

Mathematics Guidance

Mixed Aged Planning in KS2



Overview and Long Term Plans

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. Objectives have been given a 'step number'. This is the suggested order of teaching by White Rose. 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

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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.



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		Geometry GEO			Multiplication and Division NMD		Fractions decimals and Percentage NFD		
Spring	Measures MEA			Number and Place Value NPV		Addition and Subtraction NAS		Statistics STC		Multiplication and Division NMD		
				Algebra (Y6 only) ALG								
Summer	Fractions decimals and Percentage NFD				Geometry GEO			Statistics STC	Measures MEA			



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			

