Year 3 Summer Term 2021

This document could be used by all schools to support teachers in planning learning in all domains of mathematics during the summer term 2021. It is based on the Hampshire Scheme of Learning (HSL), which is available to schools subscribing to Moodle Plus (https://maths.hias.hants.gov.uk). It does not include all national curriculum statements (bold). Some additional maths team objectives included as suggestions. Teachers will need to adapt these plans based on prior planning and assessment.

The careful sequencing of domains encourages pupils to make links across domains and supports teachers' use of effective strategies supporting recall of learning, particularly spaced practice and retrieval practice, identified through cognitive psychology research (Weinstein, Sumeracki and Caviglioli, 2019). It is important that children are prompted to access their memories of prior teaching and learned knowledge during periods of remote teaching.

The number of lessons provides a suggested structure, based on hourly lessons.

It will be important for teachers to plan a sequence of a few key tasks and linked skills practise as a 'learning journey' for each unit of work. Pupils will need support to understand the problem and have examples of how to record their solutions. Further examples of similar problems to the key task, using variation techniques, will support pupils to develop confidence and independence with each task.

This document also shows where 'Ready -to- Progress' criteria (RTPs) from the DFE Teaching Mathematics: Guidance for Key Stage 1 and 2 (June 2020)* document could be used to support review, practice, and consolidation. The National Centre for the

Teaching of mathematics (NCETM) has produced resource materials to support the RTPs. Each RTP has linked resources, including power point slides, which could be used to support modelling of key mathematical concepts

*(DfE Mathematics Guidance: Key stage 1 and 2, June 2020, https://www.ncetm.org.uk/in-the-classroom/teaching-maths-through-the-pandemic/support-with-2020-dfe-guidance/

The NCETM supporting resource materials can be found at:

https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/

Points to consider when using RTP resources:

They should be used flexibly, guided by pupils' response, repeating activities where pupils lack confidence. Materials from Year 1 may support addressing gaps and misconceptions for whole class, small groups or 1:1 focused intervention. The ready-to-progress criteria are intended as goals for the end of the year.

Summer 1

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

Lessons	Domains	Objectives (HSL Unit 3.11)	DfE RTPs
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.	2MD-2

Lessons	Domains	Objectives (HSL Unit 3.12)	DfE RTPs
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.	3G-1

Lessons	Domains	Objectives (HSL Unit 3. 13)	DfE RTPs
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	3AS-2

Summer 2

Lessons	Domains	Objectives (HSL 3.14)	DfE RTPs
15	Multiplication and division (10)	• **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? 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children).	3MD-1 3F-1 3F-2 3F-3 3F-4
	Fractions (5)	• **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**	

Lessons	Domains	Objectives (HSL 3.15)	DfE RTPs
10	Measure (money (5); time (5))	• **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.**	3As-1 3AS-2 3AS-3

Lessons	Domains	Objectives (HSL 3.16)	DfE RTPs
10	Measurement (length) (*Mass , volume, capacity could also be addressed here 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**	3AS-1 3AS-3