The Northern Ireland Curriculum Primary: Mathematics and Numeracy

YEAR 1

			Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Strand	**Substrand**	**Pupils should be enabled to:**	**Online Lesson, Printable Resources, & Problem Solving Tasks**	**End-of-lesson Quiz**	**Critical Thinking and Problem Solving Interactives**	**Driving Tests (DT) Mental Minute (MM)**	**Printable Achievement Standards Assessment**
Number	**Understanding Number**	count a variety of objects; develop an understanding of one-to-one correspondence and that the size of a set is given by the last number in the count; investigate different ways of making sets for a given number within 5/10; match numerals to sets; order numerals and sets within 5/10; develop an understanding of conservation of number within 5/10; understand in counting activities that 'none' is represented by zero; explore the number that comes after, before, between a given number; carry out simple mental calculations; extend understanding of number beyond 10.	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 25, 28, 31, 33, 41, 43, 45, 46, 48, 50		43	**DT** Kindergarten Number 1-25	**Kindergarten Number** Test 3
	Counting and Number Recognition	count forwards in ones within 5/10 from different starting points; count backwards in ones within 5/10 from different starting points; extend counting in ones and recognition of numbers beyond 10; extend activities to including counting in 2s, 5s and 10s.	21, 25, 28				**Kindergarten Number** Test 1
		recognise numerals up to 5/10; state quantities within 5; make a sensible guess of quantities within 10; discover components of numbers within 5/10 by investigating different ways of paritioning sets into subsets partically; explore numbers relevant to their every day lives	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 24, 30, 31, 32, 34, 36, 40		12, 19, 31, 34, 36, 43	**DT** Kindergarten Operations 2, 6, 9	**Kindergarten Number** Test 2
	Understanding Money	use money in various contexts; talk about things that they want to spend money on; understand the need to pay for goods; become familiar with coins in everyday use; talk about different ways we can pay for goods; use their number skills in shopping activities.					**Kindergarten Number** Test 5
Measures		compare two objects of different length; order three objects of different length; find an object of similar length; explore the notion of conservation of length; understand and use the languge of comparison choose and use non-standard units to measure length.	26			**DT** Kindergarten 5, 6, 9, 10	**Kindergarten Measurement** Tests 1, 2
		compare two objects of different weight; order three objects of different weight; find an object of similar weight; explore the notion of conservation of weight; understand and use the languge of comparison choose and use non-standard units to measure weight.	29			**DT** Kindergarten Measurement 7, 8, 12	**Kindergarten Measurement** Test 4
		compare two objects of different capacity; order three objects of different capacity; find an object of similar capacity; explore the notion of conservation of capacity; understand and use the languge of comparison choose and use non-standard units to measure capacity.	38		38	**DT** Kindergarten Measurement 15, 16, 20	**Kindergarten Measurement** Test 5
		compare two objects of different area; order three objects of different area; find an object of similar area; understand and use the languge of comparison.	13			**DT** Kindergarten Measurement 2, 3	**Kindergarten Measurement** Test 3
		sequence two or three familiar events; talk about significant times on the clock; compare two intervals of time in terms of longer/shorter time; choose and use non-standard units to measure time.	39, 42			**DT** Kindergarten Measurement 1, 4, 13, 14, 17-19	**Kindergarten Measurement** Tests 6, 7
Shape and Space		explore and talk about shapes in the environment; create pictures and patterns with 2D shapes; investigate and talk about the properties of shapes; sort collections of shapes in several ways and describe the arrangements; describe and name common 2-D shapes.	4, 6, 9, 15, 23			**DT** Kindergarten Geometry 1-8, 12, 19, 20	**Kindergarten Geometry** Tests 1, 3, 4
		explore and talk about shapes in the environment; build and make models with 3D shapes; investigate and talk about the properties of shapes; sort collections of shapes in several ways and describe the arrangements; describe and name common 3-D shapes.	35, 44			**DT** Kindergarten Geometry 15-23	**Kindergarten Geometry** Tests 2, 3
		explore body space through different types of movement; understand and use a range of positional words; explore movement using programmable devices; follow/give directions from/to a partner for simple movements.				**DT** Kindergarten Geometry 9-11, 13, 14	**Kindergarten Geometry** Tests 5, 6
Sorting		explore freely properties of a range of materials and one/two/three property collections; sort collections of random materials; sort for one criterion using one-property material; sort for one criterion using two-property collections; re-sort for the second criterion; sort for one criterion using three/four-property collections; find the various possibilities; partition sets into subsets in preparation for exploring components of number.				**DT** Kindergarten Data 1-10	**Kindergarten Data** Tests 1-2
Patterns and Relationships		investigate and talk about pattern in the environment; copy a simple pattern; continue a simple pattern; create patterns; explore pattern in number	27, 37		6, 8, 15, 23, 27, 37	**DT** Kindergarten Patterns 1-9	**Kindergarten Number** Test 6
		understand the concept of addition by combining sets of objects to find 'how many'; match objects in real contexts; compare sets by matching objects/counting objects to understand the terms 'more than' 'less than' 'the same'; investigate the relationship between addition and subtraction in practical situations.	22, 24, 30, 31, 32, 34, 36, 40, 47, 49		30, 40, 41, 46	**DT** Kindergarten Operations 1, 3-5, 7, 10-20, 22-25 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Operations** Tests 1-4 **Kindergarten Number** Test 3

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YEAR 2

Strand	Substrand	Pupils should be enabled to:	Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
			Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number	**Understanding Number**	count a variety of objects; develop an understanding of one-to-one correspondence and that the size of a set is given by the last number in the count; investigate different ways of making sets for a given number within 5/10; match numerals to sets; develop an understanding of conservation of number within 5/10; understand in counting activities that 'none' is represented by zero; explore ordinal number; explore the number that comes after, before, between a given number; carry out simple mental calculations; extend understanding of number beyond 10.	56, 60, 63, 67, 75, 81, 86		60, 63, 67, 75, 81	**DT** Year 1 Number 1-24	**Year 1 Number and Algebra: Place Value** Tests 1-6 **Year 1 Number and Algebra: Whole Numbers** Tests 1-9
	Counting and Number Recognition	count forwards in ones within 5/10 from different starting points; count backwards in ones within 5/10 from different starting points; extend counting in ones and recognition of numbers beyond 10; extend activities to including counting in 2s, 5s and 10s.	56, 60, 67, 75, 77, 79, 86, 90		56, 67, 77, 79	**DT** Year 1 Operations 4-6 **DT** Year 1 Patterns and Fractions 7-10, 12	**Year 1 Number and Algebra: Whole Numbers** Tests 1-3, 6-9 **Year 1 Number and Algebra: Patterns** Tests 1, 3-7
		recognise numerals up to 5/10; state quantities within 5; make a sensible guess of quantities within 10; discover components of numbers within 5/10 by investigating different ways of paritioning sets into subsets partically; explore numbers relevant to their every day lives					
	Understanding Money	use money in various contexts; talk about things that they want to spend money on; understand the need to pay for goods; become familiar with coins in everyday use; talk about different ways we can pay for goods; use their number skills in shopping activities.	64, 83, 92		83	**DT** Year 1 Measurement 3, 5-7, 12	**Year 1 Number and Algebra: Fractions and Money** Tests 4-8
Measures		compare two objects of different length; order three objects of different length; find an object of similar length; explore the notion of conservation of length; understand and use the languge of comparison choose and use non-standard units to measure length.	55, 84			**DT** Year 1 Measurement 2, 4, 13, 14	**Year 1 Measurement: Length and Capacity** Tests 1-5
		compare two objects of different weight; order three objects of different weight; find an object of similar weight; explore the notion of conservation of weight; understand and use the languge of comparison choose and use non-standard units to measure weight.	73				
		compare two objects of different capacity; order three objects of different capacity; find an object of similar capacity; explore the notion of conservation of capacity; understand and use the languge of comparison choose and use non-standard units to measure capacity.	89			**DT** Year 1 Measurement 11, 17-19	**Year 1 Measurement: Length and Capacity** Tests 6, 7
		compare two objects of different area; order three objects of different area; find an object of similar area; understand and use the languge of comparison.	59		59		
		talk about significant times on the clock; compare two intervals of time in terms of longer/shorter time; explore time patterns; choose and use non-standard units to measure time.	54, 70, 87		87	**DT** Year 1 Measurement 1, 8-10, 15, 16	**Year 1 Measurement: Time** Tests 1-6
Shape and Space		explore and talk about shapes in the environment; create pictures and patterns with 2D shapes; investigate and talk about the properties of shapes; sort collections of shapes in several ways and describe the arrangements; describe and name common 2-D shapes.	52, 69		52, 69	**DT** Year 1 Geometry 1-3, 6, 9, 10, 13	**Year 1 Geometry: Shape** Tests 1, 2
		explore and talk about shapes in the environment; build and make models with 3D shapes; investigate and talk about the properties of shapes; sort collections of shapes in several ways and describe the arrangements; describe and name common 3-D shapes.	62, 99		62	**DT** Year 1 Geometry 7, 8, 17-19	**Year 1 Geometry: Shape** Tests 3-6
		explore body space through different types of movement; understand and use a range of positional words; explore movement using programmable devices; follow/give directions from/to a partner for simple movements.	57, 78, 94		57, 78, 94	**DT** Year 1 Geometry 4, 5, 11, 12, 14-16	**Year 1 Geometry: Shape** Tests 7, 8
Sorting		explore freely properties of a range of materials and one/two/three property collections; sort collections of random materials; sort for one criterion using one-property material; sort for one criterion using two-property collections; re-sort for the second criterion; sort for one criterion using three/four-property collections; find the various possibilities; partition sets into subsets in preparation for exploring components of number.	80, 97		80	**DT** Year 1 Data 1-4, 9, 10, 12-16	**Year 1 Statistics: Data** Tests 1-5
Patterns and Relationships		investigate and talk about pattern in the environment; copy a simple pattern; continue a simple pattern; create patterns; explore pattern in number	77, 79, 90			**DT** Year 1 Patterns and Fractions 1, 2, 4, 10, 12	**Year 1 Number and Algebra: Patterns** Tests 2, 3, 5-7
		understand the concept of addition by combining sets of objects to find 'how many'; match objects in real contexts; compare sets by matching objects/counting objects to understand the terms 'more than' 'less than' 'the same'; investigate the relationship between addition and subtraction in practical situations.	51, 53, 58, 65, 68, 72, 85, 88, 91, 95, 96, 98		51, 53, 65, 68, 71, 72, 74, 76, 83, 85, 88, 91, 93, 95, 96, 98, 100	**DT** Year 1 Operations 1-20 **MM** Addition Sprints **MM** Subtraction Sprints	

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YEAR 3

Strand	Substrand	Pupils should be enabled to:	Mathseeds Lesson # – Knowledge and Skills: Online Lesson, Printable Resources, & Problem Solving Tasks	Mathseeds Lesson # – Assessment: End-of-lesson Quiz	Mathseeds Lesson # – Higher Order Thinking Skills: Critical Thinking and Problem Solving Interactives	Additional Mathseeds Resources – Fluency: Driving Tests (DT) Mental Minute (MM)	Additional Mathseeds Resources – Assessment: Printable Achievement Standards Assessment
Number	Understanding Number and Number Notation	count, read, write and order whole numbers, initially to 10, progressing to at least 1,000; understand the empty set and the conservation of number, understand that the place of digit indicates its value; make a sensible estimate of a small number of objects and begin to approximate the nearest 10 or 100.	101, 105, 106, 108, 122, 129		105, 106, 108	**DT** Year 2 Number 1-24	**Year 2 Number and Algebra: Numbers to 1000** Tests 1-7
		recognise and use simple everyday fractions.	61, 66, 132, 138		132	**DT** Year 2 Patterns and Fractions 5, 11, 12, 14-17	**Year 2 Number and Algebra: Fractions and Money** Tests 1-4
	Patterns, Relationships and Sequences in Number	copy, continue and devise repeating patterns; explore patterns in number tables.	117, 133, 137, 140		101, 117, 132, 133, 137	**DT** Year 2 Patterns and Fractions 1-4, 6-10, 13	**Year 2 Number and Algebra: Number Patterns** Tests 1-8
		understand the commutative property of addition and the relationship between addition and subtraction; understand the use of a symbol to stand for an unknown number; understand and use simple function machines.	76, 93, 100, 131, 142, 148, 150		76, 93, 100	**DT** Year 2 Operations 20, 26	**Year 2 Number and Algebra: Addition and Subtraction** Tests 1, 4, 6, 7
	Operations and their Applications	understand the operations of addition, subtraction, multiplication and division (without remainders) and use them to solve problems; know addition and subtraction facts to 20 and the majority of multiplication facts up to 10 × 10; develop strategies for adding and subtracting mentally up to the addition of two two-digit numbers within 100.	71, 103, 110, 111, 113, 115, 118, 120, 124, 128, 130, 131, 134, 136, 137, 139, 140, 141, 142, 144, 146, 147, 148, 150		104, 110, 113, 115, 118, 120, 124, 128, 130, 134, 136, 139, 141, 142, 144, 146, 148, 150	**DT** Year 2 Operations 1-19, 22-25, 27, 28 **MM** Addition Sprints **MM** Subtraction Sprints **MM** Multiplication Sprints **MM** Division Sprints	**Year 2 Number and Algebra: Addition and Subtraction** Tests 1-8 **Year 2 Number and Algebra: Equal Groups** Tests 1-5
	Money	recognise coins and use them in simple contexts; add and subtract money up to £10, use the conventional way of recording money, and use these skills to solve problems.	118, 125, 139, 147		125, 131, 147	**DT** Year 2 Measurement 12	**Year 2 Number and Algebra: Fractions and Money** Tests 5-8
Measures		understand and use the language associated with length; use non-standard units to measure and recognise the need for standard units; know and use the most commonly used units to measure in purposeful contexts; make estimates using arbitrary and standard units; choose and use simple measuring instruments, reading and interpreting them with reasonable accuracy; understand the conservation of measures	104, 126, 140, 141, 143		141, 143	**DT** Year 2 Measurement 6, 9, 11, 13, 15, 19, 21-24	**Year 2 Measurement: Informal Units** Tests 1, 2, 8
		understand and use the language associated with 'weight'; use non-standard units to measure and recognise the need for standard units; choose and use simple measuring instruments, reading and interpreting them with reasonable accuracy; understand the conservation of measures	135		135	**DT** Year 2 Measurement 17, 18	**Year 2 Measurement: Informal Units** Tests 6-8
		understand and use the language associated with capacity; use non-standard units to measure and recognise the need for standard units; make estimates using arbitrary and standard units; understand the conservation of measures	116			**DT** Year 2 Measurement 8	**Year 2 Measurement: Informal Units** Tests 4, 5
		understand and use the language associated with area; use non-standard units to measure and recognise the need for standard units; know and use the most commonly used units to measure in purposeful contexts; make estimates using arbitrary and standard units; understand the conservation of measures	112, 149		149	**DT** Year 2 Measurement 6	**Year 2 Measurement: Informal Units** Test 3
		understand and use the language associated with time; know and use the most commonly used units to measure in purposeful contexts; sequence everyday events; know the days of the week, months of the year and seasons; explore calendar patterns; recognise times on the analogue clock and digital displays;	109, 114, 123, 127		109	**DT** Year 2 Measurement 1-5, 7, 10, 14, 16, 20	**Year 2 Measurement: Time** Tests 1-5
Shape and Space	Exploration of Shape	sort 2-D shapes in different ways; make constructions, pictures and patterns using 2-D shapes; name and describe 2-D shapes	119, 140, 145		119, 140, 145	**DT** Year 2 Geometry 4-7, 10	**Year 2 Geometry: Shape and Movement** Tests 1, 2, 5
		sort 3-D shapes in different ways; make constructions, pictures and patterns using 3-D shapes; name and describe 3-D shapes.	121		121, 140	**DT** Year 2 Geometry 3, 5-7	**Year 2 Geometry: Shape and Movement** Tests 3-5
	Position, Movement and Direction	use prepositions to state position; know the four points of the compass; use programmable devices to explore movement and direction.	102		102	**DT** Year 2 Geometry 1, 2, 8, 9, 11-13	**Year 2 Geometry: Shape and Movement** Tests 6-8
		understand angle as a measure of turn; understand and give instructions for turning through right angles; recognise right-angled corners in 2-D and 3-D shapes.					
Handling Data	Collecting, Representing and Interpreting Data	sort and classify objects for one or two criteria and represent results; collect data, record and present it using real objects, drawings, tables, mapping diagrams, simple graphs and ICT software; discuss and interpret the data; extract information from a range of charts, diagrams and tables; enter and access information using a database.	140, 143		143	**DT** Year 2 Data and Chance 1, 4, 5, 7-14	**Year 2 Statistics: Data** Tests 1-6

The Northern Ireland Curriculum Primary: Mathematics and Numeracy

YEAR 4

Strand	Substrand	Pupils should be enabled to:	Mathseeds Lesson # — Knowledge and Skills: Online Lesson, Printable Resources, & Problem Solving Tasks	Mathseeds Lesson # — Assessment: End-of-lesson Quiz	Mathseeds Lesson # — Higher Order Thinking Skills: Critical Thinking and Problem Solving Interactives	Additional Mathseeds Resources — Fluency: Driving Tests (DT) Mental Minute (MM)	Additional Mathseeds Resources — Assessment: Printable Achievement Standards Assessment
Number	Understanding Number and Number Notation	count, read, write and order whole numbers, initially to 10, progressing to at least 1,000; understand the empty set and the conservation of number, understand that the place of digit indicates its value; make a sensible estimate of a small number of objects and begin to approximate the nearest 10 or 100.	151, 156, 161, 166, 194		151, 156, 161, 194		
		recognise and use simple everyday fractions.	160, 175, 180, 191, 197		175, 180, 191, 197		
	Patterns, Relationships and Sequences in Number	copy, continue and devise repeating patterns; explore patterns in number tables.	153, 195		153, 195		
		understand the commutative property of addition and the relationship between addition and subtraction; understand the use of a symbol to stand for an unknown number; understand and use simple function machines.	163, 181		163		
	Operations and their Applications	understand the operations of addition, subtraction, multiplication and division (without remainders) and use them to solve problems; know addition and subtraction facts to 20 and the majority of multiplication facts up to 10 × 10; develop strategies for adding and subtracting mentally up to the addition of two two-digit numbers within 100.	155, 158, 165, 168, 170, 171, 173, 176, 178, 181, 183, 186, 188, 190, 192, 193, 195, 196, 199		168, 170, 173, 176, 178, 181, 183, 186, 193, 196, 199		
	Money	recognise coins and use them in simple contexts; add and subtract money up to £10, use the conventional way of recording money, and use these skills to solve problems.	159		159, 188		
Measures		understand and use the language associated with length; know and use the most commonly used units to measure in purposeful contexts; make estimates using arbitrary and standard units; choose and use simple measuring instruments, reading and interpreting them with reasonable accuracy; understand the conservation of measures	182, 192, 198		182		
		understand and use the language associated with 'weight'; know and use the most commonly used units to measure in purposeful contexts; choose and use simple measuring instruments, reading and interpreting them with reasonable accuracy; understand the conservation of measures	172		172		
		understand and use the language associated with capacity; know and use the most commonly used units to measure in purposeful contexts; make estimates using arbitrary and standard units; understand the conservation of measures	154		154		
		understand and use the language associated with area; know and use the most commonly used units to measure in purposeful contexts; know and use the most commonly used units to measure in purposeful contexts; make estimates using arbitrary and standard units; understand the conservation of measures	157, 200		200		
		understand and use the language associated with time; know and use the most commonly used units to measure in purposeful contexts; sequence everyday events; know the days of the week, months of the year and seasons; explore calendar patterns; recognise times on the analogue clock and digital displays;	162, 179, 185, 189		179, 185, 189		
Shape and Space	Exploration of Shape	sort 2-D shapes in different ways; make constructions, pictures and patterns using 2-D shapes; name and describe 2-D shapes; recognise reflective symmetry; explore simple tessellation through practical activities.	152, 184				
		sort 3-D shapes in different ways; make constructions, pictures and patterns using 3-D shapes; name and describe 3-D shapes.	169				
	Position, Movement and Direction	use prepositions to state position; know the four points of the compass; use programmable devices to explore movement and direction.	164				
		understand angle as a measure of turn; understand and give instructions for turning through right angles; recognise right-angled corners in 2-D and 3-D shapes.	177				
Handling Data	Collecting, Representing and Interpreting Data	sort and classify objects for one or two criteria and represent results; collect data, record and present it using real objects, drawings, tables, mapping diagrams, simple graphs and ICT software; discuss and interpret the data; extract information from a range of charts, diagrams and tables; enter and access information using a database.	174, 187, 198		187		