# Curriculum Prioritisation

North-East Hants and Surrey Maths Hub
Summer Conference 2021

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MATHSHUBS

# An opportunity for change?

…lost learning

…catch-up

…blighted by the pandemic

…never be able to fully recover

# March 2021

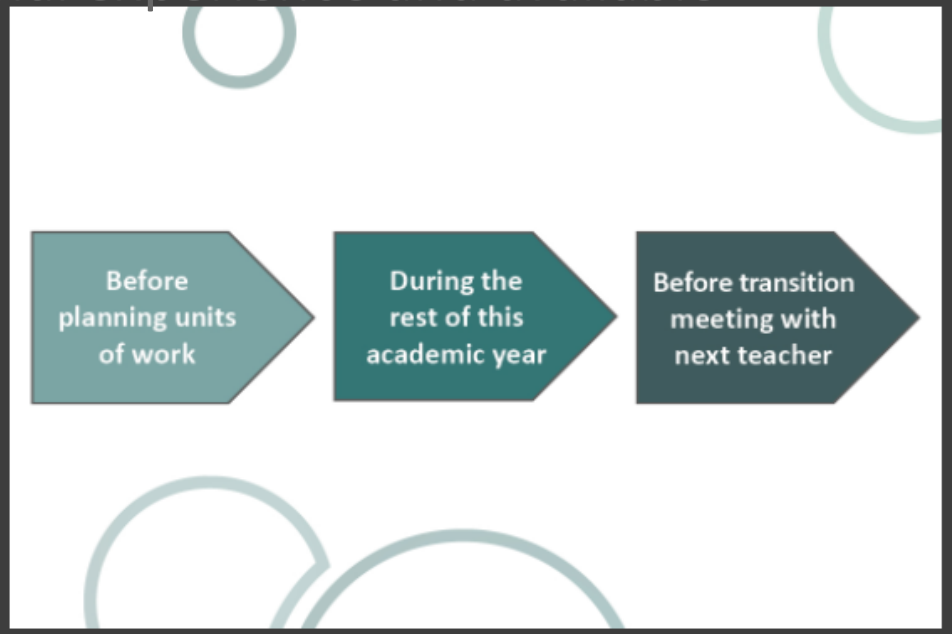
Support for primary teachers > Curriculum prioritisation in primary maths

- Evidence-informed practice requires teachers and school leaders to make expert decisions based on their local context, professional experience and available research evidence.

COVID RECOVERY

# CURRICULUM PRIORITISATION IN PRIMARY MATHS

What maths to teach for the rest of 2020/21




Blog

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Department for Education

# Teaching a broad and balanced curriculum for education recovery

July 2021

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/999043/teaching_a_broad_and_balanced_curriculum_for_education_recovery.pdf

# Guiding Principles

Taking the planned, sequenced curriculum as a starting point, you should prioritise teaching missed content that will allow pupils to make sense of later work in the curriculum. This includes key knowledge, skills, vocabulary, concepts, and the links between concepts.

Curriculum adjustments should be informed by:

- an understanding of the critical content for progression in each subject
- what pupils do and do not know.

Questioning and discussion will reveal pupils' gaps, misconceptions and insecure knowledge, so that effective support can be put in place.



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# An understanding of the critical content for progression in each subject

How do all your teachers know what this critical content for progression is?

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# Assessment

Focused assessments which target specific components of knowledge or skills precisely are likely to be more effective. For example, the marks pupils achieve on a past paper that covers a wide range of content will not allow you easily to infer what the precise knowledge gaps are.

Identifying these gaps and teaching the content pupils have missed are essential.



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# Assessment

A low-stakes test or quiz, on the other hand, focused on the salient aspects of a specific topic, will very quickly tell you who has learnt it, and how well. In some subjects (such as mathematics, languages and for phonics), gaps in knowledge are likely to present serious difficulties for pupils in mastering the next stage of what they need to know.

# Making connections…
# The answer is just the beginning

15 – 9 =

Possible strategies:

a) I know the answer is 6.
b) I know 10 subtract 9 is 1 so 15 – 9 = 1 + 5
c) I know 15 – 10 = 5 so 15 – 9 = 6
d) Counts back using fingers to keep track 15,14,13,12,11,10, 9, 8, 7, 6
e) Draws 15 marks and crosses off 9 of them
f) Uses a vertical algorithm
g) Counts up from 9 to 15

# Mathematics

When deciding what to teach to support education recovery most effectively, leaders can help all pupils by focusing on making sure they are fluent and confident in the facts and methods that they most frequently need in order to be successful with further study. In the context of missed education, it remains crucial to take the time to practise, rather than moving through curriculum content too quickly. What pupils already know is key.

**Progressing to teaching new content when pupils are not secure with earlier content limits their chances of making good progress later.** The sequence of teaching mathematical content is also very important: gaps need to be filled before new content is taught.



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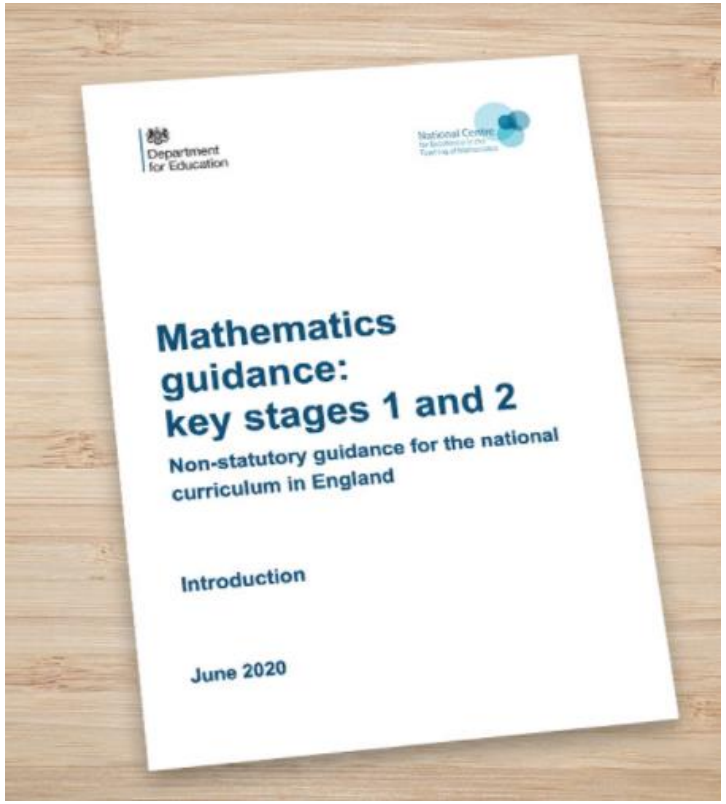
# Primary Mathematics Guidance and the Primary PD materials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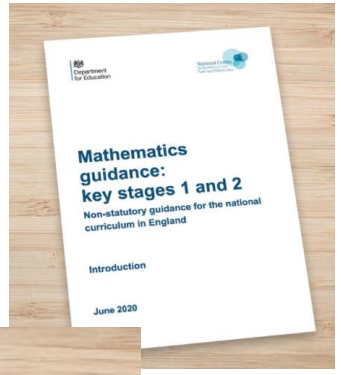
# Primary Mathematics Guidance Outline

## Primary PD Materials

## Mathematics guidance at Key Stages 1 and 2




This publication aims to:

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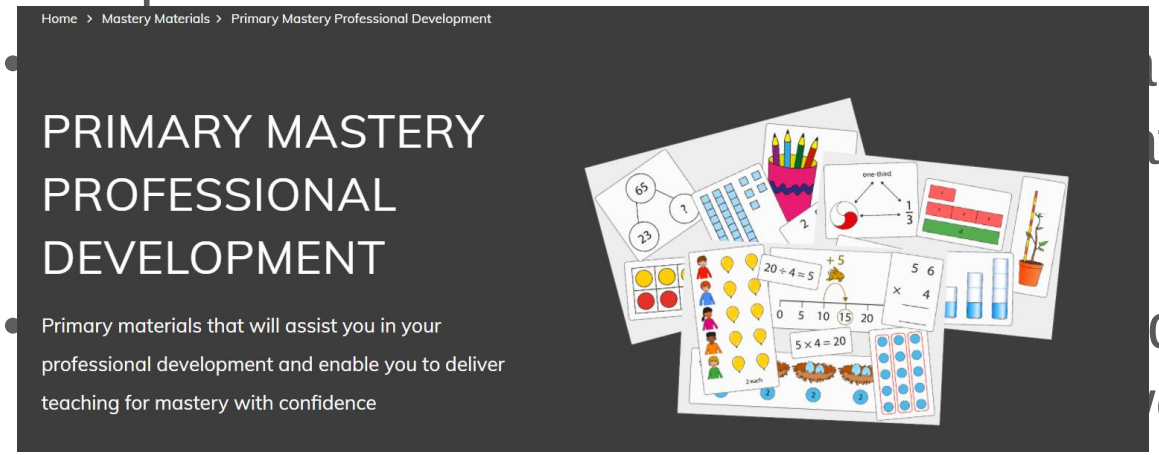


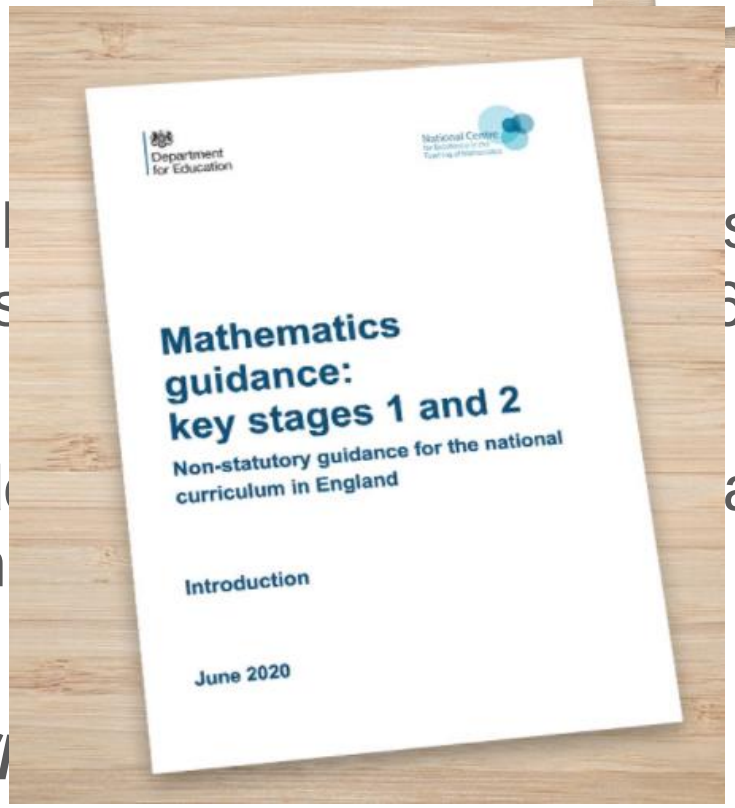


*…supports curriculum prior*

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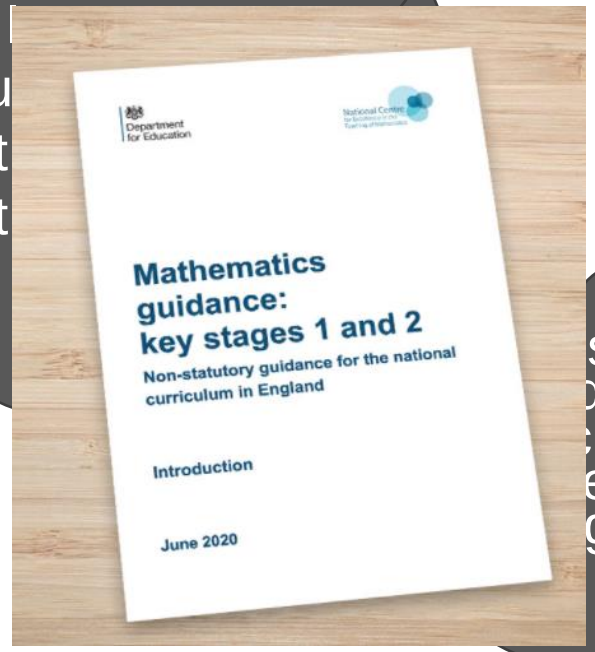
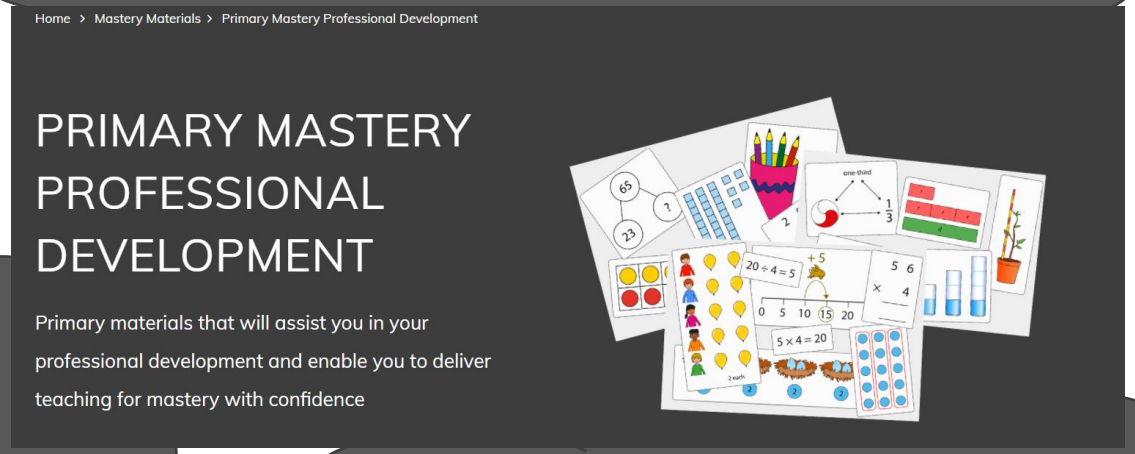
Which representation should support pu the struct mat




s and dures children e with in group?

What language should we be using?
Is there consistency across school?




How do I know if my pupils are secure with the maths that I have taught them?

*her subject knowledge*

What connections should we be making?

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# Coherence and prioritisation

## Long-term planning

Do the ready-to-progress criteria drive the sequencing of the learning?

If they do, does the group placement of some of the maths differ from your current curriculum?

## Medium-term planning

Do you intend to allocate more time to concepts which support pupils to make secure connections?

## Short term-planning

Do your teachers plan collaboratively?

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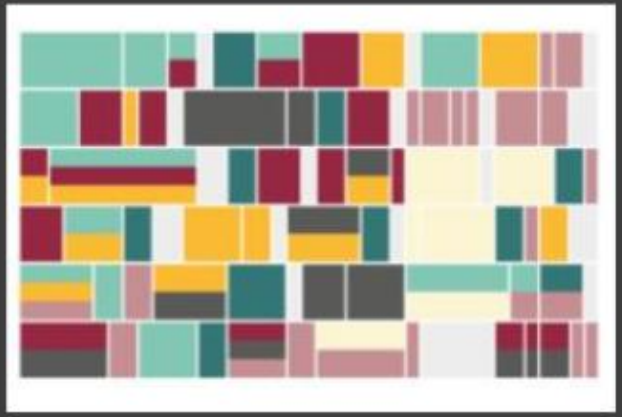
# CURRICULUM PRIORITISATION IN PRIMARY MATHS

A term-by-term framework to support planning and teaching in 2021/22



- Number and place value
- Number facts
- Addition and subtraction
- Multiplication and division
- Fractions
- Geometry
- Other

This resource provides coherent curriculum sequencing for the primary maths curriculum. It draws together the DfE guidance on curriculum prioritisation, with the high quality professional development and classroom resources provided by the NCETM Primary Mastery PD materials.

For each of Years 1-6, there is a mapping of the year's curriculum into around a dozen units. Each unit has a downloadable PowerPoint slidedeck, with sequenced classroom slides, carrying comprehensive links to pages in the DfE Primary Mathematics Guidance, and to associated pedagogy and professional development in the NCETM Primary Mastery PD materials.

Phase

PRIMARY KS1 KS2

Year 1 curriculum mapping

Year 2 curriculum mapping

Year 3 curriculum mapping

Year 4 curriculum mapping

Year 5 curriculum mapping

Year 6 curriculum mapping

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# Curriculum coherence

| | Unit | Unit name |
|---|---|---|
| Autumn 1 | 1 | Adding and subtracting across 10 |
| | 2 | Numbers to 1,000 |
| Autumn 2 | | |
| Spring 1 | 3 | Right angles |
| | 4 | Manipulating the additive relationship and securing mental calculation |
| Spring 2 | 5 | Column addition |
| | 6 | 2, 4, 8 times tables |
| | 7 | Column subtraction |
| Summer 1 | 8 | Unit fractions |
| Summer 2 | 9 | Non-unit fractions |
| | 10 | Parallel and perpendicular sides in polygons |
| | 11 | Time |

- Number and place value
- Number facts
- Addition and subtraction
- Multiplication and division
- Fractions
- Geometry
- Other

The sequence of teaching mathematical content is also very important: gaps need to be filled before new content is taught.

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# Year 2

| | Unit | Unit name |
|---|---|---|
| Autumn 1 | 1 | Numbers 10 to 100 |
| | 2 | Calculations within 20 |
| Autumn 2 | 3 | Fluently add and subtract within 10 |
| | 4 | Addition and subtraction of two-digit numbers (1) |
| | 5 | Introduction to multiplication |
| Spring 1 | 6 | Introduction to division structures |
| Spring 2 | 7 | Shape |
| | 8 | Addition and subtraction of two-digit numbers (2) |
| Summer 1 | 9 | Money |
| | 10 | Fractions |
| | 11 | Time |
| | 12 | Position and direction |
| Summer 2 | 13 | Multiplication and division – doubling, halving, quotitive and partitive division |
| | 14 | Sense of measure – capacity, volume, mass |

- Number and place value
- Number facts
- Addition and subtraction
- Multiplication and division
- Fractions
- Geometry
- Other

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# Year 4

| | Unit | Unit name |
|---|---|---|
| Autumn 1 | 1 | Review of column addition and subtraction |
| | 2 | Numbers to 10,000 |
| Autumn 2 | 3 | Perimeter |
| | 4 | 3, 6, 9 times tables |
| Spring 1 | 5 | 7 times table and patterns |
| Spring 2 | 6 | Understanding and manipulating multiplicative relationships |
| | 7 | Coordinates |
| Summer 1 | 8 | Review of fractions |
| | 9 | Fractions greater than 1 |
| Summer 2 | 10 | Symmetry in 2D shapes |
| | 11 | Time |
| | 12 | Division with remainders |

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# Year 3

| | Unit | Unit name |
|---|---|---|
| Autumn 1 | 1 | Adding and subtracting across 10 |
| | 2 | Numbers to 1,000 |
| Autumn 2 | | |
| Spring 1 | 3 | Right angles |
| | 4 | Manipulating the additive relationship and securing mental calculation |
| Spring 2 | 5 | Column addition |
| | 6 | 2, 4, 8 times tables |
| | 7 | Column subtraction |
| Summer 1 | 8 | Unit fractions |
| Summer 2 | 9 | Non-unit fractions |
| | 10 | Parallel and perpendicular sides in polygons |
| | 11 | Time |

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# YEAR 2 CURRICULUM MAP

The whole of Year 2, split into units

| | Autumn 1 | | Autumn 2 | | Spring 1 | | Spring 2 | | Summ |
|---|---|---|---|---|---|---|---|---|---|
| Unit | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 10 |

The graphic above shows the year mapped into different areas of the curriculun
time that should be spent on each unit. Spare weeks are included in each term t
across schools and classes. Click on the image to download a more detailed PD

For the detail of each unit, click on the relevant unit below.

## UNITS

### Numbers 10 to 100

Unit 1 – x weeks



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# NUMBERS 10 TO 100

Unit 1 – x weeks

The PowerPoint file contains slides you can use in the classroom to support each of the learning outcomes for this unit, listed below.

The slides are comprehensively linked to associated pedagogical guidance in the **NCETM Primary Mastery Professional Development materials**. There are also links to the ready-to-progress criteria detailed in the **DfE Primary Mathematics Guidance 2020**.

Learning outcomes PowerPoint

All Year 2 Autumn files - coming soon

Phase

PRIMARY KS1 YEAR 2

## Learning outcomes

| # | Title |
|---|---|
| 1 | Pupils explain that one ten is equivalent to ten ones |
| 2 | Pupils represent multiples of ten using their numerals |
| 3 | Pupils represent multiples of ten using their numerals and names |
| 4 | Pupils represent multiples of ten in an expression or an equation |
| 5 | Pupils estimate the position of multiples of ten on a 0-100 number line |
| 6 | Pupils explain what happens when you add and subtract ten to a multiple of ten |
| 7 | Pupils use knowledge of tens and unitising to add and subtract multiples of ten |
| 8 | Pupils add and subtract multiples of ten |
| 9 | Pupils explore the counting sequence for counting to 100 and beyond |
| 10 | Pupils count a large group of objects by counting groups of tens and the extra ones |
| 11 | Pupils count a large group of objects by using knowledge of unitising by counting tens and ones |
| 12 | Pupils represent a number from 20-99 in different ways |
| 13 | Pupils explain and mark the position of numbers 20-99 on a number line |
| 14 | Pupils explain that numbers 20-99 can be represented as a length |
| 15 | Pupils compare two, two digit numbers |
| 16 | Pupils partition a two digit number into tens and ones |
| 17 | Pupils add two, two digit numbers by partitioning into tens and ones |

Is there anything wrong with this page?

Is this page useful? Yes/No
Was this written in plain English? Yes/No

# Example unit 1

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# Curriculum prioritisation

Progression of concepts across the school – DfE guidance

Teacher subject knowledge – PD materials

Improved teaching and learning – ongoing reflection and shaping of practice

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# Thank you

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