HECKINGTON ST. ANDREW'S C OF E PRIMARY SCHOOL

MATHS CURRICULUM AND PROGRESSION DOCUMENTS

Intent

Our Mathematics curriculum is underpinned by the **National Curriculum** Programmes of Study. Teaching and learning in Mathematics is predominantly done in discrete subject lessons. There is an entitlement to one mathematics lesson per day for all pupils. We use a **mastery** approach to learning in Mathematics, meaning that we ensure that all pupils are confident and proficient in the planned **knowledge** and **process knowledge (skills)** before moving on to new content. Wherever possible, pupils are challenged in their thinking and encouraged to deepen their mathematical **understanding**. Our curriculum enables competent and confident mathematicians, who are able to reason.

Implementation

Class teachers follow our curriculum progression documents to underpin their planning and teaching, and carefully plan for an appropriate balance of pictorial and concrete resources, alongside abstract problems, to ensure that all pupils are able to progress within individual lessons, and across a sequence, using mastery approaches. Formative assessment practices identify any learning gaps within individual lessons to inform continuous feedback and next steps for pupils, allowing teachers to plan supplementary lessons where required. Teachers ensure there is sufficient time for regular, focussed rehearsal of core number facts that are essential to solving mathematical calculations and problems.

Golden Threads for Maths

Relationships	Respect	Responsibility	Resilience	Reverence
• We are helpful • We work as a team • We are kind and caring • We are good communicators	• We are active listeners • We show good manners • We care for our environment • We show consideration for others	• We own our actions • We are self-motivated • We are good role models • We are in control of our learning	• We keep going • We believe in ourselves • We have a go • We persevere	• We show empathy • We are reflective • We experience awe and wonder • We practice stillness

Long Term Plans

EYFS

EYFS	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Number and Pattern: Matching	Number and Pattern: Counting	Coming soon
Week 2	Number and Pattern: Sorting	Number and Pattern: Counting and ordering	Coming soon
Week 3	Shape, Space and Measure: Comparing and ordering	Number and Pattern: Counting	Coming soon
Week 4	Number and Pattern: AB Patterns	Number and Pattern: Addition	Coming soon
Week 5	Number and Pattern: Counting	Number and Pattern: Comparing and ordering	Coming soon
Week 6		Number and Pattern: Counting	Coming soon
Week 7	Shape, Space and Measure: Time		Coming soon
Week 8	Number and Pattern: Composition of numbers up to 5	Number and Pattern: Patterns	Coming soon
Week 9		Shape, Space and Measure: Measuring lengths and heights	Coming soon
Week 10	Shape, Space and Measure: 2D shapes	Shape, Space and Measure: Capacity	Coming soon
Week 11		Shape, Space and Measure: 2D shapes	Coming soon
Week 12	Shape, Space and Measure: Positional language	Shape, Space and Measure: 3D shapes	Coming soon

Year 1 (110 white space days)

Y1 Edited	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Place value: Numbers to 10	Addition and subtraction within 20	Multiplication
Week 2	Place value: Numbers to 10	Geometry: Properties of Shape	Division
Week 3	Addition and subtraction	Geometry: Properties of Shape	Fractions
Week 4	Addition and subtraction	Measurement: Length and Height	Place value: Numbers to 100
Week 5	Addition and subtraction	Review and Remediation	Place value: Numbers to 100
Week 6	Addition and subtraction	Review and Remediation	Measurement: Time
Week 7	Addition and subtraction	Place value – Numbers to 40	Measurement: Money
Week 8	Geometry: Position and Direction	Place value – Numbers to 40	Measurement: Volume and capacity
Week 9	Geometry: Position and Direction	Addition and subtraction	Measurement: Mass
Week 10	Place value: Numbers to 20	Addition and subtraction	Geometry: Position and Direction
Week 11	Place value: Numbers to 20	Spring Term Assessment Week	Revision and End-of-year tests

Week 12	Addition and subtraction within 20	Multiplication	Review and Remediation

Year 2 (72 white space days)

Y2 Edited for SATs	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Place value: Numbers to 100	Multiplication and division of 2, 5 and 10	Measurement: Time
Week 2	Place value: Numbers to 100	Multiplication and division of 2, 5 and 10	Measurement: Time
Week 3	Place value: Numbers to 100	Measurement: Length	Consolidation week
Week 4	Addition and subtraction	Measurement: Length	Geometry: 2D Shapes
Week 5	Addition and subtraction	Fractions	Geometry: 2D/ 3D Shapes SATS week
Week 6	Addition and subtraction	Fractions	Geometry: 2D/3D Shapes

Week 7	Addition and subtraction	Fractions	Measurement: Mass
Week 8	Addition and subtraction	Measurement: Money	Measurement: Mass
Week 9	Consolidation week	Measurement: Money	Measurement: Volume
Week 10	Multiplication of 2, 5 and 10	Statistics: Picture Graphs	Measurement: Volume
Week 11	Multiplication of 2, 5 and 10	Assessment and consolidation week	Review and revisit
Week 12	Multiplication of 2, 5 and 10	Measurement: Temperature	Review and revisit

Year 3 (17 white space days)

Y3 Edited	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Place value: Numbers to 1000	Measurement: Length	Statistics
Week 2	Place value: Numbers to 1000	Measurement: Length	Fractions
Week 3	Addition and subtraction	Measurement: Mass	Fractions
Week 4	Addition and subtraction	Measurement: Volume	Fractions
Week 5	Addition and subtraction	Measurement: Volume	Fractions
Week 6	Addition and subtraction	Measurement: Money	Fractions
Week 7	Addition and subtraction	Measurement: Money	Geometry – angles
Week 8	Multiplication and division	Measurement: Money	Geometry – angles, lines
Week 9	Multiplication and division	Measurement: Time	Geometry – shapes
Week 10	Multiplication and division	Measurement: Time	Measurement: perimeter of figures
Week 11	Further multiplication and division	Spring Term Assessment Week	Measurement: perimeter of figures
Week 12	Further multiplication and division	Measurement: Time	Review and revisit

Year 4 (44 white space days)

Y4 Edited	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Place value: Numbers to 10 000	Further multiplication and division	Measurement: Money
Week 2	Place value: Numbers to 10 000	Further multiplication and division	Measurement: Money
Week 3	Place value: Numbers to 10 000	Further multiplication and division	Measure: Mass, Volume and Length
Week 4	Addition and subtraction: 10 000	Statistics - Graphs	Measure: Mass, Volume and Length
Week 5	Addition and subtraction: 10 000	Fractions	Measure: Mass, Volume and Length
Week 6	Addition and subtraction: 10 000	Fractions	Measure: Mass, Volume and Length
Week 7	Addition and subtraction: 10 000	Fractions	Measurement: Area of figures
Week 8	Multiplication and division	Measurement - Time	Geometry: Properties of Shapes
Week 9	Multiplication and division	Decimals	Geometry: Properties of Shapes
Week 10	Multiplication and division	Decimals	Geometry: Position and Movement
Week 11	Multiplication and division	Spring Term Assessment Week	Place value: Roman numerals

Week 12	Further multiplication and division	Decimals	Review and revisit

Year 5 (55 white space days)

Y5 Edited	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Place value: Numbers to 1 000 000	Fractions, Decimals and Percentages	Geometry: Position and Movement
Week 2	Place value: Numbers to 1 000 000	Fractions, Decimals and Percentages	Measurement - Measurements
Week 3	Place value: Numbers to 1 000 000	Fractions, Decimals and Percentages	Measurement - Measurements
Week 4	Addition and subtraction	Fractions, Decimals and Percentages	Measurement - Measurements
Week 5	Addition and subtraction	Fractions, Decimals and Percentages	Measurement – Area and Perimeter
Week 6	Multiplication and division	Fractions, Decimals and Percentages	Measurement – Area and Perimeter
Week 7	Multiplication and division	Fractions, Decimals and Percentages	Measurement – Area and Perimeter
Week 8	Multiplication and division	Fractions, Decimals and Percentages	Measurement – Volume
Week 9	Multiplication and division	Geometry: Properties of Shapes	Measurement – Volume
Week 10	Word problems	Geometry: Properties of Shapes	Place value – Roman numerals

Week 11	Statistics: Graphs	Spring Term Assessment Week	Review and revisit
Week 12	Statistics: Graphs	Geometry: Properties of Shapes	Review and revisit

Year 6 (54 white space days)

Y6 Edited for SATs	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Numbers & Place Value to 10 Million	FDP: Percentages	Statistics: graphs and averages
Week 2	Calculations 4 operations. Whole numbers	Word problems	Revision
Week 3	Calculations 4 operations. Whole numbers	Ratio & Proportion: Ratio	Revision
Week 4	Calculations 4 operations. Whole numbers	Ratio & Proportion: Ratio	SATS
Week 5	Calculations 4 operations. Whole numbers	Algebra: Algebra	Geometry – properties of shapes
Week 6	FDP: Fractions	Algebra: Algebra	Geometry – Position and direction

Week 7	FDP: Fractions	Measurement: Area & Perimeter	Number & place value : negative numbers
Week 8	Autumn Term Test Week	Measurement: Area & Perimeter	Statistics – graphs and averages
Week 9	FDP: Decimals	Geometry – properties of shape, angles	Statistics – graphs and averages
Week 10	FDP: Decimals	Geometry – Position and movement	Revisit topics
Week 11	Measurements	Spring Term Assessment Week	Revisit topics
Week 12	Measurements	Measurement - volume	Revisit topics

Medium Term Plans

Year 1

Year 1 Maths Guidance 2020-2021:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897799/Maths_guidance_year_1.pdf
Find previous year experience and future applications for ready-to-progress criteria on p9-10 of document above.
Year 1 Guidance video: https://youtu.be/GZQC0duYGKk?list=PL6gGtLyXoeq-FMWk00AlcIPo3fhGmi03D
PD materials: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/

Autumn Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2**	**Place value: Numbers to 10** **Lesson 1 - Counting to 10** **Lesson 2 - Counting Objects to 10** **Lesson 3 - Writing to 10** **Lesson 4 - Counting To Zero** **Lesson 5 - Comparing Numbers of Objects** **Lesson 6 - Ordering Numbers** **Lesson 7 - Comparing Numbers** **Lesson 8 - Chapter Consolidation** + supplementary	**1NPV–1** Count within 100, forwards and backwards, starting with any number. **(p11-13)** **1AS–1** Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. **(p23-28)**	1.1 Comparison of quantities and measures https://www.ncetm.org.uk/classroom-resources/primm-1-01-comparison-of-quantities-and-measures/ 1.3 Composition of numbers: 0 – 5 https://www.ncetm.org.uk/classroom-resources/primm-1-03-composition-of-numbers-0-5/ 1.4 Composition of numbers: 6 – 10 https://www.ncetm.org.uk/classroom-resources/primm-1-04-composition-of-numbers-6-10/

Week 3 **Week 4** **Week 5** **Week 6** **Week 7**	**Addition and subtraction** Lesson 1 – Making Number Bonds Lesson 2 – Making Number Stories Lesson 3 – Chapter Consolidation Lesson 1 – Add By Using Number Bonds Lesson 2 – Add by Counting On Lesson 3 – Completing Number Sentences Lesson 4 – Making Addition Stories Lesson 5 – Solving Picture Problems Lesson 6 – Chapter Consolidation Lesson 1 – Subtract by Crossing Out Lesson 2 – Subtract by Using Number Bonds Lesson 3 – Subtract by Counting Back Lesson 4 – Making Subtraction Stories Lesson 5 – Solving Picture Problems Lesson 6 – Addition and Subtraction Lesson 7 – Chapter Consolidation + supplementary	1NF–1 Develop fluency in addition and subtraction facts within 10. **(p17-19 and p39-40)** 1AS–2 Read, write and interpret equations containing addition (+), subtraction (−) and equals (=) symbols, and relate additive expressions and equations to real-life contexts. **(p29-35)**	1.2 Introducing 'whole' and 'parts': Part-part-whole https://www.ncetm.org.uk/classroom-resources/primm-1-02-introducing-whole-and-parts-part-part-whole/ 1.7 Addition and subtraction: strategies within 10 https://www.ncetm.org.uk/classroom-resources/primm-1-07-addition-and-subtraction-strategies-within-10/ 1.5 Additive structures: introduction to aggregation and partitioning https://www.ncetm.org.uk/classroom-resources/primm-1-05-additive-structures-introduction-to-aggregation-and-partitioning/ 1.6 Additive structures: introduction to augmentation and reduction https://www.ncetm.org.uk/classroom-resources/primm-1-06-additive-structures-introduction-to-augmentation-and-reduction/

Week 8 **Week 9?**	**Geometry: Position and Direction** **Lesson 1 – Naming Positions** **Lesson 2 – Naming Positions in Queues** **Lesson 3 – Naming Left and Right Positions** **Lesson 4 – Chapter Consolidation** + supplementary		
Week 10 **Week 11**	**Place value: Numbers to 20** **Lesson 1 – Counting to 20** **Lesson 2 – Writing to 20** **Lesson 3 – Comparing Numbers** **Lesson 4 – Ordering Numbers** **Lesson 5 – Number Patterns** **Lesson 6 – Chapter Consolidation** + supplementary	**1NPV–2** Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =. **(p13-16)**	1.1 Comparison of quantities and measures https://www.ncetm.org.uk/classroom-resources/primm-1-01-comparison-of-quantities-and-measures/ 1.3 Composition of numbers: 0 – 5 https://www.ncetm.org.uk/classroom-resources/primm-1-03-composition-of-numbers-0-5/ 1.4 Composition of numbers: 6 – 10 https://www.ncetm.org.uk/classroom-resources/primm-1-04-composition-of-numbers-6-10/ 1.10 Composition of numbers: 11 – 19 https://www.ncetm.org.uk/classroom-resources/primm-1-10-composition-of-numbers-11-19/

Week 12	**Addition and subtraction within 20** Lesson 1 - Add by Counting On Lesson 2 - Add by Making 10 Lesson 3 - Add by Adding Ones Lesson 4 - Counting Back + supplementary		

Spring Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	**Addition and subtraction within 20** Lesson 5 - Subtract by Subtracting Ones Lesson 6 - Subtract from 10 Lesson 7 - Addition and Subtraction Facts Lesson 8 - Chapter Consolidation + supplementary		

Week 2 **Week 3**	**Geometry: Properties of Shape** **Lesson 1 – Recognising Solids** **Lesson 2 – Recognising Shapes** **Lesson 3 – Grouping Shapes** **Lesson 4 – Making Patterns** **Lesson 5 – Chapter Consolidation** + supplementary	1G–1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. **(p35–37)** 1G–2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations. **(p37–39)**	n/a
Week 4	**Measurement: Length and Height** **Lesson 1 – Comparing Height and Length** **Lesson 2 – Measuring Length Using Things** **Lesson 3 – Measuring Height and Length Using Body Parts** **Lesson 4 – Measuring Height and Length Using a Ruler** **Lesson 5 – Chapter Consolidation** + supplementary		
Week 5	**Review and Remediation**		
Week 6	**Review and Remediation**		

Week 7 **Week 8**	**Place value – Numbers to 40** Lesson 1 – Counting to 40 Lesson 2 – Writing Numbers to 40 Lesson 3 – Counting in Tens and Ones Lesson 4 – Comparing Numbers Lesson 5 – Finding How Much More Lesson 6 – Making Number Patterns Lesson 7 – Chapter Consolidation + supplementary		
Week 9 **Week 10**	**Addition and subtraction** Lesson 1 – Solving Word Problems Lesson 2 – Solving Word Problems Lesson 3 – Solving Word Problems Lesson 4 – Solving Word Problems Lesson 5 – Solving Word Problems Lesson 6 – Solving Word Problems Lesson 7 – Chapter Consolidation + supplementary		
Week 11	**Spring Term Assessment Week**		

Week 12	**Multiplication** **Lesson 1 - Making Equal Groups** **Lesson 2 - Adding Equal Groups** **Lesson 3 - Making Equal Rows** **Lesson 6 - Chapter Consolidation** + supplementary	**1NF-2** Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. **(p19-23 and p40)**	2.1 Counting, unitising and coins https://www.ncetm.org.uk/classroom-resources/primm-2-01-counting-unitising-and-coins/ 1.8 Composition of numbers: Multiples of 10 up to 100 https://www.ncetm.org.uk/classroom-resources/primm-1-08-composition-of-numbers-multiples-of-10-up-to-100/

Summer Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	**Multiplication** **Lesson 4 - Making Doubles** **Lesson 5 - Solving Word Problems** + supplementary	As above	As above

Week 2	**Division** **Lesson 1 - Grouping Equally** **Lesson 2 - Sharing Equally** **Lesson 3 - Chapter Consolidation** + supplementary		
Week 3	**Fractions** **Lesson 1 - Making Halves** **Lesson 2 - Making Quarters** **Lesson 3 - Sharing and Grouping** **Lesson 4 - Chapter Consolidation** + supplementary		3.0 Guidance on teaching fractions in KS1 https://www.ncetm.org.uk/classroom-resources/primm-3-0-guidance-on-the-teaching-of-fractions-in-key-stage-1/
Week 4 **Week 5?**	**Place value: Numbers to 100** **Lesson 1 - Counting to 100** **Lesson 2 - Finding Tens and Ones** **Lesson 3 - Comparing Numbers** **Lesson 4 - Making Number Patterns** **Lesson 5 - Chapter Consolidation** + supplementary	**1NPV–1** Count within 100, forwards and backwards, starting with any number.	1.1 Comparison of quantities and measures https://www.ncetm.org.uk/classroom-resources/primm-1-01-comparison-of-quantities-and-measures/ 1.9 Composition of numbers: 20–100 https://www.ncetm.org.uk/classroom-resources/primm-1-09-composition-of-numbers-20-100/
Week 5	**Measurement: Time** **Lesson 1 - Telling Time to the Hour**		

Week 6	**Lesson 2 - Telling Time to the Half Hour** **Lesson 3 - Using Next, Before and After** **Lesson 4 - Estimating Duration of Time** **Lesson 5 - Comparing Time** **Lesson 6 - Using a Calendar** **Lesson 7 - Chapter Consolidation** + supplementary		
Week 7	**Measurement: Money** **Lesson 1 - Recognising Coins** **Lesson 2 - Recognising Notes** **Lesson 3 - Chapter Consolidation** + supplementary		
Week 8	**Measurement: Volume and capacity** **Lesson 1 - Comparing Volume and Capacity** **Lesson 2 - Finding Volume and Capacity** **Lesson 3 - Describing Volume Using Half and a Quarter** **Lesson 4 - Chapter Consolidation** + supplementary		

Week 9	**Measurement: Mass** **Lesson 1 - Comparing Mass** **Lesson 2 - Finding Mass** **Lesson 3 - Chapter Consolidation** + supplementary		
Week 10	**Geometry: Position and Direction** **Lesson 1 - Describing Positions** **Lesson 2 - Describing Movements** **Lesson 3 - Making Turns** **Lesson 4 - Chapter Consolidation** + supplementary		
Week 11	**Revision and End-of-year tests**		
Week 12	**Review and Remediation**		

Year 2

Year 2 Maths Guidance 2020-2021:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897800/Maths_guidance_year_2.pdf
(See progression on p9-11)
Year 2 Guidance video: https://youtu.be/Cd4CuwgtfGQ?list=PL6gGtLyXoeq-FMWk00AlcIPo3fhGmi03D
PD materials: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/

Autumn Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2** **Week 3**	**Place value: Numbers to 100** Lesson 1 - Counting to 100 Lesson 2 - Place Value Lesson 3 - Comparing Numbers Lesson 4 - Number Bonds Lesson 5 - Number Patterns Lesson 6 - Number Patterns Lesson 7 - Chapter Consolidation **+ supplementary lessons**	2NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning. **(p12-13)** 2NPV–2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10. **(p14-16)**	1.8 Composition of numbers: multiples of 10 up to 100 https://www.ncetm.org.uk/classroom-resources/primm-1-08-composition-of-numbers-multiples-of-10-up-to-100/ 1.9 Composition of numbers: 20–100 https://www.ncetm.org.uk/classroom-resources/primm-1-09-composition-of-numbers-20-100/ 1.10 Composition of numbers: 11–19 https://www.ncetm.org.uk/classroom-resources/primm-1-10-composition-of-numbers-11-19/

Week 4 **Week 5** **Week 6** **Week 7** **Week 8**	**Addition and subtraction** Lesson 1 - Simple Adding Lesson 2 - Simple Adding Lesson 3 - Simple Adding Lesson 4 - Simple Adding Lesson 5 - Adding with Renaming Lesson 6 - Adding with Renaming Lesson 7 - Simple Subtracting Lesson 8 - Simple Subtracting Lesson 9 - Simple Subtracting Lesson 10 - Simple Subtracting Lesson 11 - Subtracting with Renaming Lesson 12 - Subtracting with Renaming Lesson 13 - Addition of Three Numbers Lesson 14 - Chapter Consolidation **+ supplementary lessons**	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. **(p16-17)** 2AS–1 Add and subtract across 10, for example: $8+5=13$ $13-5=8$ **(p18-20)** 2AS–2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?". **(p20-22)** 2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. **(p23-26)** 2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. **(p27-29)**	1.7 Addition and Subtraction: strategies within 10 https://www.ncetm.org.uk/classroom-resources/primm-1-07-addition-and-subtraction-strategies-within-10/ 1.11 Addition and subtraction: bridging 10 https://www.ncetm.org.uk/classroom-resources/primm-1-11-addition-and-subtraction-bridging-10/ 1.12 Subtraction as difference https://www.ncetm.org.uk/classroom-resources/primm-1-12-subtraction-as-difference/ 1.13 Addition and subtraction: two-digit and single-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-13-addition-and-subtraction-two-digit-and-single-digit-numbers/ 1.14 Addition and subtraction: two-digit numbers and multiples of ten https://www.ncetm.org.uk/classroom-resources/primm-1-14-addition-and-subtraction-two-digit-numbers-and-multiples-of-ten/

			1.15 Addition: two-digit and two-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-15-addition-two-digit-and-two-digit-numbers/ 1.16 Subtraction: two-digit and two-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-16-subtraction-two-digit-and-two-digit-numbers/
Week 9	**Consolidation week**		
Week 10 **Week 11** **Week 12**	**Multiplication of 2, 5 and 10** Lesson 1 - Multiplication as Equal Groups Lesson 2 - 2 Times Table Lesson 3 - 2 Times Table Lesson 4 - 5 Times Table Lesson 5 - 5 Times Table Lesson 6 - 10 Times Table Lesson 7 - 10 Times Table Lesson 8 - Multiplying by 2, 5 and 10 Lesson 9 - Multiplying by 2, 5 and 10 Lesson 10 - Solving Word Problems Lesson 11 - Chapter Consolidation **+ supplementary lessons**	2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. **(p30-32)**	2.2 Structures: multiplication representing equal groups https://www.ncetm.org.uk/classroom-resources/primm-2-02-structures-multiplication-representing-equal-groups/ 2.3 Times tables: groups of 2 and commutativity (part 1) https://www.ncetm.org.uk/classroom-resources/primm-2-03-times-tables-groups-of-2-and-commutativity-part-1/ 2.4 Times tables: groups of 10 and of 5, and factors of 0 and 1 https://www.ncetm.org.uk/classroom-resources/primm-2-04-times-tables-groups-of-10-and-of-5-and-factors-of-0-and-1/

			2.5 Commutativity (part 2), doubling and halving https://www.ncetm.org.uk/classroom-resources/primm-2-05-commutativity-part-2-doubling-and-halving/

Spring Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 Week 2	**Multiplication and division of 2, 5 and 10** Lesson 1 - Grouping Lesson 2 - Sharing Lesson 3 - Dividing by 2 Lesson 4 - Dividing by 5 Lesson 5 - Dividing by 10 Lesson 6 - Multiplication and Division Lesson 7 - Solving Word Problems Lesson 8 - Odd and Even Numbers Lesson 9 - Chapter Consolidation **+ supplementary lessons**	2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). **(p33-34)**	2.6 Structures: quotitive and partitive division https://www.ncetm.org.uk/classroom-resources/primm-2-06-structures-quotitive-and-partitive-division/

Week 3 **Week 4**	**Measurement: Length** Lesson 1 - Measuring Length in Metres Lesson 2 - Measuring Length in Centimetres Lesson 3 - Comparing Length in Metres Lesson 4 - Comparing Length in Centimetres Lesson 5 - Comparing the Length of Lines Lesson 6 - Solving Word Problems Lesson 7 - Solving Word Problems Lesson 8 - Solving Word Problems Lesson 9 - Chapter Consolidation		
Week 5 **Week 6**	**Fractions** Lesson 1 - Making Equal Parts Lesson 2 - Showing Half and Quarter Lesson 3 - Showing Quarters Lesson 4 - Showing Thirds Lesson 5 - Naming Fractions Lesson 6 - Making Equal Fractions Lesson 7 - Comparing and Ordering Fractions Lesson 8 - Comparing and Ordering Fractions Lesson 9 - Counting Wholes and Parts Lesson 10 - Counting in Halves		3.0 Guidance on teaching fractions in KS1 https://www.ncetm.org.uk/classroom-resources/primm-3-0-guidance-on-the-teaching-of-fractions-in-key-stage-1/

Week 7	**Fractions** Lesson 11 - Counting in Quarters Lesson 12 - Counting in Thirds Lesson 13 - Finding Part of a Set Lesson 14 - Finding Part of a Set Lesson 15 - Finding Part of a Set Lesson 16 - Finding Part of a Quantity Lesson 17 - Chapter Consolidation		
Week 8 **Week 9**	**Measurement: Money** Lesson 1 - Writing Amounts of Money Lesson 2 - Counting Money Lesson 3 - Counting Money Lesson 4 - Counting Money Lesson 5 - Showing Equal Amounts of Money Lesson 6 - Exchanging Money Lesson 7 - Comparing Amounts of Money Lesson 8 - Calculating Total Amount Lesson 9 - Calculating Change Lesson 10 - Solving Word Problems Lesson 11 - Chapter Consolidation		
Week 10	**Statistics: Picture Graphs**		

	Lesson 1 - Reading Picture Graphs Lesson 2 - Reading Picture Graphs Lesson 3 - Reading Picture Graphs Lesson 4 - Reading Picture Graphs Lesson 5 - Reading Picture Graphs Lesson 6 - Chapter Consolidation		
Week 11	**Spring Term Assessment Week**		
Week 12	**Measurement: Temperature** Lesson 1 - Reading Temperature Lesson 2 - Estimating temperature Lesson 3 - Chapter Consolidation		

Summer Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2**	**Measurement: Time** Lesson 1 - Telling and Writing Time to 5 Minutes Lesson 2 - Telling and Writing Time Lesson 3 - Sequencing Events Lesson 4 - Drawing Clock Hands Lesson 5 - Finding Durations of Time Lesson 6 - Finding Durations of Time Lesson 7 - Finding Ending Times Lesson 8 - Finding Ending Times Lesson 9 - Finding Starting Times Lesson 10 - Finding Starting Times Lesson 11 - Comparing Time Lesson 12 - Chapter Consolidation		
Week 3	**Consolidation week**		
Week 4 **Week 5**	**Geometry: 2D Shapes**	2G–1 Describe and compare 2D and 3D shapes. Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties. **(p35-38)**	n/a

	Lesson 1 - Identifying Sides Lesson 2 - Identifying Vertices Lesson 3 - Identifying Lines of Symmetry Lesson 4 - Making Figures Lesson 5 - Sorting Shapes Lesson 6 - Drawing Shapes Lesson 7 - Making Patterns Lesson 8 - Describing Patterns Lesson 9 - Moving Shapes Lesson 10 - Turning Shapes Lesson 11 - Chapter Consolidation		
	SATS week		
Week 6	**Geometry: 2D/3D Shapes** Lesson 1 - Recognising Three-Dimensional Shapes Lesson 2 - Describing Three-Dimensional Shapes Lesson 3 - Describing Three-Dimensional Shapes Lesson 4 - Grouping Three-Dimensional Shapes Lesson 5 - Forming Three-Dimensional Structures Lesson 6 - Making Patterns Lesson 7 - Chapter Consolidation		

Week 7 **Week 8**	**Measurement: Mass** Lesson 1 - Measuring Mass in Kilograms Lesson 2 - Measuring Mass in Grams Lesson 3 - Measuring Mass in Grams Lesson 4 - Comparing Masses of Two Objects Lesson 5 - Comparing the Mass of Three Objects Lesson 6 - Solving Word Problems Lesson 7 - Solving More Word Problems Lesson 8 - Chapter Consolidation		
Week 9 **Week 10**	**Measurement: Volume** Lesson 1 - Comparing Volume Lesson 2 - Comparing Volume Lesson 3 - Measuring Volume in Litres Lesson 4 - Measuring Volume in Millilitres Lesson 5 - Solving Word Problems Lesson 6 - Solving Word Problems Lesson 7 - Solving Word Problems Lesson 8 - Chapter Consolidation		
Week 11/12	**Review and revisit**		

Year 3

Year 3 Maths Guidance 2020-2021:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897801/Maths_guidance_year_3.pdf
(p9-12 shows progression)
Year 3 Guidance video: https://youtu.be/9rlue2OaupU?list=PL6gGtLyXoeq-FMWk00AlcIPo3fhGmi03D
PD materials: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/

Autumn Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2**	**Place value: Numbers to 1000** Lesson 1 - Counting in Hundreds Lesson 2 - Counting in Hundreds, Tens and Ones Lesson 3 - Place Value Lesson 4 - Comparing and Ordering Numbers Lesson 5 - Counting in Fifties Lesson 6 - Number Patterns Lesson 7 - Number Patterns Lesson 8 - Counting in Fours and Eights Lesson 9 - Chapter Consolidation	**3NPV–1** Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10. **(p13-15)** **3NPV–2** Recognise the place value of each digit in *three*-digit numbers, and compose and decompose *three*-digit numbers using standard and non-standard partitioning. **(p15-17)** **3NPV–3** Reason about the location of any *three*-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10. **(p18-21)**	1.17 Composition and calculation: 100 and bridging 100 https://www.ncetm.org.uk/classroom-resources/primm-1-17-composition-and-calculation-100-and-bridging-100/ 1.18 Composition and calculation: three-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-18-composition-and-calculation-three-digit-numbers/ 1.18 Composition and calculation: three-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-18-composition-and-calculation-three-digit-numbers/

Week 3 **Week 4** **Week 5** **Week 6** **Week 7**	**Addition and subtraction** Lesson 1 - Addition and Subtraction Fac Lesson 2 - Simple Adding Lesson 3 - Simple Adding Lesson 4 - Simple Adding Lesson 5 - Simple Adding Lesson 6 - Adding with Renaming Lesson 7 - Adding with Renaming Lesson 8 - Adding with Renaming Lesson 9 - Adding with Renaming Lesson 10 - Adding with Renaming Lesson 11 - Simple Subtracting Lesson 12 - Simple Subtracting Lesson 13 - Simple Subtracting Lesson 14 - Simple Subtracting Lesson 15 - Simple Subtracting Lesson 16 - Subtracting with Renaming Lesson 17 - Subtracting with Renaming Lesson 18 - Subtracting with Renaming Lesson 19 - Subtracting with Renaming Lesson 20 - Using Models Lesson 21 - Using Models Lesson 22 - Using Models Lesson 23 - Using Models Lesson 24 - Chapter Consolidation	3NF–1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice. **(p25-27 and p67-68)** 3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). **(p30-32)** 3AS–1 Calculate complements to 100, for example: $46 + ? = 100$ **(p33-35)** 3AS–2 Add and subtract up to three-digit numbers using columnar methods. **(p36-39)** 3AS–3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction. **(p40-43)**	1.11 Addition and subtraction: bridging 10 https://www.ncetm.org.uk/classroom-resources/primm-1-11-addition-and-subtraction-bridging-10/ 1.17 Composition and calculation: 100 and bridging 100 https://www.ncetm.org.uk/classroom-resources/primm-1-17-composition-and-calculation-100-and-bridging-100/ 1.17 Composition and calculation: 100 and bridging 100 https://www.ncetm.org.uk/classroom-resources/primm-1-17-composition-and-calculation-100-and-bridging-100/ 1.20 Algorithms: column addition https://www.ncetm.org.uk/classroom-resources/primm-1-20-algorithms-column-addition/ 1.21 Algorithms: column subtraction https://dev-ncetm.s1.umbraco.io/classroom-resources/primm-1-21-algorithms-column-subtraction/ ***n/a*** 1.19 Securing mental strategies: calculation up to 999 https://www.ncetm.org.uk/classroom-resources/primm-1-19-securing-mental-strategies-calculation-up-to-999/

Week 8 **Week 9** **Week 10**	**Multiplication and division** Lesson 1 - Multiplying by 3 Lesson 2 - Multiplying by 3 Lesson 3 - Multiplying by 4 Lesson 4 - Multiplying by 4 Lesson 5 - Multiplying by 4 and 8 Lesson 6 - Multiplying by 8 Lesson 7 - Multiplying by 8 Lesson 8 - Dividing by 3 Lesson 9 - Dividing by 4 Lesson 10 - Multiplying and Dividing Lesson 11 - Dividing by 4 and 8 Lesson 12 - Solving Word Problems Lesson 13 - Solving Word Problems Lesson 14 - Solving Word Problems Lesson 15 - Solving Word Problems Lesson 16 - Chapter Consolidation	3NF–2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. **(p27-29 and p69)** 3NPV–4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. **(p22-24)** 3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division. **(p44-46)**	2.4 Times tables: groups of 10 and of 5, and factors of 0 and 1 https://www.ncetm.org.uk/classroom-resources/primm-2-04-times-tables-groups-of-10-and-of-5-and-factors-of-0-and-1/ 2.7 Times tables: 2, 4 and 8, and the relationship between them https://www.ncetm.org.uk/classroom-resources/primm-2-07-times-tables-2-4-and-8-and-the-relationship-between-them/ 1.17 Composition and calculation: 100 and bridging 100 https://www.ncetm.org.uk/classroom-resources/primm-1-17-composition-and-calculation-100-and-bridging-100/ 2.5 Commutativity (part 2), doubling and halving https://www.ncetm.org.uk/classroom-resources/primm-2-05-commutativity-part-2-doubling-and-halving/ 2.6 Structures: quotitive and partitive division https://www.ncetm.org.uk/classroom-resources/primm-2-06-structures-quotitive-and-partitive-division/

Week 11 **Week 12**	**Further multiplication and division** Lesson 1 - Multiplying 2-Digit Numbers Lesson 2 - Multiplying 2-Digit Numbers Lesson 3 - Multiplying 2-Digit Numbers Lesson 4 - Multiplying with Regrouping Lesson 5 - Multiplying with Regrouping Lesson 6 - Simple Dividing Lesson 7 - Dividing with Regrouping Lesson 8 - Dividing with Regrouping Lesson 9 - Solving Word Problems Lesson 10 - Solving Word Problems Lesson 11 - Solving Word Problems Lesson 12 - Chapter Consolidation		2.8 Times tables: 3, 6 and 9, and the relationship between them https://www.ncetm.org.uk/classroom-resources/primm-2-08-times-tables-3-6-and-9-and-the-relationship-between-them/ 2.9 Times tables: 7 and the patterns within/across times tables https://www.ncetm.org.uk/classroom-resources/primm-2-09-times-tables-7-and-patterns-within-across-times-tables/

Spring Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2**	**Measurement: Length** Lesson 1 - Writing Length in Metres and Centimetres Lesson 2 - Writing Length in Centimetres Lesson 3 - Writing Length in Metres Lesson 4 - Writing Length in Kilometres and Metres Lesson 5 - Comparing Length Lesson 6 - Solving Word Problems Lesson 7 - Solving Word Problems Lesson 8 - Solving Word Problems Lesson 9 - Solving Word Problems Lesson 10 - Solving Word Problems Lesson 11 - Chapter Consolidation		
Week 3	**Measurement: Mass** Lesson 1 - Reading Weighing Scales Lesson 2 - Reading Weighing Scales Lesson 3 - Reading Weighing Scales Lesson 4 - Reading Weighing Scales Lesson 5 - Solving Word Problems Lesson 6 - Solving Word Problems Lesson 7 - Solving Word Problems Lesson 8 - Chapter Consolidation		

Week 4 **Week 5**	**Measurement: Volume** Lesson 1 - Measuring Volume in Millilitres Lesson 2 - Measuring Capacity in Millilitres Lesson 3 - Measuring Volume in Millilitres and Litres Lesson 4 - Measuring Capacity in Millilitres and Litres Lesson 5 - Writing Volume in Litres and Millilitres Lesson 6 - Writing Capacity in Litres and Millilitres Lesson 7 - Solving Word Problems Lesson 8 - Solving Word Problems Lesson 9 - Solving Word Problems Lesson 10 - Solving Word Problems Lesson 11 - Chapter Consolidation		
Week 6	**Measurement: Money** Lesson 1 - Naming Amounts of Money Lesson 2 - Naming Amounts of Money Lesson 3 - Showing Amounts of Money Lesson 4 - Adding Money Lesson 5 - Adding Money		
Week 7 **Week 8**	**Measurement: Money**		

	Lesson 6 - Adding Money Lesson 7 - Adding Money Lesson 8 - Subtracting Money Lesson 9 - Subtracting Money Lesson 10 - Subtracting Money Lesson 11 - Subtracting Money Lesson 12 - Calculating Change Lesson 13 - Solving Word Problems Lesson 14 - Solving Word Problems Lesson 15 - Chapter Consolidation		

Week 9 **Week 10** **Week 11** **ASSESSMENT WEEK** **Week 12**	**Measurement: Time** Lesson 1 - Telling the Time Lesson 2 - Telling the Time Lesson 3 - Telling the Time Lesson 4 - Telling the Time Lesson 5 - Telling the Time Lesson 6 - Telling the Time Lesson 7 - Telling the Time Lesson 8 - Measuring and Comparing Time in Seconds Lesson 9 - Measuring Time in Seconds Lesson 10 - Measuring Time in Seconds Lesson 11 - Measuring Time in Hours Lesson 12 - Measuring Time in Hours Lesson 13 - Measuring Time in Hours Lesson 14 - Measuring Time in Minutes Lesson 15 - Measuring Time in Minutes Lesson 16 - Measuring Time in Minutes Lesson 17 - Changing Minutes to Seconds Lesson 18 - Changing Seconds to Minutes Lesson 19 - Finding Number of Days Lesson 20 - Finding Number of Days Lesson 21 - Chapter Consolidation		

Week 11	**Spring Term Assessment Week**		

Summer Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	**Statistics** Lesson 1 - Drawing Picture Graphs Lesson 2 - Drawing Bar Graphs Lesson 3 - Reading Bar Graphs Lesson 4 - Reading Bar Graphs Lesson 5 - Reading Bar Graphs Lesson 6 - Chapter Consolidation		
Week 2 **Week 3** **Week 4** **Week 5** **Week 6**	**Fractions**	3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. **(p47–50)**	3.1 Preparing for fractions: the part–whole relationship https://www.ncetm.org.uk/classroom-resources/primm-3-01-preparing-for-fractions-the-part-whole-relationship/ 3.2 Unit fractions: identifying, representing and comparing https://www.ncetm.org.uk/classroom-resources/primm-3-02-unit-fractions-identifying-representing-and-comparing/ 3.3 Non-unit fractions: identifying, representing and comparing https://www.ncetm.org.uk/classroom-resources/primm-3-03-non-unit-fractions-identifying-representing-and-comparing/

	Lesson 1 - Counting in Tenths Lesson 2 - Making Number Pairs Lesson 3 - Adding Fractions Lesson 4 - Adding Fractions Lesson 5 - Subtracting Fractions Lesson 6 - Finding Equivalent Fractions Lesson 7 - Finding Equivalent Fractions Lesson 8 - Finding Equivalent Fractions Lesson 9 - Finding Equivalent Fractions Lesson 10 - Finding Equivalent Fractions Lesson 11 - Finding Equivalent Fractions Lesson 12 - Finding the Simplest Fraction Lesson 13 - Finding the Simplest Fraction Lesson 14 - Finding Equivalent Fractions Lesson 15 - Comparing Fractions Lesson 16 - Comparing Fractions Lesson 17 - Comparing Fractions Lesson 18 - Adding Fractions Lesson 19 - Subtracting Fractions Lesson 20 - Subtracting Fractions Lesson 21 - Finding Part of a Set Lesson 22 - Finding Part of a Set	**3F–2** Find unit fractions of quantities using known division facts (multiplication tables fluency). **(p51–53)** **3F–3** Reason about the location of any fraction within 1 in the linear number system. **(p54–57)** **3F–4** Add and subtract fractions with the same denominator, within 1. **(p58–60)**	3.2 Unit fractions: identifying, representing and comparing https://www.ncetm.org.uk/classroom-resources/primm-3-02-unit-fractions-identifying-representing-and-comparing/ 3.6 Multiplying whole numbers and fractions https://www.ncetm.org.uk/classroom-resources/primm-3-06-multiplying-whole-numbers-and-fractions/ 3.2 Unit fractions: identifying, representing and comparing https://www.ncetm.org.uk/classroom-resources/primm-3-02-unit-fractions-identifying-representing-and-comparing/ 3.3 Non-unit fractions: identifying, representing and comparing https://www.ncetm.org.uk/classroom-resources/primm-3-03-non-unit-fractions-identifying-representing-and-comparing/ 3.4 Adding and subtracting within one whole https://www.ncetm.org.uk/classroom-

	Lesson 23 - Finding the Fraction of a Number Lesson 24 - Sharing One Lesson 25 - Sharing More Than 1 Lesson 26 - Sharing More Than 1 Lesson 27 - Sharing More Than 1 Lesson 28 - Solving Word Problems Lesson 29 - Solving Word Problems Lesson 30 - Solving Word Problems Lesson 31 - Chapter Consolidation		resources/primm-3-04-adding-and-subtracting-within-one-whole/
Week 7	**Geometry – angles** Lesson 1 - Making Angles Lesson 2 - Making Angles Lesson 3 - Finding Angles in Shapes Lesson 4 - Finding Right Angles Lesson 5 - Comparing Angles	3G–1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. **(p61-64)**	n/a
Week 8	**Geometry – angles, lines** Lesson 6 - Comparing Angles Lesson 7 - Making Turns Lesson 8 - Chapter Consolidation Lesson 1 - Identifying Perpendicular Lines Lesson 2 - Identifying Parallel Lines Lesson 3 - Finding Vertical and Horizontal Lines		

Week 9	**Geometry – shapes** Lesson 4 - Describing Two-Dimensional Shapes Lesson 5 - Drawing Two-Dimensional Shapes Lesson 6 - Making Three-Dimensional Shapes Lesson 7 - Making Three-Dimensional Shapes Lesson 8 - Describing Three-Dimensional Shapes Lesson 9 - Chapter Consolidation	3G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides. **(p64-67)**	n/a
Week 10 **Week 11**	**Measurement: perimeter of figures** Lesson 1 - Measuring Total Length Around a Shape Lesson 2 - Measuring Perimeter Lesson 3 - Measuring Perimeter Lesson 4 - Measuring Perimeter Lesson 5 - Measuring Perimeter Lesson 6 - Calculating Perimeter Lesson 7 - Calculating Perimeter Lesson 8 - Calculating Perimeter Lesson 9 - Calculating Perimeter Lesson 10 - Calculating Perimeter Lesson 11 - Chapter Consolidation		
Week 12	**Review and revisit**		

Year 4

Year 4 Maths Guidance 2020-2021: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897803/Maths_guidance_year_4.pdf
(See progression on p9-11)
Year 4 Guidance video: https://youtu.be/s_7S9U82RcM?list=PL6gGtLyXoeq-FMWk00AlcIPo3fhGmi03D
PD materials: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/

Autumn Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 Week 2 Week 3	**Place value: Numbers to 10 000** Lesson 1 - Counting in Hundreds and Twenty-Fives Lesson 2 - Counting in Thousands Lesson 3 - Counting in Thousands, Hundreds, Tens and Ones Lesson 4 - Using Place Value Lesson 5 - Using Place Value Lesson 6 - Comparing and Ordering Numbers Lesson 7 - Comparing and Ordering Numbers Lesson 8 - Making Number Patterns Lesson 9 - Making Number Patterns Lesson 10 - Counting in Sixes, Sevens and Nines Lesson 11 - Rounding Numbers Lesson 12 - Rounding Numbers Lesson 13 - Rounding Numbers to Estimate Lesson 14 - Rounding Numbers to Estimate Lesson 15 - Chapter Consolidation	4NPV–1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. **(p12-14)** 4NPV–2 Recognise the place value of each digit in *four*-digit numbers, and compose and decompose *four*-digit numbers using standard and non-standard partitioning. **(p15-16)** 4NPV–3 Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each. **(p16-21)**	1.22 Χομποσιτιον ανδ χαλχυλατιον: 1,000 ανδ φουρ–διγιτ νυμβερσ ηττπσ://ωωω.νχετμ.οργ.υκ/χλασσροομ–ρεσουρχεσ/πριμμ–1–22–χομποσιτιον–ανδ–χαλχυλατιον–1–000–ανδ–φουρ–διγιτ–νυμβερσ/ 1.22 Χομποσιτιον ανδ χαλχυλατιον: 1,000 ανδ φουρ–διγιτ νυμβερσ ηττπσ://ωωω.νχετμ.οργ.υκ/χλασσροομ–ρεσουρχεσ/πριμμ–1–22–χομποσιτιον–ανδ–χαλχυλατιον–1–000–ανδ–φουρ–διγιτ–νυμβερσ/ 1.22 Χομποσιτιον ανδ χαλχυλατιον: 1,000 ανδ φουρ–διγιτ νυμβερσ ηττπσ://ωωω.νχετμ.οργ.υκ/χλασσροομ–ρεσουρχεσ/πριμμ–1–22–χομποσιτιον–ανδ–χαλχυλατιον–1–000–ανδ–φουρ–διγιτ–νυμβερσ/ 1.23 Χομποσιτιον ανδ χαλχυλατιον: τεντησ ηττπσ://ωωω.νχετμ.οργ.υκ/χλασσροομ–ρεσουρχεσ/πριμμ–1–23–χομποσιτιον–ανδ–χαλχυλατιον–τεντησ/

			1.24 Χομποσιτιον ανδ χαλχυλατιον: ηυνδρεδτησ ανδ τηουσανδτησ ηττπσ://ωωω.νχετμ.οργ.υκ/χλασσροομ–ρεσουρχεσ/πριμμ–1–24–χομποσιτιον–ανδ–χαλχυλατιον–ηυνδρεδτησ–ανδ–τηουσανδτησ/
Week 4 **Week 5** **Week 6** **Week 7**	**Addition and subtraction:** **10 000** Lesson 1 - Finding Sums Lesson 2 - Adding without Renaming Lesson 3 - Adding with Renaming Lesson 4 - Adding with Renaming Lesson 5 - Adding with Renaming Lesson 6 - Adding Using Mental Strategies Lesson 7 - Adding Using Mental Strategies Lesson 8 - Finding Differences Lesson 9 - Subtracting without Renaming Lesson 10 - Subtracting with Renaming Lesson 11 - Subtracting with Renaming Lesson 12 - Subtracting with Renaming Lesson 13 - Subtracting with Renaming Lesson 14 - Subtracting Using Mental Strategies Lesson 15 - Solving Word Problems Lesson 16 - Solving Word Problems Lesson 17 - Solving Word Problems Lesson 18 - Chapter Consolidation		

Week 8 **Week 9** **Week 10** **Week 11**	**Multiplication and division** Lesson 1 - Multiplying by 6 Lesson 2 - Multiplying by 7 Lesson 3 - Multiplying by 9 Lesson 4 - Multiplying by 9 Lesson 5 - Multiplying by 11 Lesson 6 - Multiplying by 11 Lesson 7 - Multiplying by 12 Lesson 8 - Dividing by 6 Lesson 9 - Dividing by 7 Lesson 10 - Dividing by 9 Lesson 11 - Multiplying and Dividing by 11 and 12 Lesson 12 - Dividing with Remainder Lesson 13 - Solving Word Problems Lesson 14 - Solving Word Problems Lesson 15 - Solving Word Problems Lesson 16 - Solving Word Problems Lesson 17 - Solving Word Problems Lesson 18 - Solving Word Problems Lesson 19 - Chapter Consolidation	4NPV–4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts. **(p21-25)** 4NF–1 Recall multiplication and division facts up to 12×12, and recognise products in multiplication tables as multiples of the corresponding number. **(p26-29)** 4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. **(p39-43)** 4MD–3 Understand and apply the distributive property of multiplication. **(p44-47)**	1.22 Composition and calculation: 1,000 and four-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-22-composition-and-calculation-1-000-and-four-digit-numbers/ 2.8 Times tables: 3, 6 and 9, and the relationship between them. https://www.ncetm.org.uk/classroom-resources/primm-2-08-times-tables-3-6-and-9-and-the-relationship-between-them/ 2.9 Times tables: 7 and patterns within/across times tables https://www.ncetm.org.uk/classroom-resources/primm-2-09-times-tables-7-and-patterns-within-across-times-tables/ 2.11 Times tables: 11 and 12 https://www.ncetm.org.uk/classroom-resources/primm-2-11-times-tables-11-and-12/ 2.10 Connecting multiplication and division, and the distributive law https://www.ncetm.org.uk/classroom-resources/primm-2-10-connecting-multiplication-and-division-and-the-distributive-law/

			2.10 Connecting multiplication and division, and the distributive law https://www.ncetm.org.uk/classroom-resources/primm-2-10-connecting-multiplication-and-division-and-the-distributive-law/ 2.17 Structures: use measures and comparison to understand scaling https://www.ncetm.org.uk/classroom-resources/primm-2-17-structures-using-measures-and-comparison-to-understand-scaling/
Week 12	**Further multiplication and division** Lesson 1 - Multiplying by 0 and 1 Lesson 2 - Dividing by 1 Lesson 3 - Multiplying the Same Two Numbers Lesson 4 - Multiplying Three Numbers Lesson 5 - Multiplying Multiples of 10	4MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. **(p36-38)**	2.13 Calculation: multiplying and dividing by 10 or 100 https://www.ncetm.org.uk/classroom-resources/primm-2-13-calculation-multiplying-and-dividing-by-10-or-100/

Spring Term

Y4 Edited	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2** **Week 3**	**Further multiplication and division** Lesson 6 - Multiplying 2-Digit Numbers Lesson 7 - Multiplying 2-Digit Numbers Lesson 8 - Multiplying Multiples of 100 Lesson 9 - Multiplying 3-Digit Numbers Lesson 10 - Multiplying 3-Digit Numbers Lesson 11 - Multiplying 3-Digit Numbers Lesson 12 - Dividing 2-Digit Numbers Lesson 13 - Dividing 3-Digit Numbers Lesson 14 - Dividing 2-Digit Numbers Lesson 15 - Dividing 3-Digit Numbers Lesson 16 - Dividing 3-Digit Numbers Lesson 17 - Solving Word Problems Lesson 18 - Solving Word Problems Lesson 19 - Chapter Consolidation	4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, for example: $74 \div 9 = 8$ r 2 and interpret remainders appropriately according to the context. **(p29-32)** 4NF–3 Apply place-value knowledge to known ditive and multiplicative number facts (scaling facts 100), for example: $8 + 6 = 14$ and $14 - 6 = 8$ so $800 + 600 = 1{,}400$ $1{,}400 - 600 = 800$ $3 \times 4 = 12$ and $12 \div 4 = 3$ so $300 \times 4 = 1{,}200$ $1{,}200 \div 4 = 300$ **(p32-35)**	2.12 Division with remainders https://www.ncetm.org.uk/classroom-resources/primm-2-12-division-with-remainders/ 1.22 Composition and calculation: 1,000 and four-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-22-composition-and-calculation-1-000-and-four-digit-numbers/ 2.14 Multiplication: partitioning leading to short multiplication https://www.ncetm.org.uk/classroom-resources/primm-2-14-multiplication-partitioning-leading-to-short-multiplication/

			2.15 Division: partitioning leading to short division https://www.ncetm.org.uk/classroom-resources/primm-2-15-division-partitioning-leading-to-short-division/
Week 4	**Statistics – Graphs** Lesson 1 - Drawing and Reading Picture Graphs and Bar Graphs Lesson 2 - Drawing and Reading Bar Graphs Lesson 3 - Drawing and Reading Line Graphs Lesson 4 - Drawing and Reading Line Graphs Lesson 5 - Drawing and Reading Line Graphs Lesson 6 - Chapter Consolidation		
Week 5 **Week 6**	**Fractions** Lesson 1 - Counting in Hundredths Lesson 2 - Writing Mixed Numbers Lesson 3 - Showing Mixed Numbers on a Number Line Lesson 4 - Finding Equivalent Fractions Lesson 5 - Finding Equivalent Fractions Lesson 6 - Simplifying Mixed Numbers Lesson 7 - Simplifying Improper Fractions Lesson 8 - Adding Fractions Lesson 9 - Adding Fractions Lesson 10 - Adding Fractions	4F–1 Reason about the location of mixed numbers in the linear number system. **(p48-50)** 4F–2 Convert mixed numbers to improper fractions and vice versa. **(p51-53)** 4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers, for example: $\frac{7}{5}+\frac{4}{5}=\frac{11}{5}$	3.5 Working across one whole: improper fractions and mixed numbers https://www.ncetm.org.uk/classroom-resources/primm-3-05-working-across-one-whole-improper-fractions-and-mixed-numbers/ 3.5 Working across one whole: improper fractions and mixed numbers https://www.ncetm.org.uk/classroom-resources/primm-3-05-working-across-one-whole-improper-fractions-and-mixed-numbers/ 3.5 Working across one whole: improper fractions and mixed numbers https://www.ncetm.org.uk/classroom-resources/primm-3-05-working-across-

		$3\frac{7}{8}-\frac{2}{8}=3\frac{5}{8}$ $7\frac{2}{5}+\frac{4}{5}=8\frac{1}{5}$ $8\frac{1}{5}-\frac{4}{5}=7\frac{2}{5}$ **(p54-58)**	one-whole-improper-fractions-and-mixed-numbers/
Week 7	**Fractions** Lesson 11 - Subtracting Fractions Lesson 12 - Subtracting Fractions Lesson 13 - Solving Word Problems Lesson 14 - Chapter Consolidation		
Week 8	**Measurement – Time** Lesson 1 - Telling Time on a 24-Hour Clock Lesson 2 - Changing Time in Minutes to Seconds Lesson 3 - Changing Time in Hours to Minutes Lesson 4 - Solving Problems on Duration of Time Lesson 5 - Changing Years to Months and Weeks to Days Lesson 6 - Solving Word Problems Lesson 7 - Chapter Consolidation		
Week 9 **Week 10** **Week 11**	**Decimals**		

Assessment week **Week 12**	Lesson 1 - Writing Tenths Lesson 2 - Writing Tenths Lesson 3 - Writing Tenths Lesson 4 - Writing Hundredths Lesson 5 - Writing Hundredths Lesson 6 - Writing Hundredths Lesson 7 - Writing Hundredths Lesson 8 - Writing Decimals Lesson 9 - Comparing and Ordering Decimals Lesson 10 - Comparing and Ordering Decimals Lesson 11 - Comparing and Ordering Decimals Lesson 12 - Making Number Patterns Lesson 13 - Rounding Decimals Lesson 14 - Rounding Decimals Lesson 15 - Writing Fractions as Decimals Lesson 16 - Dividing Whole Numbers by 10 Lesson 17 - Dividing Whole Numbers by 100 Lesson 18 - Chapter Consolidation		
Week 11	**Spring Term Assessment Week**		

Summer Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 Week 2	**Measurement: Money** Lesson 1 - Writing Amounts of Money Lesson 2 - Writing Amounts of Money Lesson 3 - Comparing Amounts of Money Lesson 4 - Rounding Amounts of Money Lesson 5 - Solving Problems Involving Money Lesson 6 - Solving Problems Involving Money Lesson 7 - Solving Problems Involving Money Lesson 8 - Estimating Amounts of Money Lesson 9 - Chapter Consolidation		1.25 Addition and subtraction: money https://www.ncetm.org.uk/classroom-resources/primm-1-25-addition-and-subtraction-money/
Week 3 Week 4 Week 5 Week 6	**Measure: Mass, Volume and Length** Lesson 1 - Measuring Mass Lesson 2 - Measuring Mass Lesson 3 - Converting Units of Mass Lesson 4 - Measuring Volume Lesson 5 - Measuring Volume Lesson 6 - Converting Units of Volume Lesson 7 - Measuring Height Lesson 8 - Measuring Length Lesson 9 - Converting Units of Length Lesson 10 - Converting Units of Length Lesson 11 - Measuring Perimeter in Different Units Lesson 12 - Solving Problems Involving Scale Reading Lesson 13 - Chapter Consolidation		

Week 7	**Measurement: Area of figures** Lesson 1 - Measuring the Surface that an Object Covers Lesson 2 - Measuring Area Lesson 3 - Measuring Area Lesson 4 - Measuring Area Lesson 5 - Measuring Area Lesson 6 - Measuring Area Lesson 7 - Chapter Consolidation		
Week 8 **Week 9**	**Geometry: Properties of Shapes** Lesson 1 - Knowing Types of Angles Lesson 2 - Comparing Angles Lesson 3 - Classifying Triangles Lesson 4 - Classifying Quadrilaterals Lesson 5 - Identifying Symmetrical Figures Lesson 6 - Drawing Lines of Symmetry Lesson 7 - Completing Symmetrical Figures Lesson 8 - Making Symmetrical Figures Lesson 9 - Completing Symmetrical Figures Lesson 10 - Sorting Shapes Lesson 11 - Chapter Consolidation	4G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant. **(p58-62)** 4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. **(p63-67)** 4G–3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry. **(p67-70)**	2.16 Multiplicative contexts: area and perimeter 1 https://www.ncetm.org.uk/classroom-resources/primm-2-16-multiplicative-contexts-area-and-perimeter-1/
Week 10	**Geometry: Position and Movement**		

	Lesson 1 - Describing Position Lesson 2 - Describing Position Lesson 3 - Plotting Points Lesson 4 - Describing Position Lesson 5 - Describing Movements Lesson 6 - Chapter Consolidation		
Week 11	**Place value: Roman numerals** Lesson 1 - Writing Roman Numerals for 1 to 20 Lesson 2 - Writing Roman Numerals to 100 Lesson 3 - Chapter Consolidation		
Week 12	**Review and revisit**		

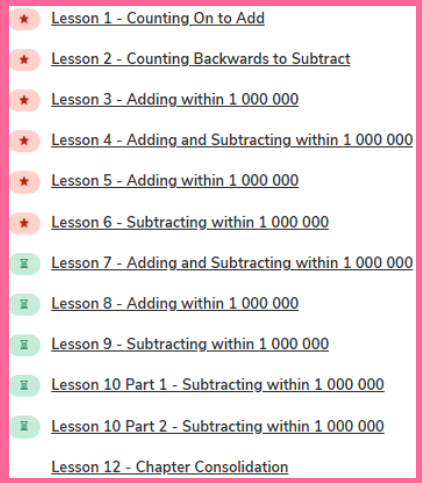
Year 5

Year 5 Maths Guidance 2020-2021:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897804/Maths_guidance_year_5.pdf
(See progression on p9-12)
Year 5 Guidance video: https://youtu.be/sdbzlq3imXE?list=PL6gGtLyXoeq-FMWk00AlcIPo3fhGmi03D
PD materials: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/

Autumn Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2** **Week 3**	**Place value: Numbers to 1 000 000** Lesson 1 - Reading and Writing Numbers to 100 000 Lesson 2 - Reading and Writing Numbers to 1 000 000 Lesson 3 - Reading and Writing Numbers to 1 000 000 Lesson 4 - Comparing Numbers to 1 000 000 Lesson 5 - Comparing Numbers to 1 000 000 Lesson 6 - Comparing Numbers to 1 000 000 Lesson 7 - Comparing Numbers to 1 000 000 Lesson 8 - Making Number Patterns Lesson 9 - Making Number Patterns Lesson 10 - Rounding Numbers Lesson 11 - Rounding Numbers Lesson 12 - Rounding Numbers Lesson 13 - Chapter Consolidation	5NPV–1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. **(p13-17)** **5NPV–2** Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. **(p17-20)** **5NPV–3** Reason about the location of any number with up to 2 decimals places in the linear number	1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/ 1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-resources/primm-1-24-composition-and-calculation-hundredths-and-thousandths/ 1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/ 1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-

		system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. **(p20-25)** **5NPV-4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **(p26-30)**	resources/primm-1-24-composition-and-calculation-hundredths-and-thousandths/ 1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/ 1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-resources/primm-1-24-composition-and-calculation-hundredths-and-thousandths/ 1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/ 1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-resources/primm-1-24-composition-and-calculation-hundredths-and-thousandths/ 1.26 Composition and calculation: multiples of 1,000 up to 1,000,000 https://www.ncetm.org.uk/classroom-resources/primm-1-26-composition-and-calculation-multiples-of-1-000-up-to-1-000-000/

			1.27 Negative numbers: counting, comparing and calculating https://www.ncetm.org.uk/classroom-resources/primm-1-27-negative-numbers-counting-comparing-and-calculating/
Week 4 **Week 5**	**Addition and subtraction**  Lesson 1 - Counting On to Add Lesson 2 - Counting Backwards to Subtract Lesson 3 - Adding within 1 000 000 Lesson 4 - Adding and Subtracting within 1 000 000 Lesson 5 - Adding within 1 000 000 Lesson 6 - Subtracting within 1 000 000 Lesson 7 - Adding and Subtracting within 1 000 000 Lesson 8 - Adding within 1 000 000 Lesson 9 - Subtracting within 1 000 000 Lesson 10 Part 1 - Subtracting within 1 000 000 Lesson 10 Part 2 - Subtracting within 1 000 000 Lesson 12 - Chapter Consolidation		1.28 Common structures and the part-part-whole relationship https://www.ncetm.org.uk/classroom-resources/primm-1-28-common-structures-and-the-part-part-whole-relationship/ 1.29 Using equivalence and the compensation property to calculate https://www.ncetm.org.uk/classroom-resources/primm-1-29-using-equivalence-and-the-compensation-property-to-calculate/
Week 6 **Week 7** **Week 8**	**Multiplication and division**	5NF–1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice. **(p35-36)** 5MD–1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. **(p42-46)**	n/a

Week 9	Lesson 1 - Finding Multiples Lesson 2 - Finding Factors Lesson 3 - Finding Common Factors Lesson 4 - Finding Prime Numbers Lesson 5 - Finding Prime Numbers Lesson 6 - Finding Square and Cube Numbers Lesson 7 - Multiplying by 10, 100 and 1000 Lesson 8 - Multiplying 2-Digit and 3-Digit Numbers by a Single Digit Lesson 9 - Multiplying 4-Digit Numbers Lesson 10 - Multiplying 4-Digit Numbers Lesson 11 - Multiplying 4-Digit Numbers Lesson 12 - Multiplying a 2-Digit Number by a 2-Digit Number Lesson 13 - Multiplying a 2-Digit Number by a 2-Digit Number Lesson 14 - Multiplying a 3-Digit Number by a 2-Digit Number Lesson 15 - Multiplying a 3-Digit Number by a 2-Digit Number Lesson 16 - Dividing by 10, 100 and 1000 Lesson 17 - Dividing 3-Digit and 4-Digit Numbers Lesson 18 - Dividing 4-Digit Numbers Lesson 19 - Dividing with Remainder Lesson 20 - Chapter Consolidation	**5MD–2** Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors. **(p46-49)** **5MD–3** Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. **(p50-53)** **5MD–4** Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context. **(p54-57)**	2.13 Calculation: multiplying and dividing by 10 or 100 https://www.ncetm.org.uk/classroom-resources/primm-2-13-calculation-multiplying-and-dividing-by-10-or-100/ 2.9 Times tables:7 and patterns within/across times tables https://www.ncetm.org.uk/classroom-resources/primm-2-09-times-tables-7-and-patterns-within-across-times-tables/ 2.21 Factors, multiples, prime numbers and composite numbers https://www.ncetm.org.uk/classroom-resources/primm-2-21-factors-multiples-prime-numbers-and-composite-numbers/ 2.14 Multiplication: partitioning leading to short multiplication https://www.ncetm.org.uk/classroom-resources/primm-2-14-multiplication-partitioning-leading-to-short-multiplication/ 2.15 Division: partitioning leading to short division https://www.ncetm.org.uk/classroom-

			resources/primm-2-15-division-partitioning-leading-to-short-division/ 2.18 Using equivalence to calculate https://www.ncetm.org.uk/classroom-resources/primm-2-18-using-equivalence-to-calculate/ 2.19 Calculation: x/ dividing decimal fractions by whole numbers https://www.ncetm.org.uk/classroom-resources/primm-2-19-calculation-decimal-fractions-by-whole-numbers/ 2.20 Multiplication with three factors and volume https://www.ncetm.org.uk/classroom-resources/primm-2-20-multiplication-with-three-factors-and-volume/ 2.22 Combining multiplication with addition and subtraction https://www.ncetm.org.uk/classroom-resources/primm-2-22-combining-multiplication-with-addition-and-subtraction/
Week 10	**Word problems**		

	Lesson 1 - Solving Word Problems Lesson 2 - Solving Word Problems Lesson 3 - Solving Word Problems Lesson 4 - Solving Word Problems Lesson 5 - Chapter Consolidation		
Week 11 **Week 12**	**Statistics: Graphs** Lesson 1 - Reading Tables Lesson 2 - Reading Tables Lesson 3 - Reading Tables Lesson 4 - Reading Line Graphs Lesson 5 - Reading Line Graphs Lesson 6 - Reading Line Graphs Lesson 7 - Reading Line Graphs Lesson 8 - Chapter Consolidation		

Spring Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1 **Week 2** **Week 3** **Week 4**	**Fractions** Lesson 1 - Dividing to Make Fractions Lesson 2 - Writing Improper Fractions and Mixed Numbers Lesson 3 - Finding Equivalent Fractions Lesson 4 - Comparing and Ordering Fractions Lesson 5 - Comparing and Ordering Fractions Lesson 6 - Comparing and Ordering Fractions Lesson 7 - Making Number Pairs Lesson 8 - Adding Fractions Lesson 9 - Adding Fractions Lesson 10 - Adding Fractions Lesson 11 - Adding Fractions Lesson 12 - Subtracting Fractions Lesson 13 - Subtracting Fractions Lesson 14 - Subtracting Fractions Lesson 15 - Multiplying Fractions by Whole Numbers Lesson 16 - Multiplying Fractions by Whole Numbers Lesson 17 - Multiplying Mixed Numbers Lesson 18 - Multiplying Mixed Numbers by Whole Numbers Lesson 19 - Chapter Consolidation	5F–1 Find non-unit fractions of quantities. **(p57-59)**	3.6 Multiplying whole numbers and fractions https://www.ncetm.org.uk/classroom-resources/primm-3-06-multiplying-whole-numbers-and-fractions/
		5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system. **(p60-63)**	3.7 Finding equivalent fractions and simplifying fractions https://www.ncetm.org.uk/classroom-resources/primm-3-07-finding-equivalent-fractions-and-simplifying-fractions/ 3.8 Common denomination: more adding and subtracting https://www.ncetm.org.uk/classroom-resources/primm-3-08-common-denomination-more-adding-and-subtracting/
Week 5 **Week 6**		5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth), for example: $8 + 6 = 14$ $0.8 + 0.6 = 1.4$ $0.08 + 0.06 = 0.14$	1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/

	Decimals Lesson 1 - Writing Decimals Lesson 2 - Reading and Writing Decimals Lesson 3 - Reading and Writing Decimals Lesson 4 - Comparing Decimals Lesson 5 - Comparing Decimals Lesson 6 - Comparing Decimals Lesson 7 - Writing Fractions as Decimals Lesson 8 - Adding and Subtracting Decimals Lesson 9 - Adding and Subtracting Decimals Lesson 10 - Adding and Subtracting Decimals	$3 \times 4 = 12$ $0.3 \times 4 = 1.2$ $0.03 \times 4 = 0.12$ **(p37-42)** 5F–3 Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{10}$, and for multiples of these proper fractions. **(p64-66)**	1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-resources/primm-1-24-composition-and-calculation-hundredths-and-thousandths/ 3.10 Linking fractions, decimals and percentages https://www.ncetm.org.uk/classroom-resources/primm-3-10-linking-fractions-decimals-and-percentages/
Week 7 **Week 8**	**Decimals and Percentages** Lesson 11 - Adding and Subtracting Decimals Lesson 12 - Adding and Subtracting Decimals Lesson 13 - Adding and Subtracting Decimals Lesson 14 - Adding and Subtracting Decimals Lesson 15 - Rounding Decimals Lesson 16 - Chapter Consolidation	5NPV–5 Convert between units of measure, including using common decimals and fractions. **(p30-34)**	3.10 Linking fractions, decimals and percentages https://www.ncetm.org.uk/classroom-resources/primm-3-10-linking-fractions-decimals-and-percentages/

	Lesson 1 - Comparing Quantities Lesson 2 - Finding Percentages Lesson 3 - Finding Percentages Lesson 4 - Chapter Consolidation		
Week 9 **Week 10** **Week 11** **Assessment Week** **Week 12**	**Geometry: Properties of Shapes** Lesson 1 - Knowing Types of Angles Lesson 2 - Measuring Angles Lesson 3 - Measuring Angles Lesson 4 - Investigating Angles on a Line Lesson 5 - Investigating Angles at a Point Lesson 6 - Drawing Angles Lesson 7 - Drawing Lines and Angles Lesson 8 - Describing Squares and Rectangles Lesson 9 - Investigating Angles in Squares and Rectangles Lesson 10 - Solving Problems Involving Angles in Rectangles Lesson 11 - Solving Problems Involving Angles Lesson 12 - Solving Problems Involving Angles Lesson 13 - Investigating Regular Polygons Lesson 14 - Chapter Consolidation	5G–1 Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size. **(p67–70)**	n/a
Week 11	**Spring Term Assessment Week**		

Summer Term

	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	**Geometry: Position and Movement** Lesson 1 - Naming and Plotting Points Lesson 2 - Describing Translations Lesson 3 - Describing Movements Lesson 4 - Describing Movements Lesson 5 - Successive Reflections Lesson 6 - Chapter Consolidation		
Week 2 Week 3 Week 4	**Measurement – Measurements** Lesson 1 - Converting Units of Length Lesson 2 - Converting Units of Length Lesson 3 - Converting Units of Length Lesson 4 - Converting Units of Length Lesson 5 - Converting Units of Mass Lesson 6 - Converting Units of Mass Lesson 7 - Converting Units of Mass Lesson 8 - Converting Units of Mass Lesson 9 - Converting Units of Time Lesson 10 - Converting Units of Time Lesson 11 - Converting Units of Time Lesson 12 - Converting Units of Time Lesson 13 - Converting Units of Time Lesson 14 - Telling the Temperature Lesson 15 - Chapter Consolidation		

Week 5 **Week 6** **Week 7**	**Measurement – Area and Perimeter** Lesson 1 - Finding the Perimeter Lesson 2 - Finding the Perimeter Lesson 3 - Finding the Perimeter Lesson 4 - Using Scale Diagrams to Find the Perimeter Lesson 5 - Measuring the Area Lesson 6 - Measuring the Area Lesson 7 - Measuring the Area Lesson 8 - Measuring the Area Lesson 9 - Measuring the Area Lesson 10 - Measuring the Area Lesson 11 - Estimating the Area Lesson 12 - Chapter Consolidation	5G–2 *Compare areas and calculate the area of rectangles (including squares) using standard units.* **(p71–76)**	2.16 Multiplicative contexts: area and perimeter 1 https://www.ncetm.org.uk/classroom-resources/primm-2-16-multiplicative-contexts-area-and-perimeter-1/
Week 8 **Week 9**	**Measurement – Volume** Lesson 1 - Understanding the Volume of Solids Lesson 2 - Finding the Volume of Solids Lesson 3 - Finding the Volume of Solids Lesson 4 - Finding the Capacity of Rectangular Boxes Lesson 5 - Finding the Capacity of Rectangular Boxes Lesson 6 - Converting Units of Volume Lesson 7 - Converting Units of Volume Lesson 8 - Converting Units of Volume Lesson 9 - Solving Word Problems Involving Volume Lesson 10 - Solving Word Problems Involving Volume Lesson 11 - Chapter Consolidation		

Week 10	**Place value – Roman numerals** Lesson 1 - Writing Roman Numerals to 1000 Lesson 2 - Writing Years in Roman Numerals Lesson 3 - Chapter Consolidation		
Week 11	**Review and revisit**		
Week 12	**Review and revisit**		

Year 6

Year 6 Maths Guidance 2020-2021:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897805/Maths_guidance_year_6.pdf
(See progression on p9-12)
Year 6 Guidance video: https://youtu.be/k0Q7Po_aRCo?list=PL6gGtLyXoeq-FMWk00AlcIPo3fhGmi03D
PD materials: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/
(54 White Space Days)

Autumn Term

Y6 Edited for SATs	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	**Numbers & Place Value to 10 Million** Lesson 1 - Reading and Writing Numbers to 10 Million Lesson 2 - Reading and Writing Numbers to 10 Million Lesson 3 - Reading and Writing Numbers to 10 Million Lesson 4 - Comparing Numbers to 10 Million Lesson 5 - Comparing and Ordering Numbers to 10 Million Lesson 6 - Rounding Numbers Lesson 7 - Rounding Numbers Lesson 8 - Chapter Consolidation	6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). **(p13-17)** 6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning. **(p17-19)** 6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts. **(p20-24)**	1.22 Composition and calculation: 1,000 and four-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-22-composition-and-calculation-1-000-and-four-digit-numbers/ 1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/ 1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-resources/primm-1-24-composition-

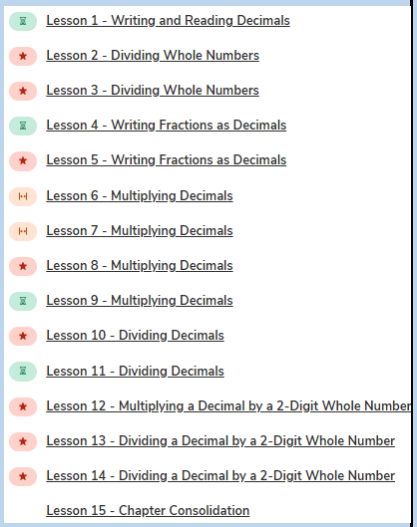
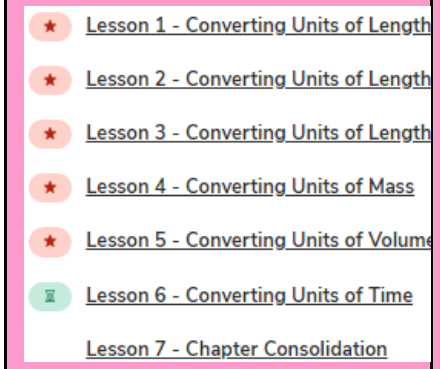
		6NPV–4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts. **(p25–29)**	and-calculation-hundredths-and-thousandths/ 1.30 Composition and calculation: numbers up to 10,000,000 https://www.ncetm.org.uk/classroom-resources/primm-1-30-composition-and-calculation-numbers-up-to-10-000-000/
Week 2	**Calculations 4 operations. Whole numbers**	6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and	

Week 3 **Week 4** **Week 5**	Lesson 1 - Using Mixed Operations Lesson 2 - Using Mixed Operations Lesson 3 - Multiplying by 2-Digit Numbers Lesson 4 - Multiplying by 2-Digit Numbers Lesson 5 - Multiplying by 2-Digit Numbers Lesson 6 - Multiplying by 2-Digit Numbers Lesson 7 - Multiplying by 2-Digit Numbers Lesson 8 - Estimating Products of Large Numbers Lesson 9 - Dividing by 2-Digit Numbers Lesson 10 - Dividing by 2-Digit Numbers Lesson 11 - Dividing by 2-Digit Numbers Lesson 12 - Dividing by 2-Digit Numbers Lesson 13 - Dividing by 2-Digit Numbers Lesson 14 - Solving Word Problems Lesson 15 - Solving Word Problems Lesson 16 - Solving Word Problems Lesson 17 - Finding Common Multiples Lesson 18 - Finding Common Multiples Lesson 19 - Finding Common Factors Lesson 20 - Finding Common Factors Lesson 21 - Finding Prime Numbers Lesson 22 - Finding Prime Numbers Lesson 23 - Chapter Consolidation	multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). **(p29-32)** 6AS/MD-1 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. **(p29-32)** 6AS/MD-3 Solve problems involving ratio relationships. **(p36-39)** 6AS/MD-4 Solve problems with 2 unknowns. **(p39-43)**	1.29 Using equivalence and the compensation property to calculate https://www.ncetm.org.uk/classroom-resources/primm-1-29-using-equivalence-and-the-compensation-property-to-calculate/ 2.25 Using compensation to calculate https://www.ncetm.org.uk/classroom-resources/primm-2-25-using-compensation-to-calculate/ 2.27 Scale factors, ratio and proportional reasoning https://www.ncetm.org.uk/classroom-

			resources/primm-2-27-scale-factors-ratio-and-proportional-reasoning/ 1.31 Problems with two unknowns https://www.ncetm.org.uk/classroom-resources/primm-1-31-problems-with-two-unknowns/ 2.23 Multiplication strategies for larger numbers and long multiplication https://www.ncetm.org.uk/classroom-resources/primm-2-23-multiplication-strategies-for-larger-numbers-and-long-multiplication/ 2.24 Division: dividing by two-digit divisors https://www.ncetm.org.uk/classroom-resources/primm-2-24-division-dividing-by-two-digit-divisors/ 2.26 Mean average and equal shares https://www.ncetm.org.uk/classroom-resources/primm-2-26-mean-average-and-equal-shares/

			2.28 Combining division with addition and subtraction https://www.ncetm.org.uk/classroom-resources/primm-2-28-combining-division-with-addition-and-subtraction/ 2.29 Decimal place-value knowledge, multiplication and division https://www.ncetm.org.uk/classroom-resources/primm-2-29-decimal-place-value-knowledge-multiplication-and-division/ 2.30 Multiplicative contexts: area and perimeter 2 https://www.ncetm.org.uk/classroom-resources/primm-2-30-multiplicative-contexts-area-and-perimeter-2/
Week 6 **Week 7**	**FDP: Fractions**	**6F–1** Recognise when fractions can be simplified, and use common factors to simplify fractions. **(p43-46)** **6F–2** Express fractions in a common denomination and use this to compare fractions that are similar in value. **(p47-50)**	3.7 Finding equivalent fractions and simplifying fractions https://www.ncetm.org.uk/classroom-resources/primm-3-07-finding-equivalent-fractions-and-simplifying-fractions/ 3.8 Common denomination: more adding and subtracting

	★ Lesson 1 - Simplifying Fractions ★ Lesson 2 - Simplifying Fractions ★ Lesson 3 - Comparing and Ordering Fractions ★ Lesson 4 - Comparing and Ordering Fractions Lesson 5 - Comparing and Ordering Fractions ★ Lesson 6 - Adding and Subtracting Fractions ★ Lesson 7 - Adding and Subtracting Fractions ★ Lesson 8 - Adding and Subtracting Fractions ★ Lesson 9 - Adding and Subtracting Fractions ★ Lesson 10 - Adding and Subtracting Fractions ★ Lesson 11 - Multiplying Fractions ★ Lesson 12 - Multiplying Fractions ★ Lesson 13 - Multiplying Fractions ★ Lesson 14 - Dividing a Fraction by a Whole Number ★ Lesson 15 - Dividing a Fraction by a Whole Number ★ Lesson 16 - Dividing a Fraction by a Whole Number Lesson 17 - Chapter Consolidation	**6F–3** Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy. **(p50-52)**	https://www.ncetm.org.uk/classroom-resources/primm-3-08-common-denomination-more-adding-and-subtracting/ 3.8 Comon denomination: more adding and subtracting https://www.ncetm.org.uk/classroom-resources/primm-3-08-common-denomination-more-adding-and-subtracting/ 3.9 Multiplying fractions and dividing fractions by a whole number https://www.ncetm.org.uk/classroom-resources/primm-3-09-multiplying-fractions-and-dividing-fractions-by-a-whole-number/ 3.10 Linking fractions, decimals and percentages https://www.ncetm.org.uk/classroom-resources/primm-3-10-linking-fractions-decimals-and-percentages/

Week 8	**Autumn Term Test Week**		
Week 9 **Week 10** **Week 11**	**FDP: Decimals**  Lesson 1 - Writing and Reading Decimals Lesson 2 - Dividing Whole Numbers Lesson 3 - Dividing Whole Numbers Lesson 4 - Writing Fractions as Decimals Lesson 5 - Writing Fractions as Decimals Lesson 6 - Multiplying Decimals Lesson 7 - Multiplying Decimals Lesson 8 - Multiplying Decimals Lesson 9 - Multiplying Decimals Lesson 10 - Dividing Decimals Lesson 11 - Dividing Decimals Lesson 12 - Multiplying a Decimal by a 2-Digit Whole Number Lesson 13 - Dividing a Decimal by a 2-Digit Whole Number Lesson 14 - Dividing a Decimal by a 2-Digit Whole Number Lesson 15 - Chapter Consolidation		3.10 Linking fractions, decimals and percentages https://www.ncetm.org.uk/classroom-resources/primm-3-10-linking-fractions-decimals-and-percentages/
Week 11 **Week 12**	**Measurements**  Lesson 1 - Converting Units of Length Lesson 2 - Converting Units of Length Lesson 3 - Converting Units of Length Lesson 4 - Converting Units of Mass Lesson 5 - Converting Units of Volume Lesson 6 - Converting Units of Time Lesson 7 - Chapter Consolidation		

Spring Term

Y6 Edited for SATs	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	**FDP: Percentages** Lesson 1 - Finding the Percentage of a Number Lesson 2 - Finding the Percentage of a Quantity Lesson 3 - Finding Percentage Change Lesson 4 - Using Percentage to Compare Lesson 5 - Chapter Consolidation		3.10 Linking fractions, decimals and percentages https://www.ncetm.org.uk/classroom-resources/primm-3-10-linking-fractions-decimals-and-percentages/
Week 2	**Word problems** Lesson 1 - Solving Word Problems Lesson 2 - Solving Word Problems Lesson 3 - Solving Word Problems Lesson 4 - Solving Word Problems Lesson 5 - Solving Word Problems Lesson 6 - Solving Word Problems Lesson 7 - Chapter Consolidation		
Week 3	**Ratio & Proportion: Ratio**		

Week 4	Lesson 1 - Comparing Quantities Lesson 2 - Comparing Quantities Lesson 3 - Comparing Quantities Lesson 4 - Comparing Quantities Lesson 5 - Comparing Quantities Lesson 6 - Comparing Numbers Lesson 7 - Solving Word Problems Lesson 8 - Solving Word Problems Lesson 9 - Solving Word Problems Lesson 10 - Chapter Consolidation		
Week 5	**Algebra: Algebra**		

Week 6	Lesson 1 - Describing a Pattern Lesson 2 - Describing a Pattern Lesson 3 - Describing a Pattern Lesson 4 - Describing a Pattern Lesson 5 - Writing Algebraic Expressions Lesson 6 - Writing and Evaluating Algebraic Expressions Lesson 7 - Writing and Evaluating Algebraic Expressions Lesson 8 - Writing Formulae Lesson 9 - Using Formulae Lesson 10 - Solving Equations Lesson 11 - Chapter Consolidation		
Week 7 **Week 8**	**Measurement: Area & Perimeter** Lesson 1 - Finding the Area and the Perimeter of Rectangles Lesson 2 - Finding the Area of Parallelograms Lesson 3 - Finding the Area of Triangles Lesson 4 - Finding the Area of Triangles Lesson 5 - Finding the Area of Triangles Lesson 6 - Finding the Area of Parallelograms Lesson 7 - Chapter Consolidation		
Week 9	**Geometry – properties of shape, angles**	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems. **(p53-57)**	2.16 Multiplicative contexts: area and perimeter 1 https://www.ncetm.org.uk/classroom-resources/primm-2-16-multiplicative-contexts-area-and-perimeter-1/

	Lesson 1 - Investigating Vertically Opposite Angles Lesson 2 - Solving Problems Involving Angles Lesson 3 - Investigating Angles in Triangles Lesson 4 - Investigating Angles in Quadrilaterals Lesson 5 - Solving Problems Involving Angles in Triangles and Quadrilaterals Lesson 6 - Naming Parts of a Circle Lesson 7 - Solving Problems Involving Angles in a Circle Lesson 8 - Drawing Quadrilaterals Lesson 9 - Drawing Triangles Lesson 10 - Drawing Triangles Lesson 11 - Drawing Nets of Three-Dimensional Shapes Lesson 12 - Drawing Nets of Three-Dimensional Shapes Lesson 13 - Chapter Consolidation		
Week 10	**Geometry – Position and movement** Lesson 1 - Showing Negative Numbers Lesson 2 - Describing Position Lesson 3 - Describing Position Lesson 4 - Drawing Polygons on a Coordinate Grid Lesson 5 - Describing Translations Lesson 6 - Describing Reflections Lesson 7 - Describing Movements Lesson 8 - Describing Movements Lesson 9 - Using Algebra to Describe Position Lesson 10 - Using Algebra to Describe Movements Lesson 11 - Chapter Consolidation		

Week 11	Spring Term Assessment Week		
Week 12	Measurement – volume Lesson 1 - Finding the Volume of Cubes and Cuboids Lesson 2 - Finding the Volume of Cubes and Cuboids Lesson 3 - Finding the Volume of Cubes and Cuboids Lesson 4 - Finding the Volume of Cubes and Cuboids Lesson 5 - Solving Problems Involving the Volume of Solids Lesson 6 - Chapter Consolidation		

Summer Term

Y6 Edited for SATs	MNP	New Maths Guidance Ready-to-progress criteria	Relevant segment in the PD materials
Week 1	Statistics: graphs and averages		

	Lesson 1 - Understanding Averages Lesson 2 - Calculating the Mean Lesson 3 - Calculating the Mean Lesson 4 - Solving Problems Involving the Mean Lesson 5 - Showing Information on Graphs Lesson 6 - Reading Pie Charts Lesson 7 - Reading Pie Charts Lesson 8 - Reading Pie Charts Lesson 9 - Reading Line Graphs Lesson 10 - Reading Line Graphs Lesson 11 - Converting Miles into Kilometres Lesson 12 - Reading Line Graphs Lesson 13 - Chapter Consolidation		
Week 2	**Revision**		
Week 3	**Revision**		
Week 4	**SATS**		
Week 5	**Geometry – properties of shapes** **See previous for lesson breakdown**		

Week 6	Geometry – Position and direction See previous for lesson breakdown		
Week 7	Number & place value: negative numbers Lesson 1 - Adding and Subtracting Negative Numbers Lesson 2 - Using Negative Numbers Lesson 3 - Chapter Consolidation		
Week 8 Week 9	Statistics – graphs and averages See previous for lesson breakdown		
Week 10	Revisit topics		
Week 11	Revisit topics		
Week 12	Revisit topics		

PROGRESSION OF KNOWLEDGE AND PROCESS KNOWLEDGE (SKILLS)

NUMBER AND PLACE VALUE

EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
ELG: Number • I have a deep understanding of number to 10, including the composition of each number. • I can subitise (recognise quantities without counting) up to 5. • I can automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including	• I can count to and across 100. • I can count forwards and backwards to 100, beginning with 0 or 1, or from any given number. • I can count, read and write numbers to 100 in numerals. • I can read and write numbers from 1 to 20 in numerals. • I can read and write numbers from 1 to 20 in words. • I can count in multiples of twos. • I can count in multiples of fives. • I can count in multiples of tens.	• I can count in 2s, 5s, 3s, 10s forwards. • I can count in 2s, 5s, 3s, 10s backwards. • I can read and write two-digit numbers and show what each digit stands for (tens, ones). • I can write numbers to 100 in order and position them on a number line or a 100 square. • I can read and write numbers up 100 in numerals and in words. • I understand 0 as a placeholder. • I can partition numbers in different ways.	• I can count in multiples of 4. • I can count in multiples of 8. • I can count in multiples of 50. • I can count in multiples of 100. • I can find 10 more or less than a given number. • I can find 100 more or less than a given number. • I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • I can compare and order numbers up to 1000. • I can identify, represent and estimate	• I can count in multiples of 25, 9, 7, 6. • I can count in multiples of 1000. • I can find 1000 more or less than a given number. • I can count on and back through zero including negative numbers. • I understand the place value of each digit in a four digit number (thousands, hundreds, tens and ones). • I can read four-digit numbers. • I can write (in figures and words) numbers beyond 1000.	• I can recognise the place value of each digit in a number to at least 1,000,000. • I can read and write numbers to at least 1,000,000 and determine the value of each digit. • I can read Roman numerals to 1000 (M) and recognise dates written in Roman numerals. • I can <u>compare and order</u> numbers to at least 1,000,000. • I can count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000.	• I can read and write numbers up to 10 000 000. • I can order numbers up to • 10 000 000. • I can compare numbers up to • 10 000 000. • I can say the value of each digit in a number up to 10 000 000, including decimals up to thousandths. • I can round any whole number up to 10,000,000 to the nearest 10. • I can round any whole number up to 10,000,000 to the nearest 100. • I can round any whole number

subtraction facts). • I can automatically recall some number bonds to 10, including double facts. **ELG: Numerical Patterns** • I can verbally count beyond 20, recognising the pattern of the counting system. • I can compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.	• Given a number, I can identify one more and one less to 100. • I can identify and represent numbers using concrete objects and pictorial representations including the number line. • I can use the language of: equal to, more than, less than (fewer), most, least. **Autumn 1** **Autumn 2** **Spring 2** **Summer 1** Summer 2	• Compare and order numbers up to 100 and use the < > = signs. • I know the coins and notes we use and can make different amounts. • I can write numbers beyond 100. • I can say the number that is one more or one less than any number up to 100. **Autumn 1** Summer 2	numbers using different representations. • I can read and write numbers up to 1000 in numerals and in words. • I can solve number problems and practical problems involving these ideas. **Autumn 1** Summer 2	• I can order and compare numbers beyond 1000. • I can identify represent and estimate numbers using different representations. • I can round numbers to the nearest 10. • I can round numbers to the nearest 100. • I can round numbers to the nearest 1000. • I can read Roman numerals to 100 (I to C). • I know and can explain how the Roman number system compares to our system now. • Round decimals with 1dp to the nearest whole number. • Compare and order numbers with up to 2 decimal places. • I can solve number and	• I can identify all multiples and factors, including finding all factor pairs. • I can interpret negative numbers in context. • I can count forwards with positive and negative whole numbers, including through zero. • I can count backwards with positive and negative whole numbers, including through zero. • I can find missing numbers in a sequence that includes negative numbers. • I can recognise linear number sequences involving those fractions, decimals. • I can recognise linear number	up to 10,000,000 to the nearest 1000. • I understand negative numbers in context and calculate intervals across zero. (counting forwards) • I understand negative numbers in context and calculate intervals across zero. (counting backwards) • I can identify common factors, common multiples and prime numbers. • I can solve number problems and practical problems that involve all elements of place value. **Autumn 1** **Summer 1** **Summer 2**

• I can explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. **Autumn 1 and 2** **Spring 1 and 2** **Summer 1 and 2**				practical problems. **Autumn 1** **Summer 2**	sequences and find term-to-term rule. • I can recall prime numbers up to 19. • I can recognise and use square numbers and cube numbers. • I can round any number up to 1,000,000 to the nearest 10. • I can round any number up to 1,000,000 to the nearest 100. • I can round any number up to 1,000,000 to the nearest 1000. • I can round any number up to 1,000,000 to the nearest 10,000. • I can round any number up to 1,000,000 to the nearest 100,000. • I can solve number problems and practical problems. • I can compare and order numbers with 3	

					decimal places. • I can round decimals with 2dp to the nearest whole number and 1dp. **Autumn 1** **Summer 2**	

ADDITION AND SUBTRACTION

EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
• To use a counting all strategy to combine two sets up to 10. **(Spring, Week 4)**	• I can add one more to a given number. • I can subtract one more to a given number. • I know and can quickly say pairs of numbers that total 10. • I know and can quickly say the pairs of numbers that total 20. • I can use the +, - and = signs. • I can work out addition calculations with	• I know the pairs of numbers that total 20 and can recall them fluently. • I can use the knowledge of pairs of numbers to 10 to derive facts such as 30+70=100. • I can add numbers in a different order to check addition. • I can use concrete objects and pictorial representations to add and	• I can add three-digit number and ones. • I can add three-digit numbers and tens. • I can add a three-digit number and hundreds. • I can subtract ones from a three-digit number. • I can subtract a tens from a three-digit number. • I can subtract hundreds from a	• I can work out sums and differences of multiples of 10 or 100. • I can add two-digit numbers mentally. • I can subtract two-digit numbers mentally. • I can add numbers with up to three-digits in my head (where it is most efficient). • I can subtract three-digit in my	• I can explain each step when I write addition and subtraction calculations in columns. • I can add whole numbers with more than 4 digits, including using formal written methods (columnar addition). • I can subtract whole numbers with more than 4 digits, including using formal written methods	• I can use efficient written methods to add and subtract whole numbers and decimal numbers. • I can perform mental calculations, including with mixed operations and large numbers. • I know and can explain the order of operations to use in calculations with brackets.

	answers to 20. (Mentally/objects/ pictures). • (Including 0) • I can work out subtraction calculations with answers to 20. (Mentally/objects/ pictures). • (Including 0) • I can solve missing number problems such as • 7 = ? - 9. **Autumn 1** **Autumn 2** **Spring 1** **Spring 2**	subtract numbers. • I can add and subtract some numbers mentally. • I know that addition and subtraction are the inverse of each other. • I can total different coins (amounts of money) and give change. • I can add and subtract a two-digit number and a one-digit number using practical equipment or a written method to help me. • I can add and subtract a two-digit number and a multiple of 10 using practical equipment or a written method to help me. • I can add and subtract two, 2-digit numbers using practical equipment or a	three-digit number. • I can use a formal written methods of columnar addition. • I can use a formal written methods of columnar subtraction. • I can estimate the answer to a calculation. • I can use the inverse operation to check answers. • I can add and subtract money, including £ and p. • I can solve addition and subtraction problems. • I can solve missing number addition problems. • I can solve missing number subtraction problems. **Autumn 1**	head (where most efficient). • I can add three-digit and four-digit numbers using a written method (columnar) where appropriate. • I can subtract three-digit and four digit numbers using a written method (columnar) where appropriate. • I can estimate answers using rounding to check answers to calculations. • I can use the inverse operation to check answers to calculations. • I can decide which operation and method to using when solving problems. • Add and subtract numbers with up to 1dp. • I can solve two step addition problems in a context. • I can solve two	(columnar subtraction). • I can add and subtract numbers with up to 2dp. • I can mentally add four-digit numbers. • I can mentally subtract four-digit numbers. • I can mentally add increasingly larger numbers (12 642 + 2300). • I can mentally subtract increasingly larger numbers (12 642 - 2300). • I can use rounding to check answers. • I can round numbers to check answers in calculations, and determine, in the context of the problem, levels of accuracy. • I can solve multi-step problems in context and decide which operations and methods to use and why.	• I can use my knowledge of the order of operations to carry out calculations involving the four operations. • I can round numbers to estimate answers to calculations. • I can describe and explain sequences, pattern and relationships. • I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. **Autumn 1** **Summer 1**

		written method to help me. • I can add three 1-digit numbers using practical equipment or a written method to help me. • I can recall addition and subtraction facts to 100. • I can work out the missing number in a number sentence such as 14 +? = 35 using the inverse relationships (FACT FAMILIES). • I can recognise odd and even numbers. **Autumn 1** **Autumn 2**		step subtraction problems in a context. **Autumn 1**	**Autumn 1**	

MULTIPICATION AND DIVISION

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
• I can use numbers to copy and continue a simple pattern. • I can count on and back in 2s. • I can count on and back in 5s. • I can count on and back in 10s. • I can find how many there are in several groups of 2s. • I can find how many there are in several groups of 5s. • I can find how many there are in several groups of 10s. • I can recall or work out doubles of numbers to 5+5. • I can put objects into equal groups of two. • I can put objects into equal groups of five.	• I can recall and use all of the 2 times-tables facts. • I can recall and use all of the 5 times-tables facts. • I can recall and use all of the 10 times-tables facts. • I can write number sentences using x ÷ = symbols. • I know that 3x5 gives the same answer as 5x3 (Recognise equivalence). • I know, understand and can show multiplication of two numbers can be done in any order (achieving the same product) but subtraction cannot (Commutative). • I can group and share quantities of objects to solve multiplication and division problems.	• I can recall the multiplication facts for the • 3 times table. • I can recall the multiplication facts for the • 6 times table. • I can recall the multiplication facts for the • 4 times table. • I can recall the multiplication facts for the • 8 times table. • I can recall the division facts for the 3 times table. • I can recall the division facts for the 6 times table. • I can recall the division facts for the 4 times table. • I can recall the division facts for the 8 times table. • I can give the multiplication fact that is linked to a division fact.	• I know almost all my tables to 12 x 12. • I know all multiplication facts to 12 × 12 (even when mixed). • I know all division facts to 12 × 12 (even when mixed). • I can multiply by 1 and 0 (mentally). • I can divide by 1 and 0 (mentally). • I can multiply together three numbers (mentally) - making connections to the most efficient combinations. • Use place value, known and derived facts to multiply three numbers together. • I can recognise and use factor pairs and commutativity in mental calculations (3x2=2x3).	• I know my tables to 12 for multiplication facts and division facts and can use these facts to multiply multiples of 10 and 100. • I can identify multiples and factors. • I can find factor pairs of a number and common factors of two numbers. • I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. • I can recall all prime numbers to 19. • I can establish whether a number up to 100 is prime or not. • I can use an efficient written method to multiply	• I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. • I can divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division. • When dividing I can interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. • I can divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate,

• I can put objects into equal groups of ten. • I can recall or work out doubles of all numbers to 12+12. • I can use doubles I know to help me work out other doubles. • I can solve one-step problems involving multiplication and division using objects, pictorial representations and arrays. **Spring 2** **Summer 1**	• I can solve problems involving multiplication through arrays. • I can solve problems involving multiplication through repeated addition. **Autumn 2** **Spring 1**	• I can multiply a two-digit number by a one-digit number (mentally). • I can divide a two-digit number by a one-digit number (mentally). • I can use a written method to multiply a two-digit number by a one-digit number. • I can use a written method to divide a two-digit number by a one-digit number. • I can connect the 2, 4 and 8 x tables and the 3 and 6 x tables. • I can solve problems, including missing number problems. • I can scale objects up by using my knowledge of multiplication and division. • I can scale objects down using my knowledge of multiplication and division. • I can solve problems in which	• I can estimate and check the result of a calculation. • I can use a written method to multiply a two-digit number and three-digit number by a one-digit number. • I can use a formal written method to divide a two-digit number by a one-digit number. • I can use the distributive law to multiply two digit numbers by 1 digits numbers. • I can scale objects by using multiplication and explain the process. • I can scale objects by using division and can explain the process. • I can solve problems where n objects are connected to m objects. **Autumn 2** **Spring 1**	numbers up to a four-digit number by a one-digit number. • I can use an efficient written method to multiply numbers up to four-digits by a two-digit number, including long multiplication. • I can use an efficient written method to divide a four-digit number by a one-digit number. • I can use a short division method. • I know when to round up or down (remainders in division), depending on the problem and the context. • I can explain each step of my calculation. • I can use different mental strategies for multiplication depending on the numbers involved. • I can use different mental strategies for division	interpreting remainders according to the context. • I can perform mental calculations, including with mixed operations and large numbers. • I know and can explain the order of operations to use in calculations with brackets. • I can use my knowledge of the order of operations to carry out calculations involving the four operations. • I can give a good estimate of an answer before I multiply or divide large numbers or decimals. • I can factorise numbers to help with mental calculations. • I can find the highest common factor of different numbers.

		'n' objects are connected to 'm' objects (e.g. 3 hats and 4 coats—how many different outfits?) **Autumn 2**		depending on the numbers involved. • I can multiply or divide a whole number or decimal by 10, 100 and 1000. • I can scale amounts up or down using different rates. • I can use materials and diagrams to multiply simple fractions by whole numbers. • I can solve problems involving multiplication and scaling. • I can solve problems involving division and scaling. • I can explain the equals sign to indicate equivalence, including missing numbers (13+24 = 12+25; 33=5 x?). **Autumn 2**	• I can find the lowest common multiple of different numbers. • I can describe and explain sequences, pattern and relationships. **Autumn 1** **Summer 1**

FRACTIONS, DECIMALS AND PERCENTAGES

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
• I can find and name half of an object, shape or quantity. • I can find and name a quarter of an object, shape or quantity. • I recognise that a half is one of two equal parts. • I recognise that a quarter is one of four equal parts. **Summer 1**	• I can recognise, find and name 1/2 or 2/4 of a length. • I can recognise, find and name 1/2 or 2/4 of a set of objects. • I can recognise, find and name 1/2 or 2/4 of a set of a quantity. • I can recognise, find and name 1/4 of a length. • I can recognise, find and name 1/4 of a set of objects. • I can recognise, find and name 1/4 of a set of a quantity. • I can recognise, find and name 1/3 of a length. • I can recognise, find and name 1/3 of a set of objects. • I can recognise, find and name 1/3 of a set of a quantity. • I can recognise, find and name 3/4 of a length.	• I can count up and down in tenths on a number line. • I can find tenths by dividing an object into ten EQUAL parts. • I can find fractions of a discrete set of objects: unit fractions (1/3 of 36). • I can find fractions of a discrete set of objects: non-unit fractions (2/3 of 36). • I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. • I can recognise equivalent fractions (using diagrams). • I can show equivalent fractions (using diagrams). • I can add and subtract fractions with the same denominator (within a whole). • I can compare unit	• I can recognise and show, using diagrams, families of common equivalent fractions. • I can count up and down in hundredths. • I recognise that fractions arise when dividing an object by one hundred and dividing tenths by ten. • I can add and subtract fractions with the same denominator (e.g. 4/5 – 1/5). I can also show this through diagrams (beyond a whole). • I can recognise and write decimal equivalents of any number of tenths or hundredths (7/10, 35/100). • I can find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits in the	• I can compare and order fractions when the denominators are all multiples of the same number. E.g. I can put ½, 3/5 and 7/10 in order of size. • I can identify, name and write equivalent fractions of a given fraction. • I can identify, name and write equivalent fractions of a given fraction using visual representation. • I can identify, name and write equivalent fractions of a given fraction using visual representation including 10th and 100ths. • I recognise and can convert mixed numbers and improper fractions and can covert one from the other. E.g. I know that 1 ½ is the same as 3/2. • I can solve	• I can use common factors to simplify fractions. • I can compare and order fractions > 1. • I can use common multiples to express fractions in the same denomination (5/6 = 15/18). • I can add fractions with different denominators and mixed numbers using the concept of equivalent fractions. • I can subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions. • I can multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1/4 x 1/2 = 1/8). • I can divide proper fractions by whole numbers (e.g. 1/3 ÷2= 1/6).

	• I can recognise, find and name 3/4 of a set of objects. • I can recognise, find and name 3/4 of a set of a quantity. • I can write simple fractions • E.g. 1/2 of 6 = 3. • I can recognise the equivalence of two quarters and one half. • I can count in fractions up to 10 (for example, 1 1/4, 1 2/4 or 1 1/2, 1 3/4, 2). **Spring 1** **Spring 2**	fractions and fractions with the same denominator. • I can put fractions with the same denominator in order. • I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. **Summer 1**	answer as ones, tenths and hundredths. • I can round decimals with one decimal place to the nearest whole number. • I can compare numbers with the same number of decimal places up to two decimal places. • I can solve simple measure and money problems involving fractions and decimals to two decimal places. • I know that one-tenth can be written as 1/10 or as 0.1 and that one-hundredth can be written as 1/100 or 0.01 • I know that 1/2 can also be written as 0.5, 1/4 as 0.25 and 3/4 as 0.75 • I can use a number line to connect fractions, numbers and measures. • I understand the relation between non-unit fractions and multiplication and division of quantities.	mathematical statements such as • $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ • I can add fractions with the same denominator and denominators that are multiples. • I can subtract fractions with the same denominator and denominators that are multiples. • I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. • I can connect equivalent fractions > 1 that simplify to integers with division and fractions >1 to division with remainders, using the number line and other models. • I can count forwards and backwards in simple fractions. • I can mentally add and subtract tenths,	• I understand a fraction is linked to division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8). • I can convert fractions to decimals. • I can identify the value of each digit in numbers give to three decimals places. • I can multiply one-digit numbers with up to two decimal places by a whole number. • I can use written division where the answer has up to two decimal places. • I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. • I can solve problems which require answers to be rounded to specified degrees of accuracy.

			• I can use factors and multiples to recognise equivalent fractions and simplify where appropriate. • I can recognise and write equivalent fractions. **Spring 1** **Spring 2**	and one-digit whole numbers and tenths. • I can read decimal numbers as fractions. • I can write decimals numbers as fractions. • I recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • I can round decimals to two decimal places, to the nearest whole and one decimal place. • I can read and write decimal up to three decimal places. • I can order decimal up to three decimal places. • I can compare decimal up to three decimal places. • I can solve problems involving numbers up to 3dp. • I know that 'per cent' means 'parts in every 100', so 1% = 1/100. • I can write the percentages as a	• I can calculate % of whole number. **Autumn 1** **Autumn 2** **Spring 1**

				fraction with a denominator 100. • I can write a percentages as a decimal. • I can solve problems which require knowing percentages and decimal equivalent of those fractions with a denominator of a multiple of 10 and 25. • I can solve problems which require knowing percentages and decimal equivalent of 1/2, 1/4 1/5, 2/5, 4/5. • I can find a simple percentage of a quantity. **Spring 1** **Spring 2**	

MEASUREMENT

EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
• I can compare and order by size, length and time. **(Autumn, Week 3)** • I can talk about time in terms of night and day, days of the week and months of the year. **(Autumn, Week 7)** • I can use language related to time and to be able to sequence events. **(Autumn, Week 7)** • I can measure end-to-end length, compare lengths and use non-standard units of measurement. **(Spring, Week 9)**	• I can compare the lengths of more than two objects and put them in order (longer, shorter, longest, shortest). • I can compare the weights of more than two objects and put them in order (heavier, lighter, heaviest, lightest. • I can compare the capacities of more than two objects and put them in order (more than, less than, most, least). • I can compare time (quicker, slower, quickest, slowest, earlier, later). • I am beginning to use	• I can choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm) to the nearest appropriate unit using rulers. • I can choose and use appropriate standard units to estimate and measure mass (kg/g) using scales. • I can choose and use appropriate standard units to estimate and measure temperature (° C) to the nearest appropriate unit using thermometers. • I can choose and use appropriate standard units to estimate and	• I can choose suitable units to estimate and measure length. • I can suggest suitable units to measure mass. • I can suggest suitable units to measure volume/capacity . • I can measure different lengths m/ cm/mm. • I can measure different mass • Kg/g. • I can measure different volume and capacity l/ml. • I can add and subtract different lengths m/cm/mm. • I can add and subtract different mass • Kg/g. • I can add and	• I can convert between different units of measure (e.g. km to m). • I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. • I can find the area of rectilinear shapes by counting squares. • I can estimate, compare and calculate different measures, including money in pounds and pence. • I know the relationships between units of measure: metres and	• I can convert between different units of measure (km—m). • I can convert between different units of measure (cm-m). • I can convert between different units of measure (cm-mm). • I can convert between different units of measure (g–kg). • I can convert between different units of measure (l–ml). • I can estimate and measure length in kilometres, metres, centimetres and millimetres	• I can solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate. • I can use, read and write and convert between standard units (mass, length, volume and time) from a smaller unit to a larger unit. (up to 3dp) i.e. 1km and 251m = 1.251km =1251m. • I can use, read and write and convert between standard units

• I can use the language 'empty', 'full' and 'half full' to describe how much is in a container. **(Spring, Week 10)** • I can measure the capacity of containers. **(Spring, Week 10)**	measuring tools such as a ruler, weighing scales and containers • I can measure and begin to record lengths and heights (cm and m). • I can measure and being to record mass and weight (kg and g). • I can measure and begin to record capacity and volume (l and ml). • I can measure and begin to record time (hours, minutes, seconds). • I can recognise the different values of money (coins). • I can recognise the different values of money (notes). • I can sequence events in chronological order (before, after, next, first, today,	measure capacity (litres/ml) to the nearest appropriate unit using measuring vessels. • I can compare and order lengths and record the results using >, < and =. • I can use vocabulary such as: 'half as high' and 'twice as wide'. • I can compare and order mass and record the results using >, < and =. • I can compare and order volume/capacity and record the results using >, < and =. • I can find different combinations of coins that equal the same amounts of money. • I can solve simple problems	subtract different volume and capacity l/ml. • I can compare different lengths m/ cm/mm. • I can compare different mass Kg/g. • I can compare different volume and capacity l/ml. • I can add money, including £ and p. • I can subtract money, including £ and p. • I can work out change. • I can tell and write time from an analogue clock. • I can use Roman numerals from I to XII. • I can tell and write time from a 12-hour and 24-hour clock. • I can read the	centimetres, kilograms and grams, litres and millilitres (I can convert). • I can read time on analogue and digital 12– and 24– hour clocks. • I can write time on analogue and digital 12– and 24– hour clocks. • I can convert time between analogue and digital 12– and 24– hour clocks. • I can solve problems converting hours to minutes. • I can solve problems converting minutes to seconds. • I can solve problems converting years to months. • I can solve problems converting weeks to days. • I can relate area to arrays and	using appropriate measuring instruments. • I can use some common imperial units and their equivalent metric measurement Inches, pounds, pints. • I can measure and calculate the perimeter of composite rectilinear shapes in cm and m. • I can calculate the area of rectangles (including squares) and including using standard units, square centimetres (cm2) and estimate the area of irregular shapes. • I can estimate the volume (using 1cm3 blocks to build a cuboid.	(mass, length, volume and time) from a larger unit to a smaller unit. (up to 3dp)i.e. 1km and 251m = 1.251km =1251m. • I can covert between Kilometres and miles. I know that 1 mile is about 1.6 km, and that 1 km is about 5/8 of a mile. • I know that shapes with the same areas can have different perimeters and vice versa. • I can calculate the area of triangles using my knowledge of areas of rectangles. • I can calculate the area of parallelograms using my knowledge of areas of rectangles and triangles.

	yesterday, tomorrow, morning, afternoon and evening. • I can correctly use and understand the days of the week. • I can correctly use and understand months of the year. • I can correctly use and understand years. • I can tell the time to the hour. • I can tell the time to half past the hour. • I can draw the hands on a clock faces to show my understanding of time. **Spring 1** **Summer 2**	in a practical context involving addition and subtraction of money of the same unit, including giving change. • I can compare and sequence intervals of time. • I can tell and write time to 5 minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • I know the number of minutes in an hour and hours in a day. **Spring 1** **Spring 2** **Summer 1** **Summer 2**	time on a clock to the nearest minute. • I can read the time on a clock to the nearest 5 minutes. • I can record and compare time in terms of seconds, minutes and hours. • I can use vocabulary such as a.m. /p.m., morning, afternoon, noon and midnight. • I know the number of seconds in a minute. • I know the number of days in each month, year and leap year. • I can find how long an activity takes if I know when it starts and when it ends. • I can compare durations of events.	multiplication. **Spring 2** **Summer 1**	• I can estimate capacity (using water). • I can solve problems involving converting between units of time. • I can solve problems, using a timetable written in 24-hour clock notation. • I can solve problems converting between units of time. I can change am or pm times to 24-hour clock times, and vice versa. • I can solve problems involving addition and subtraction of units of measure (length, mass, volume, money) using decimal notation, including scaling.	• I can work out the volume of different cubes and cuboids made from centimetre cubes. • I can calculate the volume of different cubes and cuboids (including cm3, m3). • I can calculate and compare the volume of different cubes and cuboids (including mm3, km3). • I can solve problems, using a timetable written in 24-hour clock notation. **Autumn 2** **Spring 2**

			Spring 1 **Spring 2** **Summer 2**		• I can use all four operations to solve problems involving time and money, including conversions (for example, days to weeks, expressing the answer as weeks and days. • I can express missing measures questions algebraically. **Summer 1** **Summer 2**	

GEOMETRY – PROPERTIES OF SHAPE AND POSITION AND DIRECTION

EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
I can recognise language associated with 2D shapes, specifically triangles and squares. **(Autumn, Week 10)** I can recognise language associated with 2D shapes, specifically rectangles and circles. **(Autumn, Week 11)** I can understand and use positional language. **(Autumn, Week 12)** I can compose 2D shapes using tangrams and pattern blocks. **(Spring, Week 11)**	• I know the names of familiar 2-D shapes and I can picture these shapes in my head (squares, rectangles, circles and triangles). • I know the names of familiar 3-D shapes and I can picture these shapes in my head (cubes, cuboids, pyramids and spheres). • I can recognise 2D and 3D shapes in different orientations and sizes in my surroundings. • I can use words such as: left and right, top, middle and bottom, on top of, in front of,	• Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line. • Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. • Identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid. • I can read and write some names for shapes.	• I can draw 2D shapes. • I can recognise whether a 2-D shape is symmetrical or not and describe how I know. • I can make 3-D shapes using modelling materials. • I can recognise 3-D shapes in different orientations. • I can describe the properties of 3-D shapes. • I recognise that angles are a property of shape or a description of a turn. • I can identify right angles. • I recognise that	• I can compare and classify triangles according to their properties and size (equilateral, isosceles, scalene, right-angles isosceles etc.). • I can pick out triangles that have a right angle from other triangles. • I can compare and classify quadrilaterals based on properties and size (parallelogram, rhombus, trapezium). • I can identify acute and obtuse angles. • I can compare	• I can identify 3D shapes including cubes and other cuboids from 2D representations. • I know angles are measured in degrees; estimate and measure them and draw a given angle, writing its size in degrees (o). • I can identify multiples of 90o. • I can identify angles at a point on a straight line and 1/2 a turn (total 180o). • I can identify angles at a point and one whole turn (total 360o). • I can identify reflex angles. • I can identify and	• I can draw 2-D shapes accurately, with given dimensions and angles. • I can recognise, describe and build simple 3D shapes including drawing nets and making nets. • I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons. • I can illustrate and name the parts of circles, including radius, diameter and circumference.

I can recognise 3D shapes and to build with 3D shapes. **(Spring, Week 12)**	above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. • I can describe positions of objects. • I can describe half, quarter and three-quarter turns. • I can make whole, half, quarter and three-quarter turns in both directions. • I can connect turning clockwise with movement on a clock face. **Autumn 2** **Spring 1** **Summer 2**	• I can draw lines and shapes using a straight edge. • I can compare and sort common 2-D and 3-D shapes and everyday objects. • I can order and arrange combinations of mathematical objects in patterns. • I can recognise patterns of shapes, including those in different orientations. • I can use maths vocabulary to describe position, direction and movement including in a straight line. • I can distinguish between rotation as a turn and in terms of right angles for quarter, half and three– quarter turns (clockwise and anti-clockwise).	two right angles make a half-turn, three make three quarters or a turn and four a complete turn. • I can identify whether angles are greater than or less than a right angles (900). • I can identify horizontal and vertical lines. • I can identify pairs of perpendicular and parallel lines. **Summer 2**	and order angles up to two right angles by size. I know facts about regular polygons such as the number of sides and number of angles. • I can use what I know about polygons to group them into regular and irregular polygons. • I can identify lines of symmetry in 2D shapes presented in different orientations. • I can draw symmetric patterns using a variety of media to become familiar with different orientations of lines of symmetry. • I can recognise lines of symmetry in a variety of diagrams, including where the line of symmetry does	compare angles. • I can draw shapes using given dimensions and angles. • I can state and use the properties of rectangles (including squares) to deduce related facts. • I can distinguish between regular and irregular polygons based on reasoning and equal sides and angles. • I am accurate in drawing lines with a ruler to the nearest mm. • I can measure accurately with a protractor. • I can use the term diagonal and make conjectures about the angles formed by diagonals and sides, and other properties of quadrilaterals. • I use angle sum facts and other	• I know that the diameter is twice the radius. • I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite. • I can find missing angles. • I can explain how unknown angles and lengths can be derived from known measurements. • I can express relationships algebraically. • I can describe positions on the full coordinates grid (all four quadrants). • I can draw and translate simple shapes on the coordinates plane, and reflect them in the axes. **Autumn 2** **Spring 2**

		Summer 1		not dissect the original shape. • I can complete a simple symmetric figure with respect to a specific line of symmetry. • I can describe positions on a 2-d grid as coordinates in the first quadrant. • I can describe movements between positions as translations of a given unit to the left/right and up/down. • I can plot specific points and draw sides to complete a given polygon. • I can draw a pair of axes in one quadrant, with equal scales and integer labels. • I can read, write and use pairs of coordinates (2, 5) including using coordinate-plotting ICT tools. **Summer 2**	properties to make deductions about missing angles and relate these to missing number problems. • I can identify, describe and represent the position of a shape following a reflection or translation, using appropriate language, and know that the shape has not changed. • I recognise and use reflection and translation in a variety of diagrams, including continuing to use a 2D grid and coordinates in the first quadrant. **Spring 2** **Summer 1**	

STATISTICS

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	• I can interpret and construct simple pictograms. • I can interpret and construct tally charts. • I can interpret and construct block diagrams. • I can interpret and construct simple tables. • I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. • I can ask and answer questions about totalling and compare categorical data. **Spring 2**	• I can read pictograms. • I can read tally charts and tables. • I can read bar charts. • I can present data using scaled pictograms. • I can present data using scaled tables. • I can present data using scaled bar charts. • I can answer questions about pictograms. • I can answer questions about tally charts and tables. • I can answer questions about bar charts. • I can ask questions linked to pictograms. • I can ask questions linked to tally charts and tables. • I can ask questions linked to bar	• I can interpret discrete data using appropriate graphical methods (bar charts). • I can interpret continuous data using appropriate graphical methods (bar charts). • I can present discrete data using appropriate graphical methods (bar charts). • I can present continuous data using appropriate graphical methods (bar charts). • I can interpret discrete data using appropriate graphical methods (time graphs). • I can interpret continuous data using appropriate graphical methods (time graphs). • I can present discrete data using appropriate	• I can solve comparison problems using information presented in a line graph. • I can solve sum problems using information presented in a line graph. • I can solve difference problems using information presented in a line graph. • I can complete information in tables. • I can read information in tables. • I can interpret information in tables. • I can complete information in timetables. • I can read information in timetables. • I can interpret information in	• I can interpret pie charts to solve problems. • I can interpret lines graphs to solve problems. • I can construct pie charts and use these to solve problems. • I can construct line graphs and use these to solve problems. • I can calculate the mean as an average (of a set of data). • I can interpret the mean as an average and use this to solve problems. • I can connect my work on angles, fractions and percentages to the interpretation of pie charts. • I can encounter and draw graphs relating two variables, arising from their own enquiry and in

		charts. • I can solve one step problems involving pictograms. • I can solve one step problems involving tally charts and tables. • I can solve one step problems involving bar charts. • I can solve two step problems involving pictograms. • I can solve two step problems involving tally charts and tables. • I can solve two step problems involving bar charts. **Summer 1**	graphical methods (time graphs). • I can present continuous data using appropriate graphical methods (time graphs). • I can solve comparison problems using information presented in bar charts. • I can solve sum problems using information presented in bar charts. • I can solve difference problems using information presented in bar charts. • I can solve comparison problems using information presented in pictograms. • I can solve sum problems using information presented in pictograms. • I can solve difference problems using information presented in	timetables. • I can interpret the scale in a line graph. • I understand which representations of data are most appropriate and why. **Autumn 2**	other subjects. • I can connect conversion from kilometres to miles in measurement to its graphical representation. • I know when it is appropriate to find the mean of a data set. **Summer 2**

			pictograms. • I can solve comparison problems using information presented in other graphs (line graphs). • I can solve sum problems using information presented in other graphs (line graphs). • I can solve difference problems using information presented in (line graphs). **Spring 1**		

RATIO AND PROPORTION

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
					• I can solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts. • I can solve problems involving the calculations of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison. • I can solve problems involving similar shapes, where the scale factor is known or can be found. • I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. • I can recognise proportionality in contexts when the

					relations between quantities are in the same ratio (for example, similar shapes and recipes). • I can use ratio and proportion to link percentages or 360° to calculating angles of pie charts. • I can use ratio when comparing sizes and scale drawings by solving a variety of problems. • I can solve problems involving unequal quantities, for example, 'for every egg you need 3 spoonfuls of flour', '3/5 of the class are boys'. **Spring 1**

ALGEBRA

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
					• I can generate and describe linear number sequences. • I can write and use simple expressions in words and formulae. • I can express missing number problems algebraically. • I can use formula to work out missing numbers. • I can find pairs of numbers that satisfy an equation with two unknowns. • I can enumerate all possibilities of combinations of two variables. • I can use simple formulae • I can use formula to work out missing lengths, coordinates and angles. • I can use equivalent expressions. • I can make

					generalisations of number patterns. • I can solve number puzzles and problems where enumerate possibilities of combinations of two variable exist number puzzles (for example, what 2 numbers can add up to). **Spring 1**

ASSESSMENT

Assessment grids, standardised testing, and gap analysis

Our maths assessment grids for each child allow us to track pupils' maths progress across each year group. There are three checkpoints within the year where children complete standardised NFER papers for maths. In Year 2 and Year 6 teachers us previous SATs papers at the same checkpoints to track progress accurately. Once these papers are completed, teachers complete gap analysis grids to highlight any gaps in knowledge and use these to plan interventions and guide future teaching.

Chapter Reviews and Pre-assessment

We also use 'Chapter Reviews' in the Maths No Problem workbooks once a unit of work has gone 'cold' to support on-going assessment. Teachers plan pre-assessments to take place before teaching a new unit of work. This enables teachers to adapt short term planning to include time to address areas of need.

Retrieval practice and AfL (Assessment for Learning)

Five minutes of maths retrieval practice takes place each day which supports AfL. Teachers observe and respond to pupils during a lesson, offering verbal feedback and prompting of deeper thinking using questioning for mastery (how could? what if? How do you know?). Children are supported to use concrete resources, teaching materials on interactive whiteboards, working walls, sentence stems and key vocabulary to explain their thinking and develop understanding. Ongoing teacher observation identifies pupil progress and attainment during lessons and enables learners to be challenged through response and feedback.

At the end of each academic year, this enables teachers to assess outcomes in maths. Teachers will moderate their maths judgements regularly both in school and externally to ensure accuracy of judgements.