## Autumn 1 Autumn 2

Spring 1 Spring 2 Summer 1 Summer 2

|  | Unit 1 |
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|  | Fractions |
|  | Geomety |
|  | Other |

## Assessment Questions for Y 5 from the DFE Guidance <br> https://www.ncetm.org.uk/media/uyomny2v/cp-rtp-assessment-year-5.zip

| Unit 1 | Decimal Fractions (5 weeks) |
| :---: | :---: |
| RtPs | 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 . <br> 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. <br> 5NPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. <br> 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. |
|  | 5NF-2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth). |
| NCETM spine ref. | 1.23 Composition and calculation: tenths <br> 1.24 Composition and calculation: hundredths and thousandths |
| Small step learning outcomes |  |


|  | 24 Pupils read and write numbers with up to 3 decimal places <br> 25 Pupils compare and order numbers with up to 3 decimal places |
| :---: | :---: |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/vvOfdypj/cp-year-5-unit-1-decimal-fractions.pptx <br> Specific RtP Link <br> 5NPV-1 Page 212 <br> 5NPV-2 Page 216 <br> 5NPV-3 Page 219 <br> 5NPV-4 Page 225 <br> 5NF-2 Page 236 <br> Spine Materials Teacher Guidance <br> 1.23 https://www.ncetm.org.uk/media/fhcpc0am/ncetm mm sp1 y4 se23 teach.pdf\#page=4 <br> $1.24 \mathrm{https}: / / \mathrm{www} . n c e t m . o r g . u k / m e d i a / 4 c a f h h x / / n c e t m \mathrm{~mm}$ sp1 y4 se24 teach.pdf\#page=4 |


| Unit 2 | Money (2 weeks) |
| :---: | :---: |
| RtPs | No RtP |
| NCETM spine ref. | 1.25 Addition and subtraction: money |
| Small step learning outcomes | 1 Pupils explain and represent whole pounds as a quantity of money <br> 2 Pupils explain and represent whole pounds and pence as a quantity of money <br> 3 Pupils explain how to compare amounts of money <br> 4 Pupils convert quantities of money between pounds and pence <br> 5 Pupils use their knowledge of addition to efficiently add commonly used prices <br> 6 <br> Pupils use their knowledge of subtraction to calculate the change due when paying whole <br> 7 pounds or notes <br> 8 Pupils use and explain the most efficient strategies when adding quantities of money <br> 9 Pupils find the change when purchasing several items <br> 10 Pupils use the most efficient and reliable strategy to find the change when purchasing <br> several items |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/px4pkjbr/cp-year-5-unit-2-money.pptx <br> Specific RtP Link <br> No RtP <br> Spine Materials Teacher Guidance <br> https://www.ncetm.org.uk/media/2vflmixq/ncetm mm sp1 y4 se25 teach.pdf\#page=5 |


| Unit 3 | Negative numbers (2 weeks) |
| :---: | :---: |
| RtPs | No RitP |
| NCETM spine ref. | 1.27 Negative numbers: counting, comparing and calculating |
| Small step learning outcomes | 1 Pupils represent a change story using addition and subtraction symbols <br> 2 Pupils interpret numbers greater than and less than zero in different contexts <br> 3 Pupils read and write negative numbers <br> 4 Pupils explain how the value of a number relates to its position from zero <br> 5 Pupils identify and place negative numbers on a number line <br> 6 Pupils interpret sets of negative and positive numbers in a range of contexts <br> 7 Pupils use their knowledge of positive and negative numbers to calculate intervals <br> 8 Pupils explain how negative numbers are used on a coordinate grid <br> 9 Pupils use their knowledge of positive and negative numbers to interpret graphs |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/v0bp4ret/cp-year-5-unit-3-negative-numbers.pptx <br> Specific RtP Link <br> No RtP <br> Spine Materials Teacher Guidance <br> https://www.ncetm.org.uk/media/q1cf4wi0/ncetm mm sp1 y5 se27 teach.pdf\#page=4 |


| Unit 4 | Short multiplication and short division (6 weeks) |
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| RtPs | 5MD-3 Multiply any whole number with up to 4 digits by any one-digit <br> number using a formal written method. <br> $5 M D-4 ~ D i v i d e ~ a ~ n u m b e r ~ w i t h ~ u p ~ t o ~ 4 ~ d i g i t s ~ b y ~ a ~ o n e-d i g i t ~ n u m b e r ~ u s i n g ~ a ~$ |
| formal written method, and interpret remainders appropriately for the |  |
| context. |  |

Spine Materials Teacher Guidance
$2.14 \mathrm{https}: / / w w w . n c e t m . o r g . u k / m e d i a / 0 j w n h 1 y k / n c e t m$ spine2 segment14 y4.pdf\#page=4 $2.15 \mathrm{https}: / / w w w . n c e t m . o r g . u k / m e d i a / c u 1 a n 3 e 2 / n c e t m ~ s p i n e 2 ~ s e g m e n t 15 ~ y 4 . p d f \# p a g e=4 ~$

| Unit 5 | Area and scaling (5 weeks) |
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| RtPs | 5G-2 Compare areas and calculate the area of rectangles (including squares) using standard units. |
| NCETM spine ref. | 2.16 Multiplicative contexts: area and perimeter 1 <br> 2.17 Structures: using measures and comparison to understand scaling |
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| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/ttbdv1oc/cp-year-5-unit-5-area-and-scaling.pptx <br> Specific RtP Link <br> 5G-2 Page 269 <br> Spine Materials Teacher Guidance <br> $2.16 \mathrm{https}: / / \mathrm{www} . \mathrm{ncetm} .0 \mathrm{org} . \mathrm{uk} / \mathrm{media} / \mathrm{dbwkd5mv} / \mathrm{ncetm}$ spine2 segment16 $\mathrm{y} 4 . \mathrm{pdf} \mathrm{\# page}=22$ <br> 2.17 https://www.ncetm.org.uk/media/xega5ms1/ncetm spine2 segment17 y4.pdf\#page=3 |


| Unit 6 | Calculating with decimal fractions (3 weeks) |
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| RtPs | 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. |
| NCETM <br> spine ref. | 2.19 Calculation: $\times \mid \div$ decimal fractions by whole numbers <br> 2.29 Decimal place-value knowledge, multiplication and division |
| Small step learning outcomes | Pupils explain the effect of multiplying and dividing a number by 10, 100 and 1,000 (1) Pupils explain the effect of multiplying and dividing a number by 10, 100 and 1,000 (2) Pupils explain how to multiply and divide a number by 10, 100 and 1,000 (first 'number' two or more non-zero digits) <br> 4 Pupils use their knowledge of multiplication and division by 10/100/1,000 to convert between units of measure (length) <br> $5 \quad$ Pupils use their knowledge of multiplication and division by 10/100/1,000 to convert between units of measure (mass and capacity) <br> $6 \quad$ Pupils explain how to use known multiplication facts and unitising to multiply decimal fractions by whole numbers (tenths) |



| Unit 7 | Factors, multiples and primes (4 weeks) |
| :---: | :---: |
| RtPs | 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. |
| NCETM spine ref | 2.20 Multiplication with three factors and volume <br> 2.21 Factors, multiples, prime numbers and composite numbers |
| Small step learning outcomes | 1 Pupils explain what 'volume' is using a range of contexts <br> 2 Pupils describe the units used to measure volume <br> 3 Pupils explain how to calculate the volume of a cuboid <br> 4 Pupils explain what a cube number is <br> 5 Pupis use their knowledge of calculating volume to solve problems in a range of contexts <br> 6 Pupils explain how to calculate the volume of compound shapes <br> 7 Pupils explain the use of the commutative and distributive laws when multiplying three or <br> 8 <br> more numbers  <br>  Pupils explain the reasons for changing two-factor multiplication calculations to three-factor <br> multiplications $\quad$Pupils explain what a factor is and how to use arrays and multiplication/division facts to find <br> them |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/qm0d04is/cp-year-5-unit-7-factors-multiples-and-primes.pptx <br> Specific RtP Link <br> 5MD-2 Page 245 <br> Spine Materials Teacher Guidance <br> $2.20 \mathrm{https}: / / \mathrm{www} . \mathrm{ncetm} .0 \mathrm{org} . \mathrm{uk} / \mathrm{media} / z 04 i 4 \mathrm{~d} 5 q / \mathrm{ncetm}$ spine2 segment20 y5.pdf\#page=4 <br> $2.21 \mathrm{https}: / / \mathrm{www} . n c e t m .0 r g . u k / m e d i a / v f e e u u i e / n c e t m ~ s p i n e 2 ~ s e g m e n t 21 ~ y 5 . p d f \# p a g e=4 ~$ |


| Unit 8 | Fractions (7 weeks) |
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| RtPs | 5NPV-5 Convert between units of measure, including using common decimals and fractions. |
|  | 5F-1 Find non-unit fractions of quantities. <br> 5F-2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system. <br> $5 F-3$ Recall decimal fraction equivalents for $1 / 2,1 / 4,1 / 5$ and $1 / 10$, and for multiples of these proper fractions. |
| NCETM spine ref. | 3.6 Multiplying whole numbers and fractions <br> 3.7 Finding equivalent fractions and simplifying fractions <br> 3.10 Linking fractions, decimals and percentages |
| Small step learning outcomes |  |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/5rgnojoj/cp-year-5-unit-8-fractions.pptx <br> Specific RtP Link <br> 5NPV-5 Page 229 <br> 5F-1 Page 255 <br> 5F-2 Page 258 <br> 5F-3 Page 262 <br> Spine Materials Teacher Guidance <br> $3.6 \mathrm{https}: / / \mathrm{www} . \mathrm{ncetm} .0 r$. $\mathrm{uk} /$ /media/cupi1pd1/ncetm spine3 segment06 y4.pdf\#page=5 <br> 3.7 https://www.ncetm.org.uk/media/d45iqisc/ncetm spine3 segment07 y5.pdf\#page=6 <br>  |


| Unit 9 | Converting units (2 weeks) |
| :---: | :---: |
| RtPs | 5NPV-5 Convert between units of measure, including using common decimals and fractions. |
| NCETM spine ref. | No spine |
| Small step learning outcomes | 1 Pupils apply memorised unit conversions to convert between units of measure (larger to <br> smaller units - whole number conversions) <br> 2 Pupils apply memorised unit conversions to convert between units of measure (smaller to <br> larger units - whole number conversions) <br> 3 Pupils convert from and to fraction and decimal fraction quantities of larger units <br> Pupils derive common conversions over 1 <br> 5 Pupils carry out conversions that correspond to 100 parts <br> 6 <br> 7 Pupils solve measures problems involving different units <br> imperial units such as inches, pounds and pints <br> 8 Pupils convert between miles and kilometres <br> 9 Pupils solve problems involving converting between units of time |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/5yxd5m1h/cp-year-5-unit-9-converting-units.pptx <br> Specific RtP Link <br> 5NPV-5 Page 229 <br> Spine Materials Teacher Guidance <br> No Spine |


| Unit 10 | Angles (3 weeks) |
| :---: | :---: |
| RtPs | 5G-1 Compare angles, estimate and measure angles in degrees ( ${ }^{\circ}$ ) and draw angles of a given size. |
| NCETM spine ref. | No spine |
| Small step learning outcomes | 1 Pupils compare the size of angles where there is a clear visual difference <br> 2 Pupils use the terms acute, obtuse and reflex when describing the size of angles or amount <br> of rotation with relation to right angles <br> 3 Pupils use a unit called degrees $\left(^{\circ}\right.$ ) as a standard unit to measure angles <br> 4 <br> 5 Pupils estimate the size of angles in degrees using angle sets <br> 5 Pupils measure the size of angles accurately using a protractor |
| Download Links | Classroom Slides <br> https://www.ncetm.org.uk/media/jcalyt34/cp-year-5-unit-10-angles.pptx <br> Specific RtP Link <br> 5G-1 Page 265 <br> Spine Materials Teacher Guidance <br> No spine for geometry |

