Year 3 NCETM Curriculum Map 2021



Unit 1	Adding and subtracting across 10 (2 weeks)
RtPs	2AS-1 Add and subtract across 10.
	3NF-1 Secure fluency in addition and subtraction facts that bridge 10,
	through continued
	practice.
NCETM spine ref.	1.11 Addition and subtraction: bridging 10
Small step	1 Pupils add 3 addends
learning	2 Pupils use a 'First Then Now" story to add 3 addends
outcomes	3 Pupils explain that addends can be added in any order
	4 Pupils add 3 addends efficiently
	5 Pupils add 3 addends efficiently by finding two addends that total 10
	6 Pupils add two numbers that bridge through 10
Deverlaged	7 Pupils subtract two numbers that bridge through 10 Classroom Slides
Download Links	
LINKS	https://www.ncetm.org.uk/media/sllf5trw/cp-year-3-unit-1-adding-and-subtracting-across-10.pptx
	Specific RtP Link
	2AS-1 Page 57
	3NF-1 Page 98
	Spine Materials Teacher Guidance
	https://www.ncetm.org.uk/media/x51ltghh/ncetm_mm_sp1_y2_se11_teach_final-ys2.pdf#page=4



Unit 2 Numbers to 1,000 (10 weeks). RIPs SINV1 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. SINV-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. SINV-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. SINV-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. SAS-1 Calculate complements to 100. SINF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM spine rd. 1.17 Composition and calculation: three-digit numbers 1 Pupie seplien that 100 is composed of 50x 25s and 20s and sepi 1 Pupie seplien that 100 is composed of 50x 25s and 20s and 25s and 25s and 20s and 25s and		Numbers to $4,000/40$ used to
Innes the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10. 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. 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. 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. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). I.17 Composition and calculation: three-digit numbers "small step" 1 Pupie septian that 100 is composed of 50e 25s and 20s 3 Pupie supplie that 100 is composed of 50e 25s and 20s 3 Pupie supplie that 100 is composed of 50e 25s and 20s 3 Pupie supplie that 100 is composed of 50e 25s and 20s 4 Pupie suph that 100 is composed of 50e 25s and 20s 5 Pupie supplie that 100 is composed of 50e 25s and 20s 6 Pupie supplie that 100 is composed of 50e 25s and 20s 7 Pupie supplie that 100 is composed of 50e 25s and 20s 8 Pupie suph that 100 is composed of 50e 25s and 20s		
are in other three-digit multiples of 10. SNPV-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. SNPV-3 Resion about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10. SNPV-4 Recognise the place value of equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. SAS-1 Calculate complements to 100. SNE-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM 1.18 Composition and calculation: 100 and bridging 100 spinor 6f. 1.18 Composition and calculation: three-digit numbers Small step leaming 2 Pupils explain that 100 is composed of los 256 and 20s one- or two-digit number that compose 100 3 Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 4 Pupils use known facts to find correct complements to 100 5 Pupils use knowl facts to find correct complements to 100 accurately and efficiently 7 Pupils use knowledge to addition and subtraction equations 9 Pupils bridge 100 by adding or subtracting in multiples of ten using the hundreds boundary to solve problems 1 Pupils inde moreor ten less than a given number </td <td>RtPs</td> <td></td>	RtPs	
SNP-2-2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning. SNPV-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. SNPV-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. SAS-1 Calculate complements to 100. SNP-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM spine ref. 1.17 Composition and calculation: three-digit numbers small step 2 Puplis explain that 100 is composed of 560 25s and 20s succomed 3 3.18 Use known facts to find correct complements to 100 6 Puplis use known facts to find correct complements to 100 7 Puplis use known facts to find correction aduution and subtraction equations 9 Puplis use known facts to find correcting a single-digit number 9 Puplis use known facts to find aduuticing a single-digit number 1 Puplis use known facts to find correcting a single-digit number 1 Puplis use known facts to find correcting a single-digit number 1 Puplis b		times the size of 10; apply this to identify and work out how many 10s there
compose and decompose three-digit numbers using standard and non-standard partitioning. 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. 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. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NETM 1.17 Composition and calculation: three-digit numbers Small step 1 Pupils explain that 100 is composed of 560 258 and 208 3 Pupils use known facts to find complements to 100 3 Pupils use known facts to find complements to 100 4 Pupils use known facts to find complements to 100 5 Pupils use known facts to find complements to 100 6 Pupils use known facts to find complements to 100 7 Pupils use known facts to find complements to 100 8 Pupils use known facts to find complements to 100 9 Pupils use place value knowledge to withe addition and subtraction equations 9 Pupils use known facts to find complements to 100 10 Pupils use known facts to find comple		are in other three-digit multiples of 10.
compose and decompose three-digit numbers using standard and non-standard partitioning. 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. 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. 3NP-4 a 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. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NETM 1.17 Composition and calculation: three-digit numbers Small step 1 Pupils explain that 100 is composed of 560 258 and 208 2 Pupils explain that 100 is composed of 560 258 and 208 3 Pupils use known facts to find complements to 100 6 Pupils use known facts to find complements to 100 7 Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 8 Pupils use known facts to find complements to 100 9 Pupils use known facts to find complements to 100 10 Pupils use place value knowledge to withe addition and subtraction equations 9 Pupils use place v		3NPV-2 Recognise the place value of each digit in three-digit numbers, and
 standard partitioning. 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. 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. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM spine rd. 1.17 Composition and calculation: three-digit numbers. 3MI step Pupils explain that 100 is composed of toin tens and one hundred ones Pupils explain that 100 is composed of toin tens and one hundred ones Pupils use known facts to find multiples of ten thet compose 100 Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 Pupils use known facts to find complements to 100 Pupils use known facts to find complements to 100 accurately and efficiently Pupils use known facts to find complements to 100 accurately and efficiently Pupils use known facts to find complements to 100 accurately and efficiently Pupils use known facts to find a subtraction of multiples of ten bridging the hundreds boundary to solve problems Pupils bridge 100 by adding or subtracting a single-digit number Pupils tridge 100 by adding or subtracting a single-digit number Pupils find ten more or ten less than a given number Pupils indege to the end and number for the whole mad multiple of ten single-digit number Pupils measure length and height from zero using whole metres and cm Pupils become familiar with a meter ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm). Pupils become familiar with a meter value (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 10m). Pupils become familiar with a		
SNPL-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. SNPL-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. SAS-1 Calculate complements to 100. SNF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NEETM 1.17 Composition and calculation: three-digit numbers Small step 1 Pupils explain that 100 is composed of 180 as 25 and 208 9 Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 10 5 Pupils use known facts to find correct complements to 100 10 Pupils use known facts to find correct complements to 100 6 Pupils use known facts to find correct complements to 100 10 Pupils use known facts to find correct complements to 100 7 Pupils use known facts to find ormer complements to 100 10 Pupils use known facts to find correct complements to 100 8 Pupils use knowledge to write addition and subtraction equations 10 Pupils tope cont arcrass and on from 100 9 Pupils bridge 100 by adding or subtracting in multiples of ten using their numerals and names 11 Pupils count across and on from 100		
number system, including identifying the previous and next multiple of 100 and 10. 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. 3AS-1 Calculate complements to 100. NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM spine ref. 1.17 Composition and calculation: three-digit numbers Small step 1 Puple explain that 100 is composed of ten tens and one hundred ones learning 1 2 Puple scylain that 100 is composed of ten tens and one hundred ones learning 2 0 Puple scylain that 100 is composed of to tens and one hundred ones learning 2 0 Puple scylain that 100 is composed of to accurately and efficiently 7 Puple scent a three-digit number which is a multiple of ten using their numerals and names 8 Puple suse known facts to find our to up to 199 in different ways 9 Puple suse known facts to find corner to multiples of ten bridging the hundreds boundary to solve problems 10 Puple solve brobens 11 Puple solve problems 12 Puple south across and on from 100		
and 10. 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. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number lacts (scaling facts by 10). NCETM 1.17 Composition and calculation: 100 and bridging 100 1.18 Composition and calculation: three-digit numbers Small step 1 Puble septiain that 100 is composed of ten tens and one hundred ones Jamming 2 Puble septiain that 100 is composed of ten thes and one number and a one- or two-digit number that compose 100 Statistics 3 Puble use known facts to find correct complements to 100 6 Puplis use known facts to find correct complements to 100 7 Puplis use known facts to find correct omplements to 100 8 Puplis use known facts to find correct omplements to 100 9 Publis use known facts to find correct omplements to 100 9 Publis use known facts to find correct omplements to 100 9 Publis use known facts to find correct omplements 9 Publis use known facts to find correct omplements 9 Publis thide 100 by adding or subtracting in multiples of ten bridging the hundreds boundary to soke problems 10		
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. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM spine ref. 1.17 Composition and calculation: three-digit numbers Small step 1 Pupils explain that 100 is composed of ten tens and one hundred ones learning Pupils explain that 100 is composed of ten tens and one hundred ones learning Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 9 Pupils use known facts to find correct complements to 100 9 Pupils use known facts to find complements to 100 accurately and efficiently 9 Pupils use known facts to find and subtraction equations 9 Pupils use knowledge to write addition and subtraction equations 9 Pupils use knowledge of addition and subtraction equations 9 Pupils use knowledge of addition and subtraction equations 9 Pupils bridge 100 by adding or subtracting in multiples of ten bridging the hundreds boundary to solve problems 10 Pupils bridge 100 by adding or subtracting and subtracting any two-digit multiple of ten 10		
lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. 3AS-1 Calculate complements to 100. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM spine rf. spine rf. 117 Composition and calculation: three-digit numbers Small step learning outputs explain that 100 is composed of 50s 25s and 20s outcomes 9 Pupils explain that 100 is composed of 50s 25s and 20s outcomes 9 Pupils use known facts to find correct complements to 100 9 Pupils use known facts to find correct complements to 100 9 Pupils use known facts to find correct complements to 100 9 Pupils use place value knowledge to write addition and subtraction equations 9 Pupils use place value knowledge to write addition and subtraction equations 9 Pupils bidge 100 by adding or subtracting in multiples of ten bridging the hundreds boundary to solve problems 11 Pupils count across and on from 100 12 Pupils inde termore or ten less than a given number 14 Pupils indear more or ten less than a given number 15 Pupils count across and on from 200 in gifferent ways 19 Pupils indear more or ten less than a given number 15 Pupils become familiar with a meter ruler (marked and unmarked intervals, 1 x 1m, 10 x 100m, 100 x 10m) </td <td></td> <td></td>		
3AS-1 Calculate complements to 100. Similar to the second s		
SNF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). NCETM pine ref. 1.17 Composition and calculation: 100 and bridging 100 1.18 Composition and calculation: three-digit numbers Small step learning outcomes Pupils explain that 100 is composed of ten tens and one hundred ones. 2 Pupils explain that 100 is composed of ten tens and one hundred ones. 3 Pupils use known facts to find multiples of ten that compose 100 4 Pupils use known facts to find correct complements to 100 6 Pupils use known facts to find correct complements to 100 7 Pupils use known facts to find correct complements to 100 8 Pupils use place value knowledge to write addition and subtraction equations 9 Pupils bridge 100 by adding or subtracting in multiples of ten 10 Pupils proteent a three-digit number up to 199 in different ways 11 Pupils represent a three-digit number up to 199 in different ways 12 Pupils bridge 100 by adding or subtracting a single-digit number 14 Pupils court across and on from 100 12 Pupils ind ten more or ten less than a given number 15 Pupils bridge 100 by adding or subtracting a single-digit number 16 Pupils meas		
NCETM spine ref. 1.17 Composition and calculation: 100 and bridging 100 1.18 Composition and calculation: three-digit numbers Small step learning outcomes 1 Pupile sexplain that 100 is composed of ten tens and one hundred ones 2 Pupile sexplain that 100 is composed of ten tens and one hundred ones 3 Pupile sup lain that 100 is composed of ten tens and one hundred ones 4 Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 5 Pupils use known facts to find correct complements to 100 6 Pupils use known facts to find correct complements to 100 accurately and efficiently 7 Pupils represent a three-digit number which is a multiple of ten using their numerals and names 8 Pupils use knowledge to write addition and subtraction equations 9 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems 10 Pupils count across and on from 100 10 Pupils bridge 100 by adding or subtracting a single-digit number 11 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 11 Pupils measure length and height from zero using whole metres and cm 12 Pupils measure length and height from zero using cm <th></th> <th>3AS–1 Calculate complements to 100.</th>		3AS–1 Calculate complements to 100.
NCETM spine ref. 1.17 Composition and calculation: 100 and bridging 100 1.18 Composition and calculation: three-digit numbers Small step learning outcomes 1 Pupile sexplain that 100 is composed of ten tens and one hundred ones 2 Pupile sexplain that 100 is composed of ten tens and one hundred ones 3 Pupile sup lain that 100 is composed of ten tens and one hundred ones 4 Pupils use known facts to find a two-digit number and a one- or two-digit number that compose 100 5 Pupils use known facts to find correct complements to 100 6 Pupils use known facts to find correct complements to 100 accurately and efficiently 7 Pupils represent a three-digit number which is a multiple of ten using their numerals and names 8 Pupils use knowledge to write addition and subtraction equations 9 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems 10 Pupils count across and on from 100 10 Pupils bridge 100 by adding or subtracting a single-digit number 11 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 11 Pupils measure length and height from zero using whole metres and cm 12 Pupils measure length and height from zero using cm <th></th> <th>2NE 2 Apply place value to evaluate to the sum additive and multiplicative</th>		2NE 2 Apply place value to evaluate to the sum additive and multiplicative
NCETM spine ref. 1.17 Composition and calculation: three-digit numbers Small step learning outcomes 1 Pupils explain that 100 is composed of 502 S5 and 205 3 Pupils explain that 100 is composed of 502 S5 and 205 3 Pupils use known facts to find multiples of ten that compose 100 4 Pupils use known facts to find complements to 100 6 Pupils use known facts to find complements to 100 7 Pupils use known facts to find complements to 100 8 Pupils use known facts to find complements to 100 accurately and efficiently 7 Pupils use knowledge to write addition and subtraction equations 9 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems 10 Pupils represent a three-digit number up to 199 in different ways 11 Pupils find ten more or ten less than a given number 12 Pupils find ten more or ten less than a given number 13 Pupils measure length and height from zero using whole metres and cm 14 Pupils measure length and height from zero using whole metres and cm 15 Pupils measure length and height from zero using cm 16 Pupils measure length and height from zero using cm		
spine ref. 118 Composition and calculation: three-digit numbers Small step learning outcomes 1 Pupile explain that 100 is composed of 502 55 and 20 9 3 Pupile sup lain that 100 is composed of 502 55 and 20 9 1 4 Pupile sup lain that 100 is composed of 502 55 and 20 9 1 5 Pupile sup lain that 100 is composed of 502 55 and 20 9 1 6 Pupils use known facts to find correct complements to 100 9 1 7 Pupils use known facts to find complements to 100 accurately and efficiently 9 1 8 Pupils use known facts to find complements to 100 accurately and efficiently 9 1 9 Pupils use knowledge of adding or subtracting of multiples of ten bridging the hundreds 9 1 9 Pupils use knowledge of adding or subtracting of multiples of ten bridging the hundreds 9 1 9 Pupils count across and on from 100 12 1 1 14 Pupils find ten more or ten less than a given number 15 Pupils find ten more or ten less than a given number 16 16 Pupils measure length and height from zero using whole metres and cm 18 1 × 1m, 10 × 10cm, 100 × 10cm 17 Pupils m		number facts (scaling facts by 10).
spine ref. 1.18 Composition and calculation: three-digit numbers Small step learning outcomes 1 Pupils explain that 100 is composed of 502 55 and 205 3 Pupils use known facts to find multiples of ten that compose 100 4 4 Pupils use known facts to find multiples of ten that compose 100 5 5 Pupils use known facts to find complements to 100 6 6 Pupils use known facts to find complements to 100 6 7 Pupils use known facts to find complements to 100 accurately and efficiently 7 Pupils use knowledge of addition and subtraction equations 9 Pupils bidge 100 by adding or subtracting in multiples of ten 10 Pupils use knowledge of subtracting a single-digit number 11 Pupils count across and on from 100 12 Pupils find ten more or ten less than a given number 14 Pupils find ten more or ten less than a given number 15 Pupils measure length and height from zero using whole metres and cm 18 Pupils measure length and height from zero using cm 19 Pupils measure length and height from zero using cm 19 Pupils measure length and height from zero using cm	NCETM	1.17 Composition and calculation: 100 and bridging 100
Small step 1 Pupils explain that 100 is composed of ten tens and one hundred ones learning 2 Pupils explain that 100 is composed of 50s 25s and 20s outcomes 3 Pupils use known facts to find multiples of ten that compose 100 4 Pupils use known facts to find complements to 100 5 6 Pupils use known facts to find complements to 100 accurately and efficiently 7 Pupils use known facts to find complements to 100 accurately and efficiently 8 Pupils use known facts to find complements to 100 accurately and efficiently 9 Pupils use knowledge to write addition and subtraction equations 9 Pupils bridge 100 by adding or subtracting in multiples of ten 10 Pupils cove problems 11 Pupils represent a three-digit number up to 199 in different ways 12 Pupils bridge 100 by adding or subtracting a single-digit number 14 Pupils bridge 100 by adding or subtracting and subtracting any two-digit multiple of ten 16 Pupils inden more or ten less than a given number 17 Pupils bridge 100 by adding or subtracting and subtracting any two-digit multiple of ten 18 Pupils cose the hundreds boundary when adding and subtracting any two-digit multiple of ten 19 Pupils concon	spine ref.	
 learning Pupils explain that 100 is composed of 50s 25s and 20s Pupils use known facts to find multiples of ten that compose 100 Pupils will use known facts to find a two-digit number and a one- or two-digit number that compose 100 Pupils use known facts to find correct complements to 100 Pupils use known facts to find correct complements to 100 Pupils use known facts to find correct complements to 100 accurately and efficiently Pupils use place value knowledge to write addition and subtraction equations Pupils bridge 100 by adding or subtracting in multiples of ten using their numerals and names Pupils use knowledge of addition and subtraction equations Pupils use knowledge of addition and subtraction equations Pupils use knowledge of addition and subtraction equations Pupils count across and on from 100 Pupils bridge 100 by adding or subtracting a single-digit number Pupils plas bridge 100 by adding or subtracting a single-digit number Pupils lig find ten more or ten less than a given number Pupils locont across and on from 100 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils use knowledge of the additive relations to cm and mm Pupils use knowledge of the additive relations to run, mm to whole cm and mm and vice versa) Pupils use knowledge of the additive relationship to solve problems Pupils convert between cm and mm (include whole m to mm, mm to whole cm and mm and vice versa) Pupils represent a three-digit number up to 1000 in different ways Pupils conver	Small step	
outcomes 3 Pupils use known facts to find multiples of ten that compose 100 4 Pupils will use known facts to find a two-digit number and a one- or two-digit number that compose 100 5 Pupils use known facts to find corplements to 100 accurately and efficiently 6 Pupils represent a three-digit number which is a multiple of ten using their numerals and names 8 Pupils use known facts to find complements to 100 accurately and efficiently 7 Pupils begen three-digit number which is a multiples of ten using their numerals and names 8 Pupils use known facts to find complements to 100 accurately and efficiently 7 Pupils bridge 100 by adding or subtracting in multiples of ten 10 Pupils bridge 100 by adding or subtracting a single-digit number 11 Pupils bridge 100 by adding or subtracting a single-digit number 12 Pupils find ten more or ten less than a given number 13 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 16 Pupils measure length and height from zero using whole metres and cm 19 Pupils measure length and height from zero using cm 19 Pupils measure length and height from zero using function to may may advice versa) 20 Pupil		
 compose 100 Pupils use known facts to find correct complements to 100 Pupils use known facts to find complements to 100 accurately and efficiently Pupils represent a three-digit number which is a multiple of ten using their numerals and names Pupils bridge 100 by adding or subtracting in multiples of ten Pupils bridge 100 by adding or subtractin of multiples of ten Pupils use knownledge of addition and subtraction of multiples of ten Pupils count across and on from 100 Pupils represent a three-digit number up to 199 in different ways Pupils for present a three-digit number up to 199 in different ways Pupils for the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils for the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils conset length and height from zero using whole metres and cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils convert between m and cm (include whole m to mm, mm to whole cm and mm and vice versa) Pupils use length from zero using mm / whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of place value to represent a three-digit number in different ways Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a t	_	
 Pupils use known facts to find correct complements to 100 Pupils use known facts to find complements to 100 accurately and efficiently Pupils represent a three-digit number which is a multiple of ten using their numerals and names Pupils use place value knowledge to write addition and subtraction equations Pupils use place value knowledge of addition and subtraction of multiples of ten Pupils use knowledge of addition and subtraction of multiples of ten Pupils bridge 100 by adding or subtracting in multiples of ten bridging the hundreds boundary to solve problems Pupils solve problems Pupils bridge 100 by adding or subtracting a single-digit number Pupils find ten more or ten less than a given number Pupils find ten more or ten less than a given number Pupils bridge the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 100, n 100 x 1 cm) Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils convert between m and cm (include whole cm and mm Pupils convert between cm and mm (include whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of place value to represent a three-digit number		4 Pupils will use known facts to find a two-digit number and a one- or two-digit number that
 Pupils use known facts to find complements to 100 accurately and efficiently Pupils represent a three-digit number which is a multiple of ten using their numerals and names Pupils use place value knowledge to write addition and subtraction equations Pupils bridge 100 by adding or subtracting in multiples of ten bridging the hundreds boundary to solve problems Pupils count across and on from 100 Pupils present a three-digit number up to 199 in different ways Pupils bridge 100 by adding or subtracting a single-digit number Pupils bridge 100 by adding or subtracting a single-digit number Pupils bridge 100 by adding or subtracting a single-digit number Pupils bridge 100 by adding or subtracting and subtracting any two-digit multiple of ten Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils convert between the ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm Pupils measure length from zero using mm / whole cm and mm Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of place value to represent a three-digit number ine for a three-digit number up to 1000 in different ways Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number lines Pupils compare one, two- and th		
 Pupils represent a three-digit number which is a multiple of ten using their numerals and names Pupils use place value knowledge to write addition and subtraction equations Pupils bridge 100 by adding or subtracting in multiples of ten Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems Pupils count across and on from 100 Pupils bridge 100 by adding or subtracting a single-digit number Pupils bridge 100 by adding or subtracting a single-digit number Pupils find ten more or ten less than a given number Pupils bridge 100 by adding or subtracting a single-digit number Pupils bridge 100 by adding or subtracting as ingle-digit number Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 100 x 100 x 10m) Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils neasure length from zero using cm / whole cm and mm and vice versa) Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of place value to rapresent at three-digit number in different ways Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils optimation of three-digit numbers Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number lines Pupils count in hundreds and tens on a number lines Pupils count in hundreds and tens on a number lines Pupils compare two ince-digit numbers Pupils compare two ince-di		
 names Pupils use place value knowledge to write addition and subtraction equations Pupils bridge 100 by adding or subtracting in multiples of ten Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems Pupils count across and on from 100 Pupils represent a three-digit number up to 199 in different ways Pupils bridge 100 by adding or subtracting a single-digit number Pupils count across she hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils convert between cm and mm (include whole cm and mm and vice versa) Pupils represent a three-digit number up to 1000 in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils represent a three-digit number up to 1000 in a number in different ways Pupils represent a three-digit number up to 1000 in a number ine for a three-digit multiple of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit numbers on numarked number is Pupils estimate the position of three-digit numbers Pupils estimate the position of three-digit numbers Pupils compare one, two- and three-digit numbers Pupils corder sets of three-digit numbers Pupils corder sets of three-digit numbers Pupil		
 8 Pupils use place value knowledge to write addition and subtraction equations 9 Pupils bridge 100 by adding or subtracting in multiples of ten bridging the hundreds boundary to solve problems 11 Pupils count across and on from 100 12 Pupils represent a three-digit number up to 199 in different ways 13 Pupils bridge 100 by adding or subtracting a single-digit number 14 Pupils represent a three-digit number up to 199 in different ways 15 Pupils represent a three-digit number up to 199 in different ways 16 Pupils bridge 100 by adding or subtracting a single-digit number 17 Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten 16 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 17 Pupils measure length and height from zero using whole metres and cm 18 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) 20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) 21 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) 23 Pupils seltimate a length/height, measure a length/height and record in a table 24 Pupils use knowledge of place value to represent a three-digit number in different ways 25 Pupils use knowledge of the additive relationship to solve problems 27 Pupils count in hundreds and tens on a number line 28 Pupils use knowledge of the additive relationship to solve problems 27 Pupils position three-digit numbers on numarked number line for a three-digit number in perioditive relationship to solve problems 29 Pupils position three-digit numbers 30 Pupils compare two three-digit numbers 31 Pupils compare two three-digit numbers 32 Pupils compare two three-digit numbers<		
 9 Pupils bridge 100 by adding or subtracting in multiples of ten 10 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems 11 Pupils represent a three-digit number up to 199 in different ways 12 Pupils pridge 100 by adding or subtracting a single-digit number 13 Pupils bridge 100 by adding or subtracting a single-digit number 14 Pupils find ten more or ten less than a given number 15 Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten 16 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 17 Pupils measure length and height from zero using whole metres and cm 19 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) 20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) 21 Pupils measure length from zero using mm / whole cm and mm and vice versa) 23 Pupils estimate a length/height, measure a length/height and record in a table 24 Pupils use knowledge of place value to represent a three-digit number in different ways 25 Pupils use knowledge of place value to represent a three-digit number in different ways 26 Pupils use knowledge of the additive relationship to solve problems 27 Pupils position three-digit numbers on number line 28 Pupils position three-digit numbers on number lines 39 Pupils compare one, two- and three-digit numbers on numarked number lines 30 Pupils compare one, two- and three-digit numbers 31 Pupils compare two three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils compare two three-digit numbers 34 Pupils compare two three-digit numbers 		
 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems Pupils count across and on from 100 Pupils represent a three-digit number up to 199 in different ways Pupils bridge 100 by adding or subtracting a single-digit number Pupils from ten ere or ten less than a given number Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1 cm = 10mm) Pupils convert between cm and cm (include whole cm to mm to whole cm and mm and vice versa) Pupils sestimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of the additive relationship to solve problems Pupils cont in hundreds and tens on a number line Pupils compare two three-digit number undifferent ways Pupils cont in hundreds on a number line Pupils cont in hundreds and tens on a number line Pupils position three-digit numbers on numarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 boundary to solve problems 11 Pupils count across and on from 100 12 Pupils represent a three-digit number up to 199 in different ways 13 Pupils bridge 100 by adding or subtracting a single-digit number 14 Pupils find ten more or ten less than a given number 15 Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten 16 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 100m, 100 x 1cm) 17 Pupils measure length and height from zero using whole metres and cm 18 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) 20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) 21 Pupils measure length from zero using m / whole cm and mm and vice versa) 22 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) 23 Pupils setimate a length/height, measure a length/height and record in a table 24 Pupils use knowledge of place value to represent a three-digit number in different ways 25 Pupils cont in hundreds and tens on a number line 26 Pupils cont in hundreds and tens on a number line 27 Pupils cont in hundreds and tens on a number line 28 Pupils cont in hundreds and tens on a number line 29 Pupils compare one-, two- and three-digit numbers 30 Pupils position three-digit numbers on numarked number lines 31 Pupils compare two three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils order sets of three-digit numbers 34 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils represent a three-digit number up to 199 in different ways Pupils bridge 100 by adding or subtracting a single-digit number Pupils find ten more or ten less than a given number Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of the additive relationship to solve problems Pupils use knowledge of the additive relationship to solve problems Pupils use knowledge of the additive relationship to solve problems Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils compare one-, two- and three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils bridge 100 by adding or subtracting a single-digit number Pupils find ten more or ten less than a given number Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 100m, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils count in hundreds and tens on a number line Pupils compare one-, two- and three-digit numbers on numarked number lines Pupils compare one-, two- and three-digit numbers Pupils estimate the position of three-digit numbers Pupils compare one-, two- and three-digit numbers Pupils use know facts to add or subtract multiples of 100 within 1000 		
 Pupils find ten more or ten less than a given number Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils sestimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of the additive relationship to solve problems Pupils identify the previous, next and nearest multiple of 100 on a number line for a three- digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils use knowledge of three-digit numbers Pupils compare two three-digit numbers Pupils use know facts to add or subtract multiples of 100 within 1000 		
 Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils setimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils compare to three-digit numbers Pupils compare to three-digit numbers Pupils compare two three-digit numbers Pupils use know there-digit numbers Pupils use know to three-digit numbers 		
 ten 16 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 17 Pupils measure length and height from zero using whole metres and cm 18 Pupils measure length and height from zero using cm 19 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) 20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) 21 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) 23 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) 23 Pupils estimate a length/height, measure a length/height and record in a table 24 Pupils use knowledge of place value to represent a three-digit number in different ways 25 Pupils count in hundreds and tens on a number line 28 Pupils count in hundreds and tens on a number line 29 Pupils position three-digit numbers on number lines 30 Pupils compare two three-digit numbers on unmarked number lines 31 Pupils compare two three-digit numbers 32 Pupils use knowledge of the additive relationship to solve problems 33 Pupils position three-digit numbers on number lines 34 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of the additive relationship to solve problems Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils coder sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 10cm, 100 x 1cm) Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils use knowledge of the additive relationship to solve problems Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils measure length and height from zero using whole metres and cm Pupils measure length and height from zero using cm Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 versa) 20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) 21 Pupils measure length from zero using mm / whole cm and mm 22 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) 23 Pupils estimate a length/height, measure a length/height and record in a table 24 Pupils use knowledge of place value to represent a three-digit number in different ways 25 Pupils represent a three-digit number up to 1000 in different ways 26 Pupils use knowledge of the additive relationship to solve problems 27 Pupils count in hundreds and tens on a number line 28 Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten 29 Pupils position three-digit numbers on number lines 30 Pupils compare one-, two- and three-digit numbers 31 Pupils compare two three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils control in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils compare two three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 intervals, knowing 1cm = 10mm) Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		,
 Pupils measure length from zero using mm / whole cm and mm Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 and vice versa) Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils estimate the position of three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils estimate a length/height, measure a length/height and record in a table Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils estimate the position of three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils use knowledge of place value to represent a three-digit number in different ways Pupils represent a three-digit number up to 1000 in different ways Pupils use knowledge of the additive relationship to solve problems Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three- digit multiples of ten Pupils position three-digit numbers on number lines Pupils estimate the position of three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		,
 25 Pupils represent a three-digit number up to 1000 in different ways 26 Pupils use knowledge of the additive relationship to solve problems 27 Pupils count in hundreds and tens on a number line 28 Pupils identify the previous, next and nearest multiple of 100 on a number line for a three- digit multiples of ten 29 Pupils position three-digit numbers on number lines 30 Pupils estimate the position of three-digit numbers on unmarked number lines 31 Pupils compare one-, two- and three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils order sets of three-digit numbers 34 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three- digit multiples of ten Pupils position three-digit numbers on number lines Pupils estimate the position of three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		25 Pupils represent a three-digit number up to 1000 in different ways
 Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten Pupils position three-digit numbers on number lines Pupils estimate the position of three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 digit multiples of ten Pupils position three-digit numbers on number lines Pupils estimate the position of three-digit numbers on unmarked number lines Pupils compare one-, two- and three-digit numbers Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 29 Pupils position three-digit numbers on number lines 30 Pupils estimate the position of three-digit numbers on unmarked number lines 31 Pupils compare one-, two- and three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils order sets of three-digit numbers 34 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 30 Pupils estimate the position of three-digit numbers on unmarked number lines 31 Pupils compare one-, two- and three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils order sets of three-digit numbers 34 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 31 Pupils compare one-, two- and three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils order sets of three-digit numbers 34 Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils compare two three-digit numbers Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
 Pupils order sets of three-digit numbers Pupils use known facts to add or subtract multiples of 100 within 1000 		
34 Pupils use known facts to add or subtract multiples of 100 within 1000		
25 Dupile write a threa digit multiple of 10 as a multiplication aquation		34 Pupils use known facts to add or subtract multiples of 100 within 1000
job Fupils while a three-digit multiple of TO as a multiplication equation		35 Pupils write a three-digit multiple of 10 as a multiplication equation

	36 Pupils partition three-digit numbers in different ways
	37 Pupils use known facts to solve problems involving partitioning numbers
	38 Pupils use known facts to add or subtract to/from multiples of 100 in tens
	39 Pupils use known facts to add or subtract to/from multiples of 100 in ones
	40 Pupils add/subtract multiples of ten bridging 100
	41 Pupils add/subtract to/from a three-digit number in ones bridging 100
	42 Pupils find 10 more or less across any hundreds boundary
	43 Pupils use knowledge of adding or subtracting to/from three-digit numbers to solve problems
	44 Pupils count forwards and backwards in multiples of 2, 20, 5, 50 and 25
	45 Pupils use knowledge of counting in multiples of 2, 20, 5, 50 and 25 to solve problems
	46 Pupils become familiar with different weighing scales up to 1kg (intervals of 100g, 200g, 250g and 500g)
	47 Pupils become familiar with the tools to measure volume and capacity up to 1 litre (intervals of 100ml, 200ml, 250ml and 500ml)
	48 Pupils measure mass from zero up to 1kg using grams
	49 Pupils measure mass from zero above 1kg using whole kg and grams
	50 Pupils measure volume from zero up to 1 litre using ml
	51 Pupils measure volume from zero above 1 litre using whole litres and ml
	52 Pupils estimate mass in grams and volume in ml
	53 Pupils estimate a mass/volume, measure a mass/volume and record in a table
Download	Classroom Slides
Links	https://www.ncetm.org.uk/media/vcbdy14x/cp-year-3-unit-2-numbers-to-1000.pptx
	Specific RtP Link
	3NPV-1 Page 86
	3NPV-2 Page 88
	3NPV-3 Page 91
	3NPV-4 Page 95
	3NF-3 Page 103
	3AS-1 Page 106
	Spine Materials Teacher Guidance
	https://www.ncetm.org.uk/media/swrp35kl/ncetm_mm_sp1_y3_se17_teach.pdf#page=5
	https://www.ncetm.org.uk/media/ijogstuu/ncetm_mm_sp1_y3_se18_teach.pdf#page=4

Unit 3	Right angles (2 weeks)
RtPs	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.
NCETM spine ref.	No spine
Small step learning outcomes	 Pupils rotate two lines around a fixed point to make different sized angles Pupils draw triangles and quadrilaterals and identify vertices Pupils learn that a right angle is a 'square corner' and identify them in the environment Pupils learn that a rectangle is a 4-sided polygon with four right angles Pupils learn that a square is a rectangle in which the four sides are equal length Pupils cut rectangles and squares on the diagonal and investigate the shapes they make Pupils join four right angles at a point using different right-angled polygons Pupils investigate and draw other polygons with right angles
Download Links	Classroom Slides https://www.ncetm.org.uk/media/0dhjw5cg/cp-year-3-unit-3-right-angles.pptx Specific RtP Link 3G-1 Page 134 Spine Materials Teacher Guidance No spine for geometry

Unit 4	Manipulating the additive relationship and securing mental calculation (4 weeks)
RtPs	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.
NCETM spine ref.	1.19 Securing mental strategies: calculation up to 999
Small step learning outcomes	 Pupils add 3 addends Pupils add two 3-digit numbers using adjusting Pupils add a pair of 2- or 3-digit numbers using redistribution Pupils subtract a pair of 2- or 3-digit numbers, bridging a multiple of 10, using partitioning Pupils subtract a pair of 2-digit numbers, crossing a ten or hundreds boundary, by finding the difference between them Pupils subtract a pair of three-digit multiples of 10 within 1000 by finding the difference between them Pupils evaluate the efficiency of strategies for subtracting from a 3-digit number Pupils explain why the order of addition and subtraction steps in a multi-step problem can be chosen Pupils understand and can explain that both addition and subtraction equations can be used to describe the same additive relationship (2-digit numbers) Pupils understand and can explain that both addition and subtraction equations can be used to describe the same additive relationship to rearrange equations Pupils use knowledge of the additive relationship to identify what is known and what is unknown in an equation Pupils use knowledge of the additive relationship to rearrange equations before solving
Download Links	to solve the problem Classroom Slides https://www.ncetm.org.uk/media/4orbf0xp/cp-year-3-unit-4-manipulating-the-additive-relationship- and-securing-mental-calculation.pptx Specific RtP Link 3AS-3 Page 103 Spine Materials Teacher Guidance https://www.ncetm.org.uk/media/wnzdz2hd/ncetm_mm_sp1_y3_se19_teach.pdf#page=5

Unit 5 RtPs	Column addition (2 weeks) 3AS–2 Add and subtract up to three-digit numbers using columnar methods.
NCETM spine ref.	1.20 Algorithms: column addition
Small step learning outcomes	 Pupils identify the addends and the sum in column addition Pupils use their knowledge of place value to correctly lay out column addition Pupils add a pair of 2-digit numbers using column addition Pupils add using column addition Pupils use their knowledge of column addition to solve problems Pupils add a pair of 2-digit numbers using column addition with regrouping in the ones column Pupils add a pair of 2-digit numbers using column addition with regrouping in the ones column Pupils add a pair of 2-digit numbers using column addition with regrouping in the tens column Pupils add a pair of 2-digit numbers using column addition with regrouping in the tens column Pupils add using column addition with regrouping Pupils use known facts and strategies to accurately and efficiently calculate and check column addition Pupils use their knowledge of column addition to solve problems
Download Links	Classroom Slides https://www.ncetm.org.uk/media/rjbjjo5b/cp-year-3-unit-5-column-addition.pptx Specific RtP Link 3AS-2 page 109 Spine Materials Teacher Guidance https://www.ncetm.org.uk/media/a0ohgpky/ncetm_mm_sp1_y3_se20_teach.pdf#page=4

Unit 6 RtPs	2, 4, 8 times tables (3 weeks) 3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	
	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. 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).	
NCETM spine ref.	2.6 Structures: quotitive and partitive division	
Small step learning outcomes	 Pupils represent counting in fours as the 4 times table Pupils use knowledge of the 4 times table to solve problems Pupils explain the relationship between adjacent multiples of four Pupils explain the relationship between multiples of 2 and multiples of 4 Pupils use knowledge of the relationships between the 2 and 4 times tables to solve problems Pupils represent counting in eights as the 8 times table Pupils explain the relationship between adjacent multiples of eight Pupils explain the relationship between adjacent multiples of eight Pupils explain the relationship between multiples of 4 and multiples of 8 Pupils use knowledge of the relationships between the 4 and 8 times tables to solve problems Pupils use knowledge of the relationships between the 2, 4 and multiples of 8 Pupils use knowledge of the relationships between the 2, 4 and 8 times tables to solve problems Pupils use knowledge of the divisibility rules for divisors of 2 and 4 to solve problems Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems Pupils scale known multiplication facts by 10 	
Download Links	Classroom Slides https://www.ncetm.org.uk/media/j2rpznw0/cp-year-3-unit-6-2-4-8-times-tables.pptx Specific RtP Link 3NF-2 Page 100 3MD-1 Page 117 3NF-3 Page 103 Spine Materials Teacher Guidance https://www.ncetm.org.uk/media/ciykxwgy/ncetm_spine2_segment07_y3.pdf#page=4	

Unit 7	Column subtraction (1 week)
RtPs	3AS-2 Add and subtract up to three-digit numbers using columnar methods.
NCETM spine ref.	1.21 Algorithms: column subtraction
Small step	1 Pupils identify the minuend and the subtrahend in column subtraction
learning	2 Pupils explain the column subtraction algorithm
outcomes	3 Pupils subtract from a 2-digit number using column subtraction with exchanging from tens to ones
	4 Pupils subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens (1)
	5 Pupils subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens (2)
	6 Pupils evaluate the efficiency of strategies for subtraction
Download	Classroom Slides
Links	https://www.ncetm.org.uk/media/jcbfoavd/cp-year-3-unit-7-column-subtraction.pptx
	Specific RtP Link
	<u>3AS-2 Page 109</u>
	Spine Materials Teacher Guidance https://www.ncetm.org.uk/media/vgkk1b4w/ncetm_mm_sp1_v3_se21_teach.pdf#page=4

Unit 8	Unit fractions (5 weeks)
RtPs	3F–1 Interpret and write proper fractions to represent 1 or several parts of a
	whole that is divided into equal parts.
	3F–2 Find unit fractions of quantities using known division facts
	(multiplication tables fluency).
NCETM	3.1 Preparing for fractions: the part–whole relationship
spine ref.	3.2 Unit fractions: identifying, representing and comparing
Small step	1 Pupils identify a whole and the parts that make it up
learning	2 Pupils explain why a part can only be defined when in relation to a whole
outcomes	3 Pupils identify the number of equal or unequal parts in a whole
	 Pupils identify equal parts when they do not look the same (i) Pupils explain the size of the part in relation to the whole
	6 Pupils construct a whole when given a part and the number of parts
	7 Pupils identify how many equal parts a whole has been divided into
	8 Pupils use fraction notation to describe an equal part of the whole
	9 Pupils represent a unit fractions in different ways
	10 Pupils identify parts and wholes in different contexts (i)
	11 Pupils identify parts and wholes in different contexts (ii)
	12 Pupils identify equal parts when they do not look the same (ii)
	 Pupils compare and order unit fractions by looking at the denominator Pupils identify when unit fractions cannot be compared
	15 Pupils construct a whole when given one part and the fraction that it represents
	16 Pupils use knowledge of the relationship between parts and wholes in unit fractions to solve problems
	17 Pupils identify the whole, the number of equal parts and the size of each part as a unit fraction
	18 Pupils quantify the number of items in each part and connect to the unit fraction operator
	19 Pupils calculate the value of a part by using knowledge of division and division facts
	20 Pupils calculate the value of a part by connecting knowledge of division and division facts
	 with finding a fraction of a quantity Pupils find fractions of quantities using knowledge of division facts with increasing fluency
Download	Classroom Slides
Links	https://www.ncetm.org.uk/media/hgpnbdp4/cp-year-3-unit-8-unit-fractions.pptx
	Specific RtP Link
	3F-1 Page 120
	<u>3F-2 Page 124</u>
	Spine Materials Teacher Guidance https://www.ncetm.org.uk/media/1qyn40y1/ncetm_spine3_segment01_y3.pdf#page=4
	https://www.ncetm.org.uk/media/3fbfwvyc/ncetm_spine3_segment02_y3.pdf#page=4

Unit 9	Non-unit fractions (4 weeks)
RtPs	3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. 3F–3 Reason about the location of any fraction within 1 in the linear number system.
	3F–4 Add and subtract fractions with the same denominator, within 1.
NCETM spine ref.	3.3 Non-unit fractions: identifying, representing and comparing 3.4 Adding and subtracting within one whole
Small step learning outcomes	 Pupils explain that non-unit fractions are composed of more than one unit fraction Pupils identify non-unit fractions Pupils identify the number of equal or unequal parts in a whole Pupils use knowledge of non-unit fractions to solve problems Pupils use knowledge of unit fractions to find one whole Pupils use knowledge of a unit fraction to form a numberline Pupils use repeated addition of a unit fraction to form a non-unit fraction Pupils compare using knowledge of non-unit fractions equivalent to one Pupils compare non-unit fractions with the same denominator Pupils compare fractions with the same denominator Pupils add up fractions with the same denominator Pupils add fractions with the same denominator Pupils add fractions with the same denominator Pupils add fractions with the same denominator Pupils explain that addition and subtraction of fractions are inverse operations Pupils explain that addition and subtraction of fractions are inverse operations Pupils subtract fractions from a whole by converting the whole to a fraction Pupils represent a whole as a fraction in different ways and use this to solve problems involving subtraction
Download Links	Classroom Slides https://www.ncetm.org.uk/media/5oqbpss2/cp-year-3-unit-9-non-unit-fractions.pptx Specific RtP Link 3F-1 Page 120 3F-3 Page 127 3F-4 Page 131 Spine Materials Teacher Guidance https://www.ncetm.org.uk/media/2ifhbt14/ncetm_spine3_segment03_y3.pdf#page=4 https://www.ncetm.org.uk/media/42uhwcpy/ncetm_spine3_segment04_y3.pdf#page=4

Unit 10	Parallel and perpendicular sides in polygons (2 weeks)
RtPs	3G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.
NCETM spine ref.	No spine for geometry
Small step learning outcomes	 Pupils make compound shapes by joining two polygons in different ways (same parts, different whole) Pupils investigate different ways of composing and decomposing a polygon (same whole, different parts) Pupils draw polygons on isometric paper Pupils use geostrips to investigate quadrilaterals with and without parallel and perpendicular sides Pupils make and draw compound shapes with and without parallel and perpendicular sides Pupils learn to extend lines and sides to identify parallel and perpendicular lines Pupils make and draw triangles on circular geoboards Pupils make and draw quadrilaterals on circular geoboards
	9 Pupils draw shapes with given properties on a range of geometric grids
Download Links	Classroom Slides https://www.ncetm.org.uk/media/qpncqvat/cp-year-3-unit-10-parallel-and-perpendicular-sides-in-polygons.pptx Specific RtP Link 3G-2 Page 137 Spine Materials Teacher Guidance No spine for geometry

Unit 11	Time (1 week)
RtPs	This topic is part of the National Curriculum but is not included in the DfE
	2020 guidance or the NCETM Mastery PD Materials.
NCETM spine ref.	NA
Small step learning	There are no NCETM small step learning outcomes for this unit.
outcomes	 National curriculum statutory requirements (p21) Pupils should be taught to: tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events [for example to calculate the time taken by particular events or tasks]. Notes and guidance (non-statutory) Pupils use both analogue and digital 12-hour clocks and record their times. In this way they become fluent in and prepared for using digital 24-hour clocks in Year 4
Download Links	Classroom Slides No slides available but see NCETM's website for further ideas https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-11-time/ Specific RtP Link This topic is part of the National Curriculum but is not included in the DfE 2020 guidance or the NCETM Mastery PD Materials. Spine Materials Teacher Guidance No spine guidance