction: develop mental strategies, add & subtract whole numbers with more than 4 digits, round to check answers, inverse operations, multi-step problems, compare calculations and find missing numbers.

Multiplication & Division: Multiples and common multiples, factors and common factors, prime numbers, square and cube numbers, multiply and divide by 10, 100 and 1000, multiples of 10, 100 and 1000, multiply up to a 4-digit number by a 1-digit and 2-digit, short division and efficient division.

Fractions:

Find fractions equivalent to a unit and non-unit fraction, recognise equivalent fractions, convert improper fractions to mixed numbers and vice versa, compare fractions less than 1, order fractions less than 1, compare and order fractions greater than 1, add and subtract fractions with the same denominator, add and subtract fractions with different denominator, subtract two mixed numbers, multiply a unit and non-unit fraction by an integer, multiply a mixed number by an integer, fraction of an amount, find the whole and use fractions as operators,

Decimals & Percentages: decimals up to 2 decimal places, equivalent fractions and decimals (tenths & hundredths), equivalent fractions and decimals, thousandths as fractions and as decimals, order and compare decimals, order and compare any decimals with up to 3 decimal places, round to the nearest whole and to 1 decimal place, understand percentages, percentages as fractions and percentages as decimals and understand equivalent fractions, decimals and percentages.

Decimals: add and subtract decimals within 1, efficient strategies for addition and subtraction of decimals, use decimal strategies and multiply and divide by 10, 100 and 1000.

Fractions: Equivalent fractions and simplifying, compare and order fractions, add and subtract fractions, add and subtract mixed numbers, multi-step problems, multiply fractions by integers, multiply fractions by fractions, divide a fraction by an integer and find fractions of amounts.

Decimals: place value within 1, round decimals, add and subtract decimals, multiply and divide by 10, 100 and 1000 and multiply and divide decimals by integers,

Fractions, Decimals & Percentages (FDP): Decimal and fraction equivalence, fractions to percentages, equivalent fractions, decimals & percentages, order FDP, find percentages of an amount and percentages as missing values.