Mathematics Guidance
Mixed Aged Planning in KS2

Overview and Long Term Plans

North Yorkshire County Council

MathsHUBS Archimedes NE

Introduction and Rationale

The project was borne out of the need in North Yorkshire, to organise the maths curriculum into areas which could be taught to mixed age classes. North Yorkshire has many small schools which lend themselves to mixed aged classes e.g. Y3 - Y5 or even whole key stages.

The project wanted to collate areas of similar content, to facilitate class teachers to teach multiple year groups with each year group accessing their curriculum entitlement.

These planning documents have been produced to provide an overview of learning objectives, together with associated exemplification for the three aims of the mathematics national curriculum, to enable mixed age teaching and learning of mathematics.

Long Term Planning and structure of units:

Although you may decide to block topics to teach in one go entirely, within this document are two suggested alternate models for long term planning of mathematics linked to the units. Timings for each unit are suggestions only. The unit can easily be adapted for any combination of mixed age classes within KS2.

There are 7 standalone units linked to the National Curriculum. The 8th Unit of algebra can be taught separately or alongside as suggested in the options included within this document. The Units are:

Number and Place Value	NPV	(4 weeks)
Addition and Subtraction	NAS	(4 weeks)
Multiplication and Division	NMD	(5 weeks)
Fractions, Decimals and Percentages	NFD	(7 weeks)
Algebra	ALG	(1 week – Y6 only)
Geometry	GEO	(6 weeks)
Measure	MEA	(7 weeks)
Statistics	STC	(3 weeks)

The structure of each Unit is broken down in order to link similar objectives across year 3-6. In addition there is exemplification and reasoning guidance from the NCETM, links to the schemes of work written by the White Rose Maths Hub and links to NRich problems.

Contributors and Acknowledgements

The working party consisted of four teachers all working with mixed age classes and a local Authority mathematics adviser. The group were;

Jo Fitton	Masham CE (VA) Primary School
Fiona Motteu	Danby C of E Primary School
Gordon Stainsby	Reeth and Gunnerside Primary Schools
Jill Wells	Sinnington Primary School
Julie Pattison	0-19 mathematics adviser, North Yorkshire County Council

We would also like to thank Archimedes Maths Hub for their on-going support of this project and future work and the White Rose Maths Hub for granting us permission to incorporate their primary schemes of work within our project

Future work and updates

There are future plans to produce similar plans for reception and KS1. An initial draft will be available soon. Updates will be made available once the resources have been fully trialled. Feedback is welcome. Please email Julie.pattison@northyorks.gov.uk with any feedback or enquiries.

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Long Term planning

Option 1

<table>
<tr><th></th><th>Week 1</th><th>Week 2</th><th>Week 3</th><th>Week 4</th><th>Week 5</th><th>Week 6</th><th>Week 7</th><th>Week 8</th><th>Week 9</th><th>Week 10</th><th>Week 11</th><th>Week 12</th></tr>
<tr><td>Autumn</td><td colspan="2">Number and Place Value
NPV</td><td colspan="2">Addition and Subtraction
NAS</td><td colspan="3">Geometry
GEO</td><td colspan="2">Multiplication and Division
NMD</td><td colspan="3">Fractions decimals and Percentage
NFD</td></tr>
<tr><td>Spring</td><td colspan="3">Measures
MEA</td><td colspan="2">Number and Place Value
NPV

Algebra (Y6 only)
ALG</td><td colspan="2">Addition and Subtraction
NAS</td><td colspan="2">Statistics
STC</td><td colspan="3">Multiplication and Division
NMD</td></tr>
<tr><td>Summer</td><td colspan="4">Fractions decimals and Percentage
NFD</td><td colspan="3">Geometry
GEO</td><td>Statistics
STC</td><td colspan="4">Measures
MEA</td></tr>
</table>

Masham C.E. School

Reeth Community & Gunnerside Methodist Primary School

DANBY C of E SCHOOL

Sinnington

Long Term planning

Option 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	NPV Number and Place Value		NAS – Addition only				NAS – Subtraction only				NMD – Multiplication only	
			NFD Fractions, decimals and Percentages				MEA Measures				GEO Geometry	
Spring	NMD – Multiplication only		NMD – Division only				ALG – Y6 Algebra		NAS – Addition only			
	GEO Geometry		STC Statistics				NPV Number and Place Value		NFD Fractions, decimals and Percentages			
Summer	NAS – Subtraction only				NMD – Multiplication only				NMD – Division only			
	MEA Measures				GEO Geometry				STC Statistics			