Hampshire Services
HIAS SCHOOL IMPROVEMENT

HIAS MOODLE+ RESOURCE

HIAS Scheme of Learning for Mathematics

Medium Term Plans for Year Three

HIAS Maths Team
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Final version

Hampshire County Council

www.hants.gov.uk

Overview

This document contains…
Long-term curriculum map for Y3
Medium-term overview plans for Y3 designed to support single age classes

Points to consider when using this resource
This medium-term plan identifies the key objectives in each unit.
For more detail and a break-down of these objectives please refer to the relevant unit plan.
Unit plans identify a learning journey, required prior knowledge, misconceptions, key vocabulary, and suggested tasks.
Appropriate models, images , concrete resources, and visual representations are an implicit element in all units.

National curriculum statutory end of year objectives are in **bold.** The content of the lessons highlighted in **red** at the end of each unit should be used to secure knowledge and understanding of the end of year objectives as required.

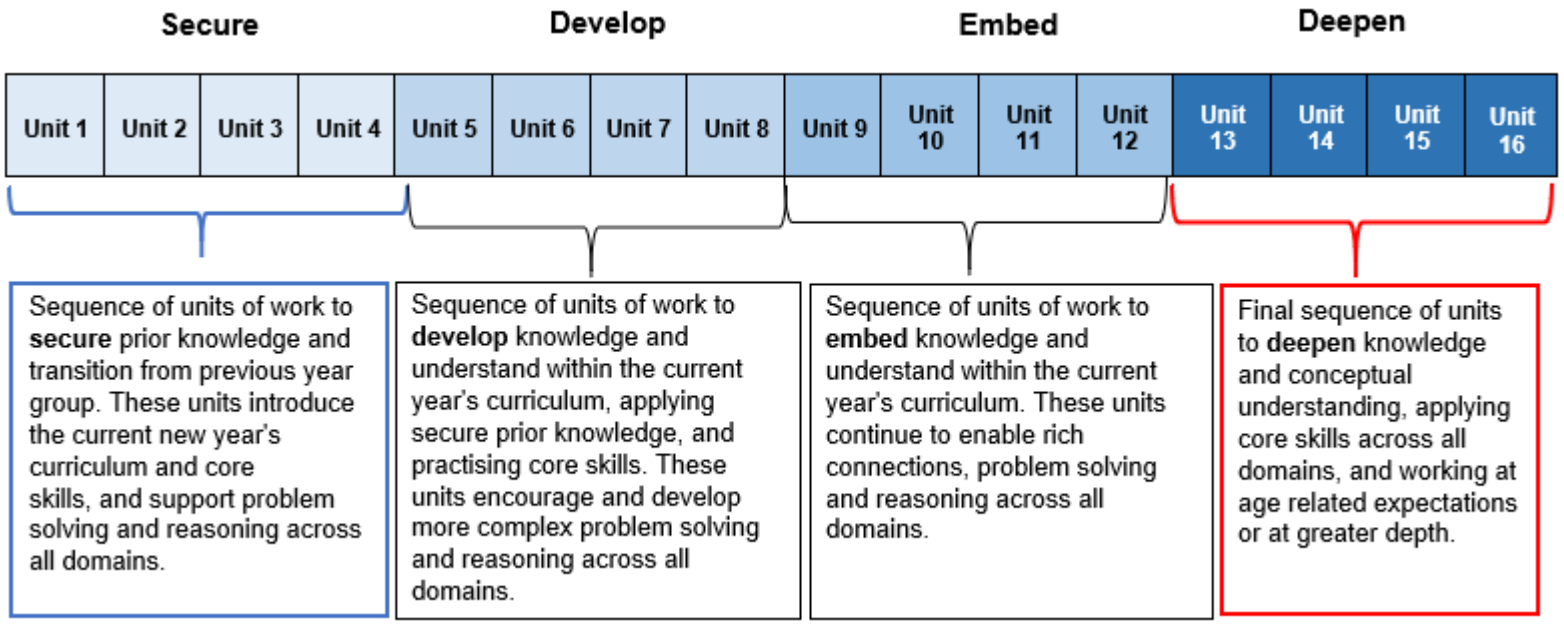
A suggested schedule for assessment is included as colour-coded bands, linked to the Hampshire Assessment Model if required.

Plans are based on a 14-week term and will need to be adjusted on a term-by-term basis

Long term curriculum map for Year 3

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	3.1 Number: Place Value Addition and Subtraction			3.2 Addition and subtraction with Measurement (Money, Length)		3.3 Multiplication and Division		3.4 Fractions and Geometry				3.5 Number: Place Value with Measurement (Length, Mass, Time)		
	Measurement: Time : Utilise everyday opportunities to tell the time from an analogue clock. Use the vocabulary of time (am/pm; morning/afternoon; noon/midnight. Know the number of days in each month, year and leap year													
Spring	3.6 Fractions and Geometry				3.7 Subtraction and addition			3.8 Measurement: Time	3.9 Multiplication and Division with Fractions (To include times tables)			3.10 Subtraction and addition with statistics Measurement (volume, capacity and scales)		
	Measurement: Time: Utilise everyday opportunities to tell the time, including on a clock face with Roman numerals. Number: Practise counting in multiples of 3, 4 and 50 , and in 100s from any number.													
Summer	3.11 Multiplication and division			3.12 Geometry		3.13 Addition and subtraction		3.14 Multiplication and Division with Fractions			3.15 Measurement (Money, Time)		3.16 Measurement (Length)	

Overview of curriculum intent



Key for assessment bands

AM1	AM2	AM3	ARE
Assessment Milestone 1	Assessment Milestone 2	Assessment Milestone 3	Assessment ARE

YEAR 3 Autumn Term

Measurement: Find everyday opportunities to tell the time from an analogue clock. Estimate and read time with increasing accuracy to the nearest minute. Use the vocabulary of time (am/pm; morning/ afternoon; noon/midnight). Know the number of days in each month, year, and leap year.

Subsequent units should continue to revisit material from previous units to deepen learning, encourage automaticity and allow rich connections to be made across the year.

A.M	Unit	Hours	Domain	Y3 objectives
	3.1	5	Number & Place Value	**Solve number problems and practical problems involving:** • **Recognise the place value of each digit in the 3-digit number (hundreds, tens and ones)** Up to 1000 • **Identify, represent, and estimate numbers using different representations particularly** including number-lines • **Find 10 or 100 more or less than a given number**
		10	Addition and Subtraction	• **Y2: Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100** • **Y2: Compare and order numbers from zero up to 100; using < , > and = signs** • **Y2: Read and write numbers to at least 100 in numerals and in words** • **Add and subtract numbers mentally including a 3-digit number and ones and a 3-digit number and hundreds.** • **Estimate the answer to a calculation and use inverse operations to check answers**

A.M	Unit	Hours	Domain	Y3 objectives
	3.2	5	Addition and subtraction with Measurement (money)	• **Add and subtract amounts of money to give change using both £ and p in practical contexts** • Use known and derived facts to work out change from £1 (100p) • Y2**: Find different combinations of coins that equal the same amounts of money** • Know 100p = £1; 2 x 50p = £1; 10 x 10p = £1; 5 x 20p = £1; 20 x 5p = £1; 50 x 2p = £1; relate to multiplication facts/ repeated addition in the context of money. • Record addition and subtraction money calculations using pictorial representations such as a number-line and bar-models
		5	Addition and subtraction with Measurement (length)	• **Measure, compare, add and subtract length (m / cm)** • **Measure the perimeter of simple 2-D shapes**
Half term				
	3.3	10	Multiplication and division	• Y2: **Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables.** • Represent multiplication and division facts as arrays using a grid (rather than dots) and a number-line • **Count in multiples of 3 and 4 from zero**. • Derive, **recall and use multiplication and division facts for 3 and 4 multiplication tables** • **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, using mental strategies** • **Solve problems including missing number problems involving multiplication and division**, recording solutions with a range of representations to include number-lines, bar-models, and arrays.

A.M	Unit	Hours	Domain	Y3 objectives
	3.4	10	Fractions	• **Recognise , find and write fractions of a discrete set of objects: unit fractions** (include 1/10) • **Compare and order fractions with the same denominators** (show on a bar-model) • **Count up and down in tenths; recognise that tenths arise from dividing and object into ten equal parts**. • Build on the idea of 'fraction families' (Y2: ½ = 2/4) developing to halves, quarters and eighths; thirds and sixths ; fifths and tenths (use a bar model or fraction wall to explore equivalence) • Count in halves, quarters and thirds on a number-line
		10	Geometry	• **Draw 2-D shapes and make 3-D shapes using modelling materials** (include simple nets) • **Identify right angles and horizontal and vertical lines**. • Sort and classify using different diagrams (Carroll diagrams, Venn diagrams, decision trees). • Sort and classify using properties such as symmetry; faces, edges and vertices.
	3.5	15	Number and PV with Measurement (length, mass, time)	• **Measure and compare lengths (mm/cm/m) and mass (g/kg)** • Know that there are 10mm in 1 cm ; 100cm in 1m; 1000mm in 1m • Derive associated facts: 50cm in ½ m, 25cm in 1/4m and 75cm in ¾ m • Know that there are 1000g = 1 kg and derive associated facts: 500g = ½ kg ; 250 g = ¼ kg ; 750 g = ¾ kg; 100g = 1/10 kg • **Count up and down in tenths; recognising that tenths arise from dividing an object into ten equal parts.** • **Recognise the place value of each digit in a 3-digit number (100s, 10s and ones)** • **Find 10 or 100 more or less than a given number • Tell and write the time from an analogue clock (12-hour).** • **Use vocabulary such as am/pm, morning, afternoon, noon and midnight.** • **Solve number and practical problems involving these ideas**
Christmas				

Year 3 Spring Term

Measurement

Find every day opportunities to tell the time, including on a clock face with Roman numerals. Practise counting in multiples of 3,4 and 50 and in 100s from any number.

A.M		Unit	Hours	Domain	Y3 objectives
		3.6	10	Fractions	• **Recognise and use unit fractions as numbers (**on a number-line) • **Recognise and show, using diagrams , equivalent fractions with small denominators** (construct 'fraction families as bar models e.g. whole / half/ quarters, eighths; whole/ thirds/ sixths etc) • **Add and subtract fractions with the same denominator within one whole e.g. 5/7 +1/7= 6/7** (represent/ interpret using bar models and number lines) • **Compare and order unit fractions** • **Solve problems that involve all of the above**
			10	Geometry	• **Recognise angles as a property of shape** • **Recognise that two right-angles make a half-turn** • **Recognise that three right-angles make three-quarters of a turn and four, a complete turn** • **Identify whether angles are greater than or less than a right angle**
		3.7	15	Subtraction and addition	• **Add and subtract numbers mentally including a 3-digit number and ones, 3-digit number and tens, 3-digit number and hundreds.** • **Add and subtract numbers with up to three digits** • **Estimate the answer to a calculation and use inverse operations to check answers** • **Compare and order numbers up to 1000** • **Read and write numbers up to 1000 in numerals and in words** • **Solve number problems and practical problems involving these ideas,** including in the context of measurement.

A.M	Unit	Hours	Domain	Y3 objectives
	3.8	5	Measurement (Time)	• **Tell and write the time from an analogue clock using 12 hour and 24-hour clocks** • **Estimate and read time with increasing accuracy to the nearest minute** • **Record and compare time in terms of seconds, minutes, hours and O'clock.** • **Know 1 hour= 60 minutes; ½ hour = 30 minutes; ¼ hour = 15 minutes; ¾ hour = 45 minutes; 60 seconds= 1 minute**
Half term				
	3.9	10	Multiplication and division	• Y2: **Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables**. • Represent multiplication and division facts as arrays using a grid (rather than dots) and a number-line • **Count in multiples of 3 ,4 and 8 from zero**. • Derive, **recall, and use multiplication and division facts for 3 , 4 and 8 multiplication tables** • **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, using mental strategies** • **Solve problems including missing number problems involving multiplication and division**, recording solutions with a range of representations to include number-lines, bar-models, and arrays.
		5	Fractions	• **Recognise , find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators** • **Recognise and use fractions as numbers; unit fractions and non-unit fractions with small denominators** (number-line)

A.M	Unit	Hours	Domain	Y3 objectives
	3.10	10	Addition and Subtraction with Statistics	• **Compare and order numbers up to 1000** • **Read and write numbers up to 1000 in numerals and words** • **Identify, represent, and estimate numbers using different representations particularly including number lines** • **Solve problems including missing number problems, using number facts, place value and more complex addition and subtraction** • **Interpret and present data using bar charts, pictograms, and tables** • **Solve one-step questions such as "How many more?" and "How many fewer?" using information presented in scaled bar charts, pictograms, and tables.**
		5	Measurement (Volume, capacity, and scales)	• **Count up and down in tenths, recognising that tenths arise from dividing an object in ten equal parts.** • **Measure, compare, add and subtract volume/capacity (l / ml)**

Year 3 Summer Term

A.M	Unit	Hours	Domain	Y3 objectives
	3.11	15	Multiplication and division	• **Recognise the place value of each digit in a 3-digit number (100s, 10s and ones)** • Use place value understanding to divide single digit and 2-digit numbers by 10. • **Recognise that tenths arise from dividing one-digit numbers or quantities by 10.** • **Count from zero in multiples of 3,4,8,50 and 100** • Y2: **Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.** • Represent multiplication and division facts as arrays using a grid (rather than dots) and a number-line • Derive, **recall and use multiplication and division facts for 3 , 4 and 8 multiplication tables** . Understand the links within and between tables facts (‘one, ten, five, derive’) • **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, using mental strategies** • **Solve problems including missing number problems involving multiplication and division**, recording solutions with a range of representations to include number-lines, bar-models, and arrays.
	3.12	10	Geometry	• Sort and classify 2-D and 3-D shapes using numbers of faces, edges and vertices. • Use the vocabulary of **parallel, perpendicular, horizontal, and vertical lines** to describe and classify 2-D shapes • **Recognise 3-D shapes in different orientations and describe them** • • Know the names of common 3-D shapes • • Sort and group according to prisms and pyramids • Construct prisms and pyramids with prepared nets, describe the shape of the faces.
Easter				

A.M	Unit	Hours	Domain	Y3 objectives
	3.13	10	Addition and subtraction	• **Add and subtract numbers mentally including a three-digit numbers and ones; tens ; hundreds** (348 + 4; 348 + 40; 348 = 400) • **Add and subtract numbers with up to three digits** using a range of written strategies as appropriate • **Estimate the answer to a calculation and use inverse operations to check answers** • **Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction** as appropriate
Half term				
	3.14	10	Multiplication and division	• **Recall and use multiplication and division facts for the 3,4,8 multiplication tables** • **Write and calculate mathematical statements for multiplication and division using the tables they know, including for two-digit numbers times one-digit numbers, using mental strategies** and written strategies as appropriate (use arrays to underpin grid method) • **Solve problems, including missing number problems, involving multiplication and division**, including integer scaling problems (e.g. four times as high) **and correspondence problems in which m objects are connected to n objects** (e.g. 3 hats and 4 coats, how many different outfits?)
		5	Fractions	• **Recognise, find, and write fractions of a discrete set of objects (unit and non-unit fractions, small denominators)** • **Recognise and use fractions as numbers (unit and non-unit fractions, small denominators)** • **Recognise and show, using diagrams, equivalent fractions with small denominators** • **Add and subtract fractions with the same denominator within one whole (e.g. 5/7 + 1/7= 6/7) • Compare and order unit fractions** • **Compare and order fractions with the same denominator**

A.M	Unit	Hours	Domain	Y3 objectives
	3.15	10	Measurement (money and time)	• **Add and subtract amounts of money to give change, using both £ and p in practical contexts.** • **Solve problems involving money and budgeting in simple contexts** • **Tell the time from an analogue clock, including using Roman numerals I to XII, 12-hour and 24-hour clocks. Use vocabulary such as a.m./p.m., midnight, and noon** • **Estimate and read the time with increasing accuracy to the nearest minute • Record and compare time in terms of seconds, minutes, hours and o'clock, comparing durations of events** • **Know the number of seconds in a minute and the number of days in each month, year and leap year.**
	3.16	10	Measurement (length) *review mass, volume and capacity if required*	• **Measure, compare, add and subtract lengths (m/cm/mm)** • **Measure and compare the perimeter of simple 2-D shapes in practical contexts** • **Solve problems involving length** • **Count up and down in tenths, recognise that tenths arise from dividing an object into 10 equal parts**
Summer				

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