

Newick Church of England Primary School

Mathematics Scheme of Work 2021-22

This scheme of work details the units of learning that each year group will be working on in each term, and shows the overview of learning across the school. Many of the units referred to are written by the NCETM, known as the PD Spines and can be found: <https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/>

The scheme of work also highlights the key skills, and where they are taught, drawn from the Ready-to-Progress Criteria mentioned in the DFE Guidance for KS1 and KS2 from June 2020. The Ready-to-Progress criteria have been exemplified in these powerpoints written by the NCETM, which are being used by class teachers for revision of key skills in 2020 - 2021. They are found here:

<https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/>

Year 1

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.1 Comparison of quantities and measures 1NPV1, 1NPV2	3	15	1.5 Additive structures: introduction to aggregation and partitioning 1AS2 (3 video lessons)	4	27	1.9 Composition of numbers: 20 to 100 2NPV1, 2NPV2	6
2			16	1.6 Additive structures: introduction to augmentation and reduction 1AS2 (3 video lessons)	4	28		
3	1.2 Introducing 'whole' and 'parts': part-part-whole	4	17	1.7 Addition and subtraction: strategies within 10 1NF1+ 8 video lessons, 2NF1	10	29	1.10 Composition of numbers: 11 to 19 1.NPV2	5
4			18		30	31	2NPV1, 2NPV2	
5	1.3 Composition of numbers: 0 - 5 1NPV2	7	19		31	32	Holiday	
6			20					
7	1AS1							
	Holiday			Holiday				
8			21			33	2.1 Counting, unitising and coins 1NF2 + 17 video lessons	6
9			22			34		
10	1.4 Composition of numbers 6-10 1 NPV2	5	23			35		
11	1AS1		24	1.8 Composition of numbers: multiples of 10 up to 100 2NPV1, 2NPV2	5	36	Geometry: position and direction 1G2	
12	Exploring measurements 1		25			37	Exploring measurements 2	
13			26			38	Consolidation and assessment of RTP skills	
14	Geometry: shapes 1G1					39		
	Christmaths							

Year 2

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.11 Addition and subtraction: bridging 10 2AS1	6	15	2.3 Times tables: groups of 2 and commutativity (part 1) 2MD1 (26 video lessons)	3	27	3.0 Fractions and Geometry: position and direction Statistics	
2			16			28		
3			17	2.4 times tables: groups of 10 and of 5, and factors of 0 or 1 2MD1 (26 video lessons), 3NF2	4	29	Review y2 learning	
4	1.12 Subtraction as difference 2AS2		18			30		
5			19	2.5 Commutativity (part 2), doubling and halving 2MD1 (26 video lessons), 3MD1	4	31		
6	1.13 Addition and subtraction: two-digit and single-digit numbers 2AS3	4	20			32	KS1 SATs	
7	Holiday			Holiday			Holiday	
8	1.14 Addition and subtraction: two-digit numbers and multiples of ten 2AS3	4	21	2.6 Structures: quotative and partitive division 2MD2 (2 video lessons)	5	33	Statistics: asking questions	
9			22			34	Geometry: properties of shape (nets), 2G1	
10	2.2 Structures: multiplication representing equals 2MD1 (26 video lessons)	5	23	3MD1		35	Telling the time	
11			24	1.15 Addition: two-digit and two-digit numbers, 2AS4	2	36		
12			25	1.16 Subtraction: two-digit and two-digit numbers, 2AS4	2	37	Using and calculating with money	
13	Geometry: properties of shape, 2G1		26	3.0 Fractions	5	38	Consolidation and assessment of RTP criteria	
14	Christmaths					39		

Year 3

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.17 Composition and calculation: 100 and bridging 100 3NPV1, 3NPV4	4	15	1.20 Algorithms: column addition 3AS2	5	27	3.3 Non-unit fractions: identifying, representing and comparing 3F1(8 videos), 3F3 (4 videos)	8
2	3NF3, 3AS1		16			28		
3			17			29		
4	1.18 Composition and calculation: three-digit numbers 3NPV2, 3NPV3	6	18	2.8 Times tables: 3, 6 and 9, and the relationship between them 4NF1	6	30	Telling the time	
5			19			31		
6			20			32		
7	Holiday			Holiday			Holiday	
8	1.19 Securing mental strategies: calculation up to 999	4	21	1.21 Algorithms: column subtraction 3AS2	2	33	3.4 Adding and subtracting within one whole 3F4 (2 videos)	4
9			22			34	Statistics	
10			23	3.1 Preparing for fractions: the part-whole relationship 3F1 (8 videos)	4	35	2.9 Times tables: 7 and patterns within/across times tables 4NF1	4
11	2.7 Times tables: 2, 4 and 8, and the relationship between them 3NF2	5	24			36		
12			25	3.2 Unit fractions: identifying, representing and comparing 3F1 (8 videos), 3F2 (1 video), 3F3 (4 videos)	6	37		
13			26			38	Consolidation and assessment of RTP skills	
14	Christmaths - Geometry: shape 3G1, 3G2					39		

Year 4

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.22 Composition and calculation: 1, 000 and four-digit numbers 4NPV1, 4NPV2, 4NPV3, 4NPV4	6	15	1.23 Composition and calculation: tenths 5NPV1-4, 5NF2	8	27	2.16 Multiplicative contexts: area and perimeter 1	
2	4NF3		16	1.24 Composition and calculation: hundredths and thousandths 5NF3	8	28	3.5 Working across one whole: improper fractions and mixed numbers 4F1, 4F2, 4F3	6
3	2.10 Connecting multiplication and division, and the distributive law 4MD2, 4MD3	3	17			29		
4			18			30		
5								
6	2.11 Times tables: 11 and 12* 4NF1	4	19	1.25 Addition and subtraction: money 5G1	5	31	3.6 Multiplying whole numbers and fractions 3F2	5
7	Holiday		20			32		
8	2.12 Division with remainders 4NF2	3	21	2.14 Multiplication: partitioning leading to short multiplication 5MD3	4	33	3.6 Multiplying whole numbers and fractions y4 Times Table Check	
9			22			34		
10	2.13 calculation: multiplying and dividing by 10 or 100 4MD1, 5MD1	7	23	2.15 Division: partitioning leading to short division 5MD4	4	35	2.17 Structures: using measures and comparison to understand scaling Geometry 4G2, 4G3	3
11			24			36		
12	1.23 Composition and calculation: tenths 5NPV1-4, 5NF2	6	25	2.16 Multiplicative contexts: area and perimeter 1 5G2, 6G1	6	37		
13			26			38	Consolidation and assessment of RTP skills	
14	Christmaths, 4G1					39		

Year 5

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.26 Composition and calculation: multiples of 1000 up to 1000000	6						
2			15	2.18 Using equivalence to calculate	2	27	3.7 Finding equivalent fractions and simplifying fractions 5F2 (9 videos)	3
3			16	2.19 Calculation: \times and \div decimal fractions by whole numbers	5	28		
4	1.27 Negative numbers: counting, comparing and calculating	6	17			29	6F1	
5			18			30	Geometry: position and direction	
6			19	2.20 Multiplication with three factors and volume	5	31	*Statistics	
7			20			32		
	Holiday			Holiday			Holiday	
8	1.28 Common structures and the part-part-whole relationship	4	21			33	3.8 Common denomination: more adding and subtracting 6F2, 6F3	5
9			22	2.21 Factors, multiples, prime numbers and composite numbers	6	34		
10	1.29 Using equivalence and the compensation property to calculate 6AS2	6	23	5MD2		35		
11			24			36	Measurements	
12			25	2.22 Combining multiplication with addition and subtraction	2	37	Geometry: shape 2, 5G2	
13			26	Geometry: shape 1, 5G1 (angles)		38	Consolidation and assessment of RTP skills	
14	Christmaths					39		

Year 6

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.30 Composition and calculation: numbers up to 10, 000, 000 6NPV1 - 4	6						
2			15	3.10 Linking fractions, decimals and percentages 5NPV5, 5F3 (4 videos)	6	27	1.31 Problems with two-unknowns	5
3			16			28	Review learning	
4	2.23 Multiplication strategies for larger numbers and long multiplication	5	17			29		
5			18	2.26 Mean average and equal shares	4	30	SATs week	
6			19			31		
7	2.24 Division: dividing by two-digit divisors Holiday	3	20	Geometry: position and direction Holiday		32	Activities week Holiday	
8						33	1.31 Problems with two-unknowns/ using algebra tiles	
9	2.25 Using compensation to calculate 6AS2	3	21	2.27 Scale factors, ratio and proportional reasoning 6AS3	4	34	6AS4	
10			22			35	Transition mathematics: preparing for KS3	
11	3.9 Multiplying fractions and dividing fractions by a whole number	3	23	2.28 Combining division with addition and subtraction	2	36	https://mei.org.uk/Primary-KS2-3-Transition	
12			24	2.29 Decimal place-value knowledge, multiplication and division	2	37		
13	Geometry: properties of shape Christmaths		25	2.30 Multiplicative contexts: area and perimeter 2	4	38	Consolidation and assessment of RTP skills	
14			26			39		