

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

Year 2

Week	Autumn term	TPs	Week	Spring term	TPs	Week	Summer term	TPs
1	1.11 Addition and subtraction: bridging 10	6						
2	2AS1		15	2.3 Times tables: groups of 2 and commutativity (part 1)	3	27	3.0 Fractions and Geometry: position and direction	
3	3NF1		16	2MD1 (26 video lessons)		28	Statistics	
4	1.12 Subtraction as difference	4	17	2.4 times tables: groups of 10 and of 5, and factors of 0 or 1	4	29	Review y2 learning	
5	2AS2		18	2MD1 (26 video lessons), 3NF2		30		
6	1.13 Addition and subtraction: two-digit and single-digit numbers	4	19	2.5 Commutativity (part 2), doubling and halving	4	31		
7	2AS3		20	2MD1 (26 video lessons), 3MD1		32	KS1 SATs	
	Holiday			Holiday			Holiday	
8	1.14 Addition and subtraction: two-digit numbers and multiples of ten	4	21	2.6 Structures: quotative and partitive division	5	33	Statistics: asking questions	
9	2AS3		22	2MD2 (2 video lessons)		34	Geometry: properties of shape (nets), 2G1	
10	2.2 Structures: multiplication representing equals	5	23	3MD1		35	Telling the time	
11	2MD1 (26 video lessons)		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	4						
2	3NPV1, 3NPV4		15	1.20 Algorithms: column addition	5	27	3.3 Non-unit fractions: identifying, representing and comparing	8
3	3NF3, 3AS1		16	3AS2		28	3F1(8 videos), 3F3 (4 videos)	
4	1.18 Composition and calculation: three-digit numbers	6	17			29		
5	3NPV2, 3NPV3		18	2.8 Times tables: 3, 6 and 9, and the relationship between them	6	30	Telling the time	
6			19	4NF1		31		
7			20			32		
	Holiday			Holiday			Holiday	
8	1.19 Securing mental strategies: calculation up to 999	4	21	1.21 Algorithms: column subtraction	2	33	3.4 Adding and subtracting within one whole	4
9			22	3AS2		34	3F4 (2 videos)	
10			23	3.1 Preparing for fractions: the part-whole relationship	4	35	Statistics	
11	2.7 Times tables: 2, 4 and 8, and the relationship between them	5	24	3F1 (8 videos)		36	2.9 Times tables: 7 and patterns within/across times tables	4
12	3NF2		25	3.2 Unit fractions: identifying, representing and comparing	6	37	4NF1	
13			26	3F1 (8 videos), 3F2 (1 video), 3F3 (4 videos)		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	6						
2	4NPV1, 4NPV2, 4NPV3, 4NPV4		15	1.23 Composition and calculation: tenths		27	2.16 Multiplicative contexts: area and perimeter 1	
3	4NF3		16	1.24 Composition and calculation: hundredths and thousandths	8	28	3.5 Working across one whole: improper fractions and mixed numbers	6
4	2.10 Connecting multiplication and division, and the distributive law	3	17	5NPV1-4, 5NF2		29	4F1, 4F2, 4F3	
5	4MD2, 4MD3		18			30		
6	2.11 Times tables: 11 and 12*	4	19	1.25 Addition and subtraction: money	5	31	3.6 Multiplying whole numbers and fractions	5
7	4NF1		20			32	3F2	
	Holiday			Holiday			Holiday	
8	2.12 Division with remainders	3	21	2.14 Multiplication: partitioning leading to short multiplication	4	33	3.6 Multiplying whole numbers and fractions	
9	4NF2		22	5MD3		34	y4 Times Table Check	
10	2.13 calculation: multiplying and dividing by 10 or 100	7	23	2.15 Division: partitioning leading to short division	4	35	2.17 Structures: using measures and comparison to understand scaling	3
11	4MD1, 5MD1		24	5MD4		36		
12	1.23 Composition and calculation: tenths	6	25	2.16 Multiplicative contexts: area and perimeter 1	6	37	Geometry 4G2, 4G3	
13	5NPV1-4, 5NF2		26	5G2, 6G1		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	1.27 Negative numbers: counting, comparing and calculating	6	15	2.18 Using equivalence to calculate	2	27	3.7 Finding equivalent fractions and simplifying fractions 5F2 (9 videos) 6F1	3
3			16	2.19 Calculation: x and ÷ decimal fractions by whole numbers	5	28		
4			17			29		
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	1.29 Using equivalence and the compensation property to calculate 6AS2	6	22	2.21 Factors, multiples, prime numbers and composite numbers	6	34		
10			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						39		
	Christmaths							

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