Mathematics Guidance
Mixed Aged Planning
Reception – Year 3

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.

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 four 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 reception to Year 3.

There are 7 standalone units linked to the National Curriculum. The Units are:

Number and Place Value	NPV	(7 weeks)
Addition and Subtraction	NAS	(7 weeks)
Multiplication and Division	NMD	(3 weeks)
Fractions, Decimals and Percentages	NFD	(4 weeks)
Geometry	GEO	(4 weeks)
Measure	MEA	(9 weeks)
Statistics	STC	(2 weeks)

The structure of each Unit is broken down in order to link similar objectives across reception to year 3. There is unlikely to be an exact match across all year groups so teachers of mixed age classes will have to use their discretion in choosing an order of teaching that will work across all year groups. 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 activities.

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, the White Rose Maths Hub for granting us permission to incorporate their primary schemes of work within our project and NRich for allowing us to include links to their activities.

Future work and updates

This is intended to be the final version of these plans; however updates will be made if any errors are found. Feedback is welcome. Please email Julie.pattison@northyorks.gov.uk with any feedback or enquiries.

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Long Term planning

Option 1

	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	Number and Place Value NPV			Addition and Subtraction NAS			Measures MEA		Multiplication and Division NMD		Geometry GEO	
Spring	Fractions decimals and Percentage NFD		Measures MEA		Addition and Subtraction NAS		Number and Place Value NPV			Measures MEA		Statistics STC
Summer	Number and Place Value NPV	Addition and Subtraction NAS		Fractions decimals and Percentage NFD		Multiplication and Division NMD	Geometry GEO			Measures MEA		Statistics STC

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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	Number and Place Value NPV							Addition and Subtraction NAS				
Spring	Addition and Subtraction NAS		Measures MEA			Multiplication and Division NMD			Fractions decimals and Percentage NFD			
Summer	Statistics STC		Geometry GEO					Measures MEA				

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Long Term planning

Option 3 (3 day (top) and 2 day (bottom) teaching split)

<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 rowspan="2">Autumn</td><td colspan="5">NPV – Number and Place Value</td><td colspan="3">NAS – Addition</td><td colspan="3">NAS – Subtraction</td><td rowspan="2">STC - Statistics</td></tr>
<tr><td colspan="5">GEO - Geometry</td><td colspan="3">MEA - Time</td><td colspan="3">MEA - Money</td></tr>
<tr><td rowspan="2">Spring</td><td colspan="3">MEA - Measure</td><td colspan="3">NFD – Fractions, Decimals and Percentages</td><td colspan="5">NPV – Number and Place Value</td><td rowspan="2">STC - Statistics</td></tr>
<tr><td colspan="3">NMD – Multiplication</td><td colspan="3">NMD - Division</td><td colspan="5">GEO - Geometry</td></tr>
<tr><td rowspan="2">Summer</td><td colspan="3">NAS - Addition</td><td colspan="3">NAS – Subtraction</td><td colspan="3">MEA - Measure</td><td colspan="3">NFD – Fractions, Decimals and Percentages</td></tr>
<tr><td colspan="3">MEA - Time</td><td colspan="3">MEA - Money</td><td colspan="3">NMD – Multiplication</td><td colspan="3">NMD - Division</td></tr>
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Long Term planning

Option 4 (Combined Units)

	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 GEO - Geometry						NAS – Addition MEA - time			NAS – Subtraction MEA – Measures		
Spring	NAS – Subtraction MEA – Measures		NMD – Multiplication MEA – Money STC – Statistics				NMD – Division NFD – Fractions, Decimals and Percentages			NPV – Number and Place Value GEO - Geometry		
Summer	NAS – Addition MEA - Time			NAS – Subtraction MEA – Measures			NMD – Multiplication MEA – Money STC – Statistics			NMD – Division NFD – Fractions, Decimals and Percentages		

Please note the weighting of each unit are not necessarily equal. Please refer to the long term planning and structure of units at the start of this document.

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