



OLSA Maths Year 3 Full Year Plan - Abacus

Year 3, Autumn Term 1

Addition and subtraction

Weeks 1 and 2 focus on revising the understanding and use of place value and number facts in mental addition and subtraction.

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Multiplication and division

Week 3 focuses on key multiplication and division facts and on doubling and halving.

Time; 3D shapes

Week 4 focuses on telling the time with increasing accuracy, and identifying, describing and sorting 3D shapes.

Place value; difference

Week 5 focuses on placing 2- and 3-digit numbers on a line and using an empty number line to find differences.

Use multiple of 5 and 10 bonds to 100 to solve additions and subtractions; add and subtract 1-digit numbers to and from 2-digit numbers

Compare and order 2- and 3- digit numbers; count on and back in 10s and 1s; add and subtract 2-digit numbers; solve problems using place value

Know multiplication and division facts for the 5, 10, 2, 4 and 3 times-tables; doubling and halving

Know and understand the calendar, including days, weeks, months, years; tell the time to the nearest 5 minutes on analogue and digital clocks; know the properties of 3D shapes

Comparing, ordering and understanding place value of 2- and 3-digit numbers; subtracting from 2-digit numbers; using prediction to estimate calculations

Year 3, Autumn Term 2

Multiplication and division; fractions

Week 6 focuses on doubling and halving, and understanding a half and other unit fractions.

Place value in addition and subtraction

Week 7 focuses on understanding place value, including in money, and on using partitioning in adding and subtracting.

Length; capacity

Week 8 focuses on the SI units and measurement of length and capacity.

Place value; difference

Week 9 focuses on using number lines to compare and round numbers and to find differences.

Revision

Week 10 provides revision of key calculation strategies and their use in word problems.

Doubling and halving numbers up to 100 using partitioning; understanding fractions and fractions of numbers

Use money to add and subtract and record using the correct notation and place value; add and subtract 2-digit numbers using partitioning; add three 2-digit numbers by partitioning and recombining.

Choose an appropriate instrument to measure a length and use a ruler to estimate, measure and draw to the nearest centimetre; know 1 litre = 1000 ml; estimate and measure capacity in millilitres

Place 2- and 3-digit numbers on a number line; round 3-digit numbers to nearest 100; use counting up to do mental subtractions with answers between 10 and 20, 10 and 30, and either side of 100

Revise times-tables learned and derive division facts; perform division with remainders; choose a mental strategy to solve additions and subtractions; solve word problems

Year 3, Spring Term 1

Place value

Week 11 focuses on embedding a thorough understanding of place value and properties of numbers.

Addition; times tables

Week 12 focuses on using partitioning in addition; and on the 2, 3, 4, 5, 8 and 10 times tables.

Fractions

Week 13 focuses on fractions as numbers, finding equivalent fractions, placing fractions on a line, and on fractions as operators, finding fractions of amounts.

Angles; 2D shapes

Week 14 focuses on angles, including right angles, measurement of turn, and the $^{\circ}$ symbol; and on properties of 2D shapes and finding perimeters.

Addition and subtraction

Weeks 15, 16 and 17 focus on the way a secure understanding of place value underpins rounding, mental addition and subtraction, and column methods of addition.

Rehearse place value in 3-digit numbers, order them on a number line and find a number in between; compare number sentences; solve additions and subtractions using place value; multiply and divide by 10 (whole number answers); count in steps of 10, 50 and 100.

Add pairs of 2-digit numbers using partitioning (crossing 10s, 100 or both) and then extend to add two 3-digit numbers (not crossing 1000); recognise and sort multiples of 2, 3, 4, 5, and 10; double the 4 times-table to find the 8 times-table; derive division facts for the 8 times-table; multiply and divide by 4 by doubling or halving twice

Identify $\frac{1}{2}$ s, $\frac{1}{3}$ s, $\frac{1}{4}$ s, $\frac{1}{6}$ s, and $\frac{1}{8}$ s; realise how many of each make a whole; find equivalent fractions; place fractions on a 0 to 1 line; find fractions of amounts

Recognise right angles and know they are 90° ; understand angles are measured in degrees; recognise $^{\circ}$ as the symbol for the measurement of degrees; name and list simple properties of 2D shapes; begin to understand and use the term perimeter to mean the length/distance around the edge (border) of a 2D shape; begin to calculate using a ruler; know a right angle is a quarter turn; know 360° is a full turn; begin to understand angles and identify size of angles in relation to 90°

Place 3-digit numbers on empty 100 number lines; begin to place 3-digit numbers on 0-1000 landmarked and empty number lines; round 3-digit numbers to the nearest ten and to the nearest hundred; use counting up as a strategy to perform mental subtraction (Frog); subtract pounds and pence from five pounds; use counting up (Frog) as a strategy to perform mental subtraction of amounts of money; subtract pounds and pence from ten pounds

Year 3, Spring Term 2

Addition and subtraction

Weeks 15, 16 and 17 focus on the way a secure understanding of place value underpins rounding, mental addition and subtraction, and column methods of addition.

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Time

Week 18 focuses on time-telling on digital and analogue clocks, and the calculation of time intervals; these are used in solving word problems.

Place value; subtraction

Week 19 focuses on using number lines to facilitate an understanding of place value in 3-digit numbers, and as an efficient method of performing subtraction involving 3-digit numbers.

Understand place-value in 3-digit numbers; separate 3-digit numbers into hundreds, tens, and ones; add two 3-digit numbers using vertical written addition (expanded); add 2- and 3- digit numbers using vertical written addition (expanded)

Add two 2-digit numbers mentally; add 2-digit to 3-digit numbers mentally using place value and rounding; add two 3-digit numbers using expanded written method (answers under 1000); begin to move tens and hundreds moving towards formal written addition; add two 3-digit numbers using expanded column addition; investigate patterns in numbers when adding them; choose to solve addition using a mental method or expanded column addition (written method)

Tell the time to the nearest minute on analogue and digital clocks (minutes past and minutes to); time events in minutes and seconds; find a time after a given interval (not crossing the hour); calculate time intervals; solve word problems involving time

Order 3-digit numbers and find numbers between; solve subtractions of 3-digit - 3-digit numbers using counting up (Frog); use counting up and counting back as strategies to perform mental subtractions; choose to solve a given subtraction by counting up or counting back

Multiplication and division

Week 20 focuses on developing multiplication strategies using doubling and halving and the grid method; division is related to multiplication and this relationship is used to solve missing number problems.

Double and halve numbers up to 100 by partitioning; solve word problems involving doubling and halving; multiply numbers between 10 and 25 by 1-digit numbers using the grid method; divide multiples of 10 by 1-digit numbers using known tables facts; see the relation between multiplication and division

Year 3, Summer Term 1

Addition and subtraction

Week 21 focuses on securing understanding of addition and subtraction and rehearsing sound mental strategies, extending to adding and subtracting fractions.

Add 3-digit and 1-digit numbers mentally, using number facts; subtract 1-digit numbers from 3-digit numbers mentally using number facts; add and subtract multiples of 10 by counting on and back in 10s and using number facts to cross 100s; compare and order fractions with the same denominator; begin to recognise equivalences of $\frac{1}{2}$; add and subtract fractions with the same denominator

Multiplication and division

Weeks 22 and 23 focus on developing understanding and skills in multiplication and division, including using tables facts to solve scaling problems, multiplications using the grid method, and divisions using chunking.

Use function machines to multiply by 2, 3, 4, 5 and 8 and understand the inverse; use scaling to multiply heights and weights by 2, 4, 8, 5 and 10; use known facts to multiply multiples of 10 by 2, 3, 4 and 5; multiply numbers between 10 and 30 by 3, 4 and 5 using the grid method; multiply 2-digit numbers by 3, 4, 5 and 8 using the grid method

Multiplication and division

Weeks 22 and 23 focus on developing understanding and skills in multiplication and division, including using tables facts to solve scaling problems, multiplications using the grid method, and divisions using chunking.

Divide without remainders, just beyond the 12th multiple; division using chunking, with remainders; use the grid method to multiply 2-digit numbers by 3, 4, 5 and 8; begin to estimate products

Statistics and data; weight

Week 24 focuses on drawing and interpreting pictograms and bar graphs with different scales, and on using these to record and analyse data in the context of measuring weights.

Draw and interpret bar charts and pictograms where one square/symbol represents two units; compare and measure weights in multiples of 100g; know how many grams are in a kilogram; estimate and weigh objects to the nearest 100g; draw and interpret bar charts where one square represents one hundred units

Addition and subtraction

Weeks 25, 26 and 27 focus on mental and written addition and subtraction, including mental strategies, column addition, subtracting by counting up, and choosing appropriate methods to solve problems.

Add 3-digit and 2-digit numbers using mental strategies; add two 3-digit numbers using mental strategies or by using column addition; use reasoning, trial and improvement to solve problems involving more complex addition

Year 3, Summer Term 2

Addition and subtraction

Weeks 25, 26 and 27 focus on mental and written addition and subtraction, including mental strategies, column addition, subtracting by counting up, and choosing appropriate methods to solve problems.

Use column addition to add three 2- and 3-digit numbers together and four 2- and 3-digit numbers together; subtract 3-digit numbers using counting up; solve word problems choosing an appropriate method

Addition and subtraction

Add 3-digit numbers using column addition; solve problems involving measures; solve subtractions of 3-digit numbers using counting up on a line and work systematically to find possibilities; choose an appropriate strategy to solve addition or subtraction

Weeks 25, 26 and 27 focus on mental and written addition and subtraction, including mental strategies, column addition, subtracting by counting up, and choosing appropriate methods to solve problems.

2D shapes; time

Week 28 focuses on developing understanding and vocabulary of shape and angle, including measuring perimeters; and on telling the time 5, 10, 20 minutes later using am/pm and 24-hour clock.

Multiplication and division; fractions

Week 29 focuses on consolidating written multiplication and division strategies, securing understanding of the relation between division and fractions, and moving to finding tenths of amounts.

Revision

Week 30 focuses on rehearsing and consolidating mental and written calculation skills in addition, subtraction, multiplication and division.

Identify, name and draw horizontal, vertical, perpendicular, parallel and diagonal lines, angles and symmetry in 2D shapes; measure the perimeter of 2D shapes by counting and measuring with a ruler; tell the time on analogue and digital clocks to the minute, begin to tell the time 5, 10, 20 minutes later, recognise am and pm and 24-hour clock times

Use the grid method to multiply 2-digit numbers by 3, 4, 5, 6 and 8; estimate products; divide using chunking, with and without remainders; decide whether to use multiplication or division to solve word problems; recognise tenths and equivalent fractions; find one-tenth and several tenths of multiples of 10 and begin to find one-tenth of single-digit numbers

Revise column addition for adding three 3-digit numbers; revise mental strategies for addition; subtract 3-digit numbers using written and mental methods; find change using counting up; check subtraction using addition; multiply numbers between 10 and 40 by 1-digit numbers using grid method; solve division problems just beyond the known tables facts