

Introduction

In this document you will find guidance on planning for a Year 2 and Year 3 mixed-age class

- Planning considerations for Year 2 and Year 3 mixed-age teaching.
- Year 2 and Year 3 mixed-age long-term planning guidance.
- Year 2 and Year 3 mixed-age long-term plan, with Year 3 focus.

How you teach a mixed-age class depends on factors such as whether you have any additional teaching support for the maths lesson, and whether you have flexibility to organize your own day and timetable. Key considerations that you may wish to think through when planning and teaching a mixed-age class using Numicon are provided in this guidance.

A Year 2 and Year 3 mixed-age long-term plan (MALTP2) is supplied.

We understand that each class is different, so use your professional judgement to adapt the plans. A flexible approach to each week and unit will help you to best meet the needs of your class.

Year 1 - Learn from Firm Foundations

Year 2 - Learn from Numicon 1

Year 3 - Learn from Numicon 2

These books cover Phase 1 of the new Curriculum

Planning considerations for Year 2 and Year 3 mixed-age teaching

Teaching without additional teaching support: some organizational possibilities

- Start your teaching based on the Year 3 objectives for the whole class when teaching units with similar objectives. Organizing the class into mixed-attainment groupings allows Year 3 children to recap and consolidate their own understanding of their previous learning, whilst also supporting the Year 2 children in their understanding of new learning. As the lesson/ week progresses, you may wish to incorporate more practice and consolidation time so that when Year 2 children are working independently, you work with the Year 3 children on Year 3 objectives using either guided group work, work with individuals or whole-class teaching.
- An example of a teaching week could look like this:

Teaching sequence	Day 1	Day 2	Day 3	Day 4	Day 5
teaching	Whole-class Year 2 NC objective teaching input.	Whole-class Year 2 NC objective teaching input. Extension questions for Year 3 within whole-class input.	Work. Year 3 work	Extension questions for Year 3 within	Year 3 only guided group work. Year 2 work independently on task set on Day 4.
Year 2 children	Mixed-age Year 2/3 groupings. Teacher circulates whole class – asks	without teaching support.	Independent work without teaching support.	Teacher input with Year 2. Includes setting up a learning task that Year 2 will continue with independently on Day 5.	Mixed-age Year 2/3 groupings. Teacher circulates whole class – asks
Year 3 children	Year 3 extension questions during small-group discussions.	Teacher input with Year 3. Includes setting up a learning task that Year 3 will continue with independently on Day 3.	Teacher guided input.	Independent work without teaching support.	extension/ support questions during small-group discussions.

- Organize the maths lesson to allow for two entirely separate maths teaching inputs. This
 organization allows you to split your class and your input into Year 2 teaching objectives and
 Year 3 teaching objectives. Careful consideration needs to be given to how to structure your
 day to allow for this, and to ensure that those children not involved are occupied with other
 work.
- Make use of other group work times within the school day. Make use of other group work times within the school day to create opportunities for guided maths time and extra maths input teaching time outside of the maths lesson.

Teaching with additional teaching support: some organizational possibilities

- If you have an additional adult in the classroom, the logistics of managing mixed-age teaching may be simpler.
- Best practice is to ensure that the teacher remains responsible for the learning and progress of every child in the class and spends equal teaching time with every child regardless of attainment or age group.
- An example of a teaching week could look like this:

Teaching sequence	Day 1	Day 2	Day 3	Day 4	Day 5
Input	Whole-class Year 2 objective teaching input.	with additional teaching support for Year 3 independent	teaching support for Year 2 independent	input with additional teaching support for Year 3	Year 3 teacher input with additional teaching support for Year 1 independent work.
Year 2	support for	Additional teaching support for Year 2 group work.	Teacher Year 2 input.	Additional teaching support for Year 2 independent work.	Teacher Year 2 input.
Year 3	iguided group	Teacher Year 3 input and guided group	support for Year 3	input and guided	Additional teaching support for Year 3 independent work.

Year 2 and Year 3 mixed-age long-term planning guidance

- The Year 2 and Year 3 MALTP is based (where possible) on the Numicon 2 long-term plan. This is to ensure that Year 3 children have a thorough understanding of essential elements of the curriculum before they progress to Phase 2.
- The order here is therefore different from the Year 2 and Year 3 single year group long-term plans and you will need to be aware that children may need additional support with prerequisite skills.
- If you decide to move strands around, consider what learning needs to have happened first to ensure children can successfully progress to the new units. The progression of number, place value, multiplication, division and fractions should be very carefully considered.
- For each of the activity groups, we suggest that you decide which of the activities to
 complete, extend or combine. If you need to use additional time to enable children to
 achieve objectives, keep in mind the impact that this extra time will have on coverage of
 other activity groups over the year. We recommend that mastering understanding of the
 concepts is the core priority.

How does this plan differ from the single-year plans?

- Activity groups from Numicon 1 have been matched to Numicon 2 by topic and key
 mathematical ideas to ensure that teaching is based on very similar ideas from both year
 groups, and to make your teaching more manageable.
- The order of some units has been changed to ensure that similar ideas are taught for both year groups. It is advisable to look at the single age group long-term plans (SALTP) to be aware that children may need additional support with prerequisite skills.
- There are some Activity groups that do not have a matched unit because a topic is new to Year 3, in particular: Numicon 2 Numbers and the Number System 5 Rounding; Numicon 2 Numbers and the Number System 6 Introducing fractions as numbers (which builds on earlier work on fractions as operators); Year 3 Calculating 15 Introducing dividing as 'How many ... in ... ?'. For these three units we have suggested some of the activities you have not yet covered from Securing Foundations 1–12, of course you may also choose to revisit any earlier activities you have not covered or consolidate previous learning.
- There are some matched examples which may initially seem to be a strange match, for example, Numicon 1 Calculating 7 Developing recall of adding and subtracting facts within 10 and Numicon 2 Calculating 14 Adding and subtracting to 20. There may be other units where the content is more in line but when considering progression this is the correct place to match it as it is the final addition and subtraction unit in Year 3. Another change to note is that Numicon 2 Calculating 11 and 12 have been swapped around to enable Numicon 1 Calculating 8 to be matched effectively.
- For all the activity groups you will need to decide whether your Year 3 children need to revisit some of the Year 2 content or focus on new learning and consolidation of the Numicon 2 units.

More online and in the printed Teaching Handbooks

You can find further information on the contents of each Activity Group, single year group planning documents, templates and more in the Numicon printed Teaching Handbooks and on Numicon Online.

Year 2 and Year 3 mixed-age long-term plan (MALTP2)

Direct links to each set of activities are included in the planning charts below. After logging into your Numicon Online subscription, you can then click on any of the links in the planning charts to open those activities in the Online Teaching Handbooks.

Please note that KMI stands for Key Maths Ideas.

Y3 Activity group title	_	Getting started with Number, Pattern and Calculating 2 KMI: Counting, Place value, Grouping, Mathematical thinking and reasoning								
Y3 Strand and activity group number	Getting Started	etting Started								
	Learning about Numicon Shapes, number rods,	Naming Numicon Shapes, building patterns and	Snape patterns,	Describing relationships, more adding and	Learning about Numicon Shapes, number rods,					
Year 2	pattern and counting	thinking and reasoning	Inumber lines	patterns in movement	pattern and counting					
Activity group title	KMI: Pattern, Ordering, Counting, Mathematical	KMI: Pattern, Ordering, Counting, Mathematical	Grouping, Ordering,	KMI: Pattern, Counting, Ordering, Adding,	KMI: Pattern, Ordering, Counting, Mathematical					
	thinking and reasoning	counting objects	Mathematical	Mathematical thinking and reasoning	thinking and reasoning					
Y2 Strand and activity group number	Securing Foundations 1 Getting Started Activity 1-5	Securing Foundations 2 Getting Started Activity 1-5	Securing	Securing Foundations 5 Getting Started 1- 3	Numbers and the Number Securing Foundations 1 System 1-3					

Please note that KMI stands for Key Maths Ideas.

Y3 Activity	Counting to 10	00 and beyond		Exploring diffe	rent patterns		
group	KMI: Counting thinking and re	, Place value, N easoning	Mathematical (KMI: Pattern, Mathematical thinking and reasoning			
Y3 Strand and activity group number	Numbers and the Number System 1			Pattern and Algebra 1			
Y2 Activity group title	reasoning KMI: Pattern, Ordering,	property, Counting and adding Mathematical	Finding how many by grouping KMI: Counting, Place value, Grouping, Mathematical thinking and reasoning	pattern and counting	Naming Numicon Shapes, building patterns and thinking and reasoning KMI: Pattern, Ordering, Counting, Mathematical counting objects	Building Numicon Shape patterns, more repeating patterns and number lines KMI: Pattern, Counting, Grouping, Ordering, Mathematical thinking and reasoning	Comparing and ordering, more patterns, beginning calculating KMI: Pattern, Counting, Ordering, Adding, Mathematical thinking and reasoning
Y2 Strand and activity group number	Numbers and the Number Securing Foundations 2 System 1	Securing Foundations 11 NNS Activity 1 and Practice and discussion	Numbers and the Number System 2	Securing Foundations 1 Pattern and Algebra Activity 1-5	Securing Foundations 2 Pattern and Algebra Activity 1–3	Securing Foundations 3 Pattern and Algebra Activity 1-3	Securing Foundations 4 Pattern and Algebra Activity 1 and 2

_	Exploring diffe KMI: Pattern, I thinking and reasoning	Mathematical	Adding and wi KMI: Adding, F reasoning	Subtracting and writing subtracting sentences KMI: Subtracting, Mathematical thinking and reasoning			
Y3 Strand and activity group number		d Algebra 1	Calculating 1				Calculating 2
Y2 Activity group title	in movement KMI: Pattern, Counting, Ordering,	KMI: Duration, Ordering, Standard units Units of time	Comparing and ordering, more patterns, beginning calculating KMI: Pattern, Counting, Ordering, Adding, Mathematical thinking and reasoning	and patterns in movement KMI: Pattern, Counting, Ordering,	Counting, Adding, Commutative property, Counting and adding Mathematical	Similar attributes, numbers to 20 and the '+' symbol KMI: Equivalence, Order, Counting, Grouping, Adding, Mathematical thinking and reasoning	Beginning subtracting, sorting, more number patterns KMI: Pattern, Ordering, Equivalence, Counting, Grouping, Subtracting, Mathematical thinking and reasoning
Y2 Strand and activity group number	Securing Foundations 5 Pattern and Algebra Activity 1	Measurement 3 Activity 1-3	4	Securing Foundations 5 Calculating 1- 3	Securing Foundations 11 Calculating 1- 6	Securing Foundations 12 Calculating Activity 1-3	Securing Foundations 8 Calculating 1- 2

Y3 Activity group title	sentences KMI: Subtracting,	KMI: Counting, Pattern, Place value, Equivalence, 2- digit numbers Order, Mathematical thinking and reasoning		Ordering adding and subtracting facts KMI: Adding, Subtracting, Pattern, Mathematical thinking and reasoning	relationship between adding and subtracting	Place value, Equivalence, Pattern, More 2-digit numbers, Order, Mathematical	Comparing and ordering numbers to 100 KMI: Counting, Pattern, Order, Place value, Equivalence, Mathematical thinking and reasoning
Y3 Strand and activity group number	Calculating 2	Numbers and Syste	I the Number em 2	Calculating 3	Pattern and Algebra 2	Numbers and the Number System 3	Numbers and the Number System 4
Y2 Activity group title	Introducing the subtracting symbol KMI: Subtracting, Mathematical thinking and reasoning	number rods, investigating teen numbers and finding totals KMI: Pattern, Ordering, Place value, Adding,	numbers to 20 and the '+' symbol KMI: Equivalence, Order, Counting, Grouping, Adding,	subtracting facts to 10 KMI: Adding, Subtracting, Pattern, Inverse, Mathematical	Reasoning with Numicon Shapes and number reasoning ideas KMI: Pattern, Mathematical thinking and	ordering KMI: Counting, Pattern, Order, Place value,	Ordering numbers to 20 KMI: Counting, Place value, Grouping, Mathematical thinking and reasoning
Y2 Strand and activity group number	Calculating 1	Securing Foundations 6 Numbers and the Number System Activities 1-3	Securing Foundations 12 Numbers and the Number System Activity 1	Calculating 4 Part 1	Pattern and Algebra 2	Numbers and the Number System 4	Numbers and the Number System 1

Y3 Activity group title	KMI: Equivalence, Inverse, Adding, Subtracting,	Introducing centimetres KMI: Length, Ordering, Standard units	Adding and s whole tens KMI: Adding, Pattern, Mat thinking and	ubtracting Subtracting, hematical reasoning	KMI: Describing parts and properties of shapes invariant under transformation	faces, edges and vertices of solid 3D shapes KMI: Describing parts and properties of shapes invariant	and 10 KMI: Adding, Subtracting, Place value, Mathematical thinking and
	Pattern and Algebra 3	Measurement 1	Calculating 4		Geometry 1	Geometry 2	Calculating 5
Y2 Activity group title	KMI: Comparing different numbers, Equivalence, symbol	Comparing lengths and weights, more subtracting KMI: Pattern, Ordering, Subtracting, Mathematical thinking and reasoning	and finding totals KMI: Pattern, Ordering, Place value, Adding.	subtracting facts to 10 KMI: Adding, Subtracting, Pattern, Inverse, Mathematical	Recognizing and naming 2D shapes KMI: Sorting, Describing parts and properties of shapes invariant under	common 3D shapes KMI: Sorting,	Adding and subtracting 1 and 2 KMI: Adding, Subtracting, Pattern, Mathematical thinking and reasoning
Y2 Strand and activity group number	Pattern and Algebra 1	Securing Foundations 10 Pattern and Algebra Activity 1 Practice and Discussion	Securing Foundations 6 Calculating 1-2	Calculating 4 Part 2	Geometry 1	Geometry 3	Calculating 2

Y3 Activity group title	Translation, Equivalence	Odd and even KMI: Pattern, Adding, Subtracting, Mathematical	subtracting problems	Patterns and sequences of 2s, 3s, 5s and 10s KMI: Pattern, Mathematical thinking and reasoning		KMI: Adding, Subtracting,	
Y3 Strand and activity group number	Geometry 3	Pattern and Algebra 4	Calculating 6	Pattern an	d Algebra 5	Calculating 7	Measurement 2
Y2 Activity group title		Mathematical thinking and	Partitioning into tens and ones KMI: Place value, Adding, Subtracting, Pattern, Equivalence, Mathematical thinking and reasoning	Place value, Adding, Mathematical	patterns KMI: Pattern, Ordering, Equivalence, Counting,	KMI: Place value, Adding, Subtracting, Pattern, Equivalence, Mathematical	Introducing the 1c, 2c, 5c denotations/as counters and 10c coins KMI: Money, Equivalence
Y2 Strand and activity group number	Geometry 2	Pattern and Algebra 3	Calculating 9 Activities 1, 2, 8 and 10	Securing Foundations 6 Pattern and Algebra Activity 1 and 2	Securing Foundations 8 Pattern and Algebra Activity 1–4	Calculating 9 Activities 3–7 and 9	Measurement 2

Y3 Activity group title	Introducing the \$2 coin and the \$5, \$10 and \$20 notes KMI: Money, Equivalence, Scaling	repeated adding KMI: Adding, Multiplying,	Learning times tables and about multiplying KMI: Multiplying, Equivalence, Mathematical through arrays thinking and reasoning	Rounding KMI: Counting, Pattern, Mathematical thinking and reasoning			
Y3 Strand and activity group number			Calculating 9	Numl	pers and the N	lumber Syste	m 5
Y2 Activity group title	KMI: Money, Adding, Subtracting, Pattern, Money Mathematical thinking and reasoning	Pattern, Order,	More about teen numbers, number patterns, KMI: Pattern, Ordering, Counting, Place value, Grouping, Adding, Equivalence, Mathematical thinking and reasoning, adding	There is no linked unit in the Numicon 1 book. Therefore, we suggest you complete the following activities from Securing Foundations or revisit any earlier activities you have not covered	patterns and number lines KMI: Pattern, Counting, Grouping, Ordering, Mathematical thinking and	and ordering, more patterns, beginning calculating KMI: Pattern, Counting, Ordering, Adding, Mathematical thinking and	Describing relationships, more adding and patterns in movement KMI: Pattern, Counting, Ordering, Adding, Mathematical thinking and reasoning
Y1 Strand and activity group number	Calculating 3	Numbers and the Number System 3	Securing Foundations 7 Pattern and Algebra Activity 1 and 2	or that require consolidation.	Numbers and the Number Securing Foundations 3 System 1-4	Numbers and the Number Securing Foundations 4 System 3-6	Numbers and the Number Securing Foundations 5 System 1-2

Y3 Activity group title	strategies for near doubles and adding and subtracting 9 KMI: Adding, Subtracting, Pattern, Mathematical	Mental strategies for near doubles and adding and subtracting 9 KMI: Adding, Subtracting, Pattern, Mathematical thinking and reasoning	Adding three or more 1-digit numbers KMI: Adding, Pattern, Mathematical thinking and reasoning	Recognizing and naming prisms and cylinders KMI: Describing parts and properties of shapes invariant under transformations, Classifying shapes, Equivalence	through multiples of 10 KMI: Adding, Subtracting, Place value, Pattern, Mathematical thinking and	Adding and subtracting 2-digit numbers to 100 KMI: Adding, Subtracting, Place value, Mathematical thinking and reasoning
Y3 Strand and activity group number	Calculating 10	Calculating 10	Calculating 12	Geometry 4	Calculating 11	Calculating 13
Y2 Activity group title	KMI: Pattern, Equivalence, Subtracting, Mathematical	Comparing lengths and weights, more subtracting KMI: Pattern, Ordering, Subtracting, Mathematical thinking and reasoning	Pattern, Associative property of addition, Mathematical	Comparing and naming common solid 3D shapes KMI: Classifying shapes, Describing parts and properties of shapes invariant under transformations, Equivalence	numbers KMI: Adding, Subtracting, Pattern, Associative property of addition, Mathematical	Understanding subtracting as 'difference' and as 'how many more?' KMI: Adding, Subtracting, Zero, Inverse, Mathematical thinking and reasoning
Y2 Strand and activity group number	Securing Foundations 9 Calculating Activity 1-3	Securing Foundations 10 Calculating Activity 1-3	Calculating 8 Activities 1–9	Geometry 4	Calculating 8 Activities 10– 13	Calculating 6

Y3 Activity group	KMI: Length, Equivalence, Standard units Introducing metres	KMI: Adding, Subtracting, Place value,	KMI: Dividing, Grouping Structure, I Inverse, Multiplying, Mathematical		Logic KMI: Pattern, Mathematical	Halves, quarters and thirds of wholes KMI: Fractions as operators, Multiplying, Dividing, Equivalence, Mathematical thinking and reasoning
Y3 Strand and activity group number	Measurement 4	Calculating 14	Calculating 15		Pattern and Algebra 6	Calculating 16
Y2 Activity group title	Comparing, ordering and measuring lengths KMI: Length and distance, Comparing, Ordering, Non- standard units	Developing recall of adding and subtracting facts thinking and reasoning within 10 KMI: Adding, Subtracting, Pattern, Mathematical	There is no linked unit in the Numicon 1 book. Therefore, we suggest you complete the following activities from Securing	More about teen numbers, number patterns, while Pattern, Ordering, Counting, Place value, Grouping, Adding, Equivalence, Mathematical thinking and reasoning adding	Logic KMI: Pattern, Mathematical thinking and reasoning	Halves and quarters of wholes KMI: Fractions as operators, Equivalence, Mathematical thinking and reasoning
Y2 Strand and activity group number	Measurement 1	Calculating 7	revisit any earlier activities you have not covered or that require consolidation.	Securing Foundations 7 Numbers and the Number System 1-3 Calculating 1-3	Pattern and Algebra 4	Calculating 5

Y3 Activity group title	Mathematical thinking Finding all	Introducing fractions as numbers – building on earlier work on fractions as operators (NPC2, Calc16) KMI: Fractions as numbers, Mathematical thinking and reasoning			Introducing fractions as numbers — building on earlier work on fractions as operators (NPC2, Calc16) KMI: Fractions as numbers, Mathematical thinking and reasoning	Introducing kilograms and grams KMI: Mass and weight,	Introducing litres and millilitres, and units of temperature KMI: Capacity and volume, Equivalence, Standard units
Y3 Strand and activity group number	Pattern and Algebra 7	Numbers and the Number System 6			Numbers and the Number System 6	Measurement 5	Measurement 6
Y2 Activity group	KMI: Pattern, Mathematical thinking and Finding possibilities reasoning	the Numicon 1 book. Therefore, we suggest you complete the following activities from Securing Foundations or revisit any earlier	practical subtracting KMI: Pattern, Equivalence, Subtracting, Mathematical thinking and reasoning	Comparing lengths and weights, more subtracting KMI: Pattern, Ordering, Subtracting, Mathematical thinking and reasoning	Similar attributes, numbers to 20 and the '+' symbol KMI: Equivalence, Order, Counting, Grouping, Adding, Mathematical thinking and reasoning	Comparing, ordering and measuring heaviness KMI: Mass and weight, Comparing, Ordering, Non-standard units	Comparing, ordering and measuring capacity KMI: Capacity and volume, Equivalence, Comparing, Ordering, Non-standard units
Y2 Strand and activity group number	Algebra 5	activities you have not covered or that require consolidation.	Pattern and Algebra Activity Securing Foundations 9 1-4	Pattern and Algebra Activity Securing Foundations 10 2-3	Securing Foundations 12 Pattern and Algebra Activity 1	Measurement 4	Measurement 5

Y3 Activity group title	lelling the time and adding and subtracting with units of		Investigating and describing rotation	
	IKIVII: Time diiration ()rdering Ediivalence		KMI: Rotation, Reflection, Equivalence	
Y3 Strand and activity group number	Measurement 7		Geometry 5	
Y2 Activity group title	units	KMI: Telling the time, Ordering, Standard units, Telling the time Equivalence	Position, direction and movement KMI: Translating and rotating, Direction and orientation in movement, Equivalence	
Y2 Strand and activity group number	Measurement 3 Activity 4-5	Measurement 6	Geometry 5	