

HIAS MOODLE+ RESOURCE

Year 3 Unit Plan 3.1

Autumn Term

HIAS Maths Team
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Final Version

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Overview

In this document

Year 3 Unit Plans linked to Medium Term Overview

Points to consider when using this resource

These unit plans provide an example of how medium term planning could be developed into units of work. These unit plans will need to be adapted to meet the needs of pupils. The unit plan provides an outline of a possible learning journey with suggestions of types of tasks that could be used. They also identify key prior learning, some common misconceptions and an indication of number fluency pupils need to develop towards automaticity. It is assumed that pupils will have access to appropriate concrete resources to support conceptual understanding and that teachers will use a CPA (concrete, pictorial and abstract) approach to teaching.

Year 3 Unit 3.1 Plan – Number and place value and addition and subtraction

This unit is about developing understanding of number and place value and addition and subtraction. It is important to ensure that pupils have deep understanding of 2-digit numbers and are able to represent numbers using concrete resources and a range of mathematical diagrams and representations. The number line is a key model and image in securing pupils' conceptual understanding of comparing and ordering numbers and to support mental calculation for addition and subtraction. Revisiting key facts about 10 and making links to related facts for 100. Knowing key facts supports pupils' accuracy when estimating and checking reasonableness of answers.

Session	Unit Objectives	Types of task
1-5	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 • Y2: Compare and order numbers from zero up to 100; using < , > and = signs	Provide practical experiences of using a range of concrete resources to model 2 digit numbers e.g. use of Diennes, place value counters, arrow cards. Combine this with recording the number using number sentences, missing box number sentences, part whole, Gattegno chart, place value grid alongside numbers. Revise composition of 100: Addition/subtraction facts using multiples of 10, related to number bonds of 10, making links to 100 e.g. 9+1; 90+10 Partition numbers flexibly e.g. 86 = 80+6, 70+16 Make 2 digit numbers using Diennes and physically add or subtract 10s. Then make 3 digit numbers and physically add or subtract 10s / 100s. Use a range of number lines (appropriately pitched) to encourage pupils to position and compare numbers and find 10 or 100 more or less than a given number, relate to using Diennes by adding 10 or 100 more or less. Record comparisons of pairs of numbers using < , > = signs. Key facts about 100 and 1000 using bar model: Number facts documents (Y2) (1/2, 1/4, 2/4, 3/4) of 100 – use of bar model – 100 as a whole compared to 1000.
6-15	• Y2: Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Problem solving Identify a few key tasks involving addition and subtraction in one step problems in context – adapt numbers to reinforce the key concepts and facts from place value work.

	• 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	When solving problems, encourage pupils to estimate answers, show solutions using a range of representations including: bar model, equation, number line, part-part whole, checking for reasonableness of answers. Mental strategies Use unstructured number lines to record mental calculations discussing appropriate strategies depending on the number involved.
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Check and refresh	Watch out for	Building fluency
• Counting forwards and backwards in multiples of 10 crossing hundreds boundary • Check place value knowledge of 2 digit numbers	• Zero as a place holder • Reading numbers fluently	• Recall and use key facts to 100 (Y2) • Compare and order numbers from zero up to 100 using < > and = signs • Know and use families of facts (add/sub) as related facts, inverse, commutativity

HIAS Maths Team

Jo Lees – Area Inspector - Mathematics

Email: jo.lees@hants.gov.uk

Tel: 02380 816139

Jacqui Clifft – Area Inspector - Mathematics

Email: jacqui.clifft@hants.gov.uk

Tel: 02380 816139

Jenny Burn – Inspector/Adviser – Mathematics

Email: jenny.burn@hants.gov.uk

Tel: 01962 876207

Tessa Ingrey – Teaching & Learning Adviser – Mathematics (P/T)

Email: tessa.ingrey@hants.gov.uk

Tel: 01962 876207

Natalie Ivey – Inspector/Adviser – Mathematics (P/T)

Email: natalie.ivey@hants.gov.uk

Tel: 01962 876207

Dave Parnell – Teaching & Learning Adviser – Mathematics

Email: dave.parnell@hants.gov.uk

Tel: 01962 876207

Rebecca Vickers – Teaching & Learning Adviser – Mathematics

Email: rebecca.vickers@hants.gov.uk

Tel: 01962 876207

Brenda Robertson – Inspector/Adviser – Mathematics

Email: brenda.robertson2@hants.gov.uk

Tel: 01962 876207

Kate Spencer – Teaching & Learning Adviser – Mathematics

Email: kathryn.spencer@hants.gov.uk

Tel: 01962 876207

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