Year 2 Spring term 2021

This document could be used by all schools to support teachers in planning for blended learning during the spring 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 sequence of domains outlined have been suggested to support a smooth transition to blended learning. 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.

The Hampshire Maths Team will provide a ‘problem of the week’ example to support this approach linked to the plan below. Teachers will need to adapt these examples to meet the needs of the range of leaners in their class.

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.

Video lessons

The NCETM, White Rose Maths and Oak Academy have key stage 1 and 2 video lessons with linked resources such as power points and follow up tasks that can support remote education.

The NCETM maths videos can be found at <https://www.ncetm.org.uk/in-the-classroom/teaching-maths-through-the-pandemic/primary-video-lessons/>

The Oak Academy maths videos can be found at <https://teachers.thenational.academy/subjects/maths>

White Rose Maths videos can be found here: <https://whiterosemaths.com/homelearning/>

Spring 1

Measurement: **Find everyday opportunities to tell the time (talk about intervals of time, 24 hours in day,60 mins in an hour, 30 mins in half an hour etc)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Lessons** | **Domains** | **Objectives (HSL Unit 2.5)** | **DfE RTPs** |
| 10 | Addition and subtraction  | * **Add and subtract numbers using concrete objects, pictorial representations** (number-lines) **and mentally, including a two-digit number and ones and a two-digit number and tens.**
* **Add three one-digit numbers**
* Use partitions of 5,6,7,8,9 to bridge through 10 when adding and subtracting. Record on number-lines and as a number sentence.
* **Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.**
 | 1NF – 12NF – 12AS – 12AS - 3 |
| **5** | Measurement: Time (5)Mass (5) | * **Tell and write the time to five minutes including quarter past / to the hour and draw the hands on a clock face to show these times.**
* **Know how many minutes there are in an hour**, half an hour and quarter of an hour
* **Know the number of hours in a day**
* **Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales**
 |  |
| **Video Resources** |
| Oak AcademyUnit 2: Addition and subtraction of 2- digit numbers <https://teachers.thenational.academy/units/addition-and-subtraction-of-2-digit-numbers-f192>Unit 7: Time <https://teachers.thenational.academy/units/time-ea81>White Rose<https://whiterosemaths.com/homelearning/year-2/> |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lessons** | **Domains** | **Objectives (HSL Unit 2.6)** | **DfE RTPs** |
| 5 | Fractions and geometry  | * **Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line**
* **Identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid.**
* **Identify and describe the properties of 3-D shapes, including the number of faces, edges and vertices.**
* **Order and arrange combinations of mathematical objects in patterns**
* **Recognise, find, name and write fractions as equal parts of a shape** (link to symmetry and folding). Focus on ½, ¼ , 2/4 = ½. Introduce 1/3 and ¾ of a shape.
 | 1G – 12G-1 |
| 10 | Multiplication and division | * **Count reliably in 2s, 5s and 10s** **from zero, forward or backward**. Show on a number-line.
* **Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odds and evens.**
* **Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods.**
* **Use the multiplication (x) and equals (=) signs to show solutions alongside other representations e.g. arrays and number-lines.**
* Rehearse together and use the language of ‘How many groups of 2 (5, 10) are there?’ ~ ‘There are 3 groups of 2 (5,10)’
* **Share objects equally by counting how many in each group** and record pictorially (arrays). Recognise the link with multiplication facts represented as arrays. Develop the concept of sharing and grouping into different sized groups (not just 2s, 5s and 10s)
 | 1NF – 22MD - 1 |
| **Video Resources** |
| Oak AcademyUnit 8: Fractions <https://teachers.thenational.academy/units/fractions-43cf>Unit 11: Faces, shapes and patterns <https://teachers.thenational.academy/units/faces-shapes-and-patterns-lines-and-turns-1338>White Rose maths <https://whiterosemaths.com/homelearning/year-2/> |

Spring 2

|  |  |  |  |
| --- | --- | --- | --- |
| **Lessons** | **Domains** | **Objectives (HSL Unit 2.7)** | **DfE RTPs** |
| 10 | NPV/ Subtraction and addition | * **Count in 3s** from zero to 30, modelling on a number-line
* **Read and write numbers in numerals and in words to at least 100.**
* **Derive and use related facts up to 100. E.g 3 + 7 and 30 + 70**
* Order numbers up to 100 starting from any number crossing the tens boundaries.
* **Count back from any given number** up to 100.
* **Given a number, identify one more and one less**
* Add multiples of 10 to any number using concrete resources and a number-line
* **Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems** Revise and use partitions of all numbers up to 20, recalling and deriving associated subtraction facts to solve problems. Represent using part-whole diagrams such as a bar model.
* Use partitioning and part-whole diagrams to **read, write and interpret mathematical statements** to 20 when solving problems.
* Develop children’s fluency with using known or derived number facts through the use of multi-representations (concrete and pictorial) **Solve one-step problems that involve addition and subtraction to 20,** using **concrete objects and pictorial representations.**
 | 1NF – 12AS - 3 |
| 5 | Statistics | * **Interpret and construct simple tally chart, block diagrams and tables.**

**Ask and answer questions about totalling and comparing categorical data.** |  |
| **Video Resources** |
| Oak AcademyUnit 1: Number within 100 <https://teachers.thenational.academy/units/numbers-within-100-9ce3>Unit 2: Addition and subtraction of 2-digit numbers <https://teachers.thenational.academy/units/addition-and-subtraction-of-2-digit-numbers-f192>Unit 5: Graphs <https://teachers.thenational.academy/units/graphs-a428>White Rose Maths<https://whiterosemaths.com/homelearning/year-2/> |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lessons** | **Domains** | **Objectives (HSL 2.8)** | **DfE RTPs** |
| 5 | Addition and subtraction/ money | * **Solve simple problems in practical context involving addition and subtraction of money of the same unit, including giving change.**
* Count in 2ps(5ps, 10ps, 20ps and 50ps) to £1, modelling on a number-line
* Know 100p = £1, 2x 50ps = £1, 10 x 10ps = £1 , 5 x 20p = £1. Relate to tables facts in the context of money.
* **Find different combinations of coins that equal the same amounts of money.**
* Add and subtract 10p(s) to and from an amount of money using 10p and 1p coins and a number-line.
 | 1NF – 22AS - 3 |
| 5 | Fractions | * **Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a quantity**
* **Write simple fractions e.g ½ of 6 = 3 and recognise the equivalence of 2/4.**
 |  |
| **Video Resources** |
| Oak AcademyUnit 10: Money <https://teachers.thenational.academy/units/money-4a71>Unit 8: Fractions <https://teachers.thenational.academy/units/fractions-43cf>White Rose Maths <https://whiterosemaths.com/homelearning/year-2/> |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lessons** | **Domains** | **Objectives (HSL 2.9)** | **DfE RTPs** |
| 5 | Measurement/ geometry   | * **Compare and sort common 2-D and 3-D shapes and everyday objects**
* **Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise).**
* **Choose and use appropriate standard units to estimate and measure length / height in any direction (m / cm); mass (kg/g); temperature (°C); capacity (l/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.**
* **Compare and order lengths, mass, volume/capacity and record the results using more (>) than, less than (<) and equals (=).**
 | 2G – 1 |
| 5 | Addition and subtraction /  | * **Derive and use related facts up to 100**
* **Add and subtract numbers using concrete objects, pictorial representations and mentally including two 2-digit numbers**
* **Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.**
 | 2AS – 12AS – 22AS – 32AS - 4 |
| **Video Resources** |
| Oak AcademyUnit 13: Measures -capacity and volume <https://teachers.thenational.academy/units/measures-capacity-and-volume-86a2>Unit 14: Measures -mass <https://teachers.thenational.academy/units/measures-mass-22f2>Unit 3: Addition and subtraction word problems <https://teachers.thenational.academy/units/addition-and-subtraction-word-problems-cefb>White Rose Maths<https://whiterosemaths.com/homelearning/year-2> |