## Autumn Term- Year 5



| Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
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## Unit 3 - Negative Numbers (2wks)

Pupils represent a change story using addition and subtraction symbols
Interpret numbers greater than and less than zero in different contexts
Read and write negative numbers
Explain how the value of a number relates to its position from zero
Identify and place neg. numbers on a number line Interpret sets of negative and positive numbers in a range of contexts
Use their knowledge of positive and negative numbers to calculate intervals
Explain how negative numbers are used on a coordinate grid
Use their knowledge of positive and negative numbers to interpret graphs

## Unit 4 - Short multiplication and division (5wks)

Pupils multiply a two-digit number by a single-digit number using partitioning and representations (no regroups)
Multiply a 2-digit number by a single-digit number using partitioning and representations (one regroup)
Multiply a two-digit number by a single-digit number using partitioning and representations (two regroups)
Multiply a two-digit number by a single-digit number using partitioning
Multiply a two-digit number by a single-digit number using expanded multiplication (no regroups) Multiply a two-digit number by a single-digit number using short multiplication (no regroups) Multiply a two-digit number by a single-digit number using expanded multiplication (regrouping ones to tens)
Multiply a two-digit number by a single-digit number using short multiplication (regrouping ones to tens)
Multiply a two-digit number by a single-digit number using expanded multiplication (regrouping tens to hundreds)

Week 14

Week 15 Unit 4-Short multiplication and division (ctd)
Divide a three-digit number by a single-digit number using partitioning and representations (no exchanging, no remainders)
Divide a three-digit number by a single-digit number using partitioning and representations (one exchange, no remainders)
Divide a three-digit number by a single-digit number using partitioning and representations (with exchanging and remainders)
Divide a three-digit number by a single-digit number using short division
Divide a three-digit number by a single-digit number using short division (with exchanging and remainders) Solve short division problems accurately when the hundreds digit is smaller than the divisor Use efficient strategies of division to solve problems

|  | Multiply a two-digit number by a single-digit number using short multiplication (regrouping tens to hundreds) <br> Multiply a two-digit number by a single-digit number using both expanded and short multiplication (two regroups) <br> Use estimation to support accurate calculation <br> Multiply a three-digit number by a single-digit number using partitioning and representations <br> Multiply a three-digit number by a single-digit number using partitioning <br> Multiply a three-digit number by a single-digit number using expanded and short multiplication (no regroups) <br> Multiply a three-digit number by a single-digit number using expanded and short multiplication (one regroup) <br> Multiply a 3-digit number by a single-digit number using expanded and short multiplication (multiple regroups) <br> Use estimation to support accurate calculation <br> Divide a two-digit number by a single-digit number using partitioning and representations (no remainders, no exchanging) <br> Divide a two-digit number by a single-digit number using partitioning and representations (with exchanging) <br> Divide a two-digit number by a single-digit number using partitioning and representations (with exchanging and remainders) <br> Divide a two-digit number by a single-digit number using short division (no exchanging, no remainders) <br> Divide a two-digit number by a single-digit number using short division (with exchanging) Divide a two-digit number by a single-digit number using short division (with exchanging and remainders) |  |  |
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## Spring Term- Year 5

| Week 1 | Week 2 | Week 3 |  | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 |
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| Unit 5-A <br> Explain wha <br> Explain what <br> Explain how <br> Explain how <br> Measure the <br> Measure the <br> Calculate the <br> Use their kn <br> Compare an <br> Use their kn <br> Compare an <br> Use their know <br> Compare and <br> Describe the <br> Use their kn | (5wks) <br> ure using co <br> ure using co es with the different s <br> using squ <br> a using squa ing multipli pes e problems sing their kn on to solve sing their k solve comp nts by using nts by using ents using t on and divis | tegy (1) <br> tegy (2) <br> ultiplication d change pr ision ge problem ge of multip ge of multip of multipli mparison a | ems <br> ation and division ation and divis ion and divisio change proble | ion (mass/ca ion (mass/ca n ms | /time) (1) <br> y/time) (2) | Unit 6 - Cal <br> Pupils explain Explain the effe Explain how to more non-zero Use their know units of measur Use their know units of measur Explain how to whole numbers Explain how to whole numbers Use their know problems Explain the rela Explain the rela Explain how to Explain how to the multiplican Explain how to | with deci <br> multiplying and ying and divid divide a num <br> tiplication an <br> tiplication an capacity) multiplication <br> multiplication <br> tiplying decim <br> ween multipl <br> ween multipl <br> ing by 10 or 1 <br> of the multip <br> ing by 10 or 1 | wks) <br> by 10,100 and 1,000 (1) <br> 100 and 1,000 (2) <br> 000 (first 'number' two or <br> 1,000 to convert between <br> 1,000 to convert between <br> multiply decimal fractions by <br> multiply decimal fractions by <br> numbers to solve measures <br> 10 <br> y 100 <br> numbers by decimal fractions of the product compared to <br> ractions by one-digit numbers |
| Week 9 | Week |  | Week 11 |  | Week 12 | Week 13 |  |  |
| Unit 7 <br> Explain wh <br> Describe <br> Explain how <br> Explain wh <br> Use their <br> Explain how <br> Explain th <br> Explain th <br> Explain wh <br> Explain how <br> them all <br> Use a com <br> Explain how <br> Explain how <br> Explain how <br> Use know <br> Explain how | es and $P$ <br> range of con me of a cub <br> g volume to <br> me of comp <br> ve and distri <br> two-factor <br> to use array <br> all factors <br> xplain when umber or a factor or a or common rs of ' 100 ' <br> rs of ' 100 ' to | s) <br> s in a range <br> multiply alculations tion/divisio d how they <br> square num ber <br> f a number number a range of ons efficien | contexts <br> three or more three-factor mult facts to find them ow when they <br> r <br> ntexts | e numbers ultiplications em have found |  | Revisit short multiplication and division |  |  |

## Summer Term- Year 5

| Week 1 | Week 2 | Week 3 | Week 4 |
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| Unit 8 - Fractions <br> Explain the relationship between repeated addition of a proper fraction and multiplication of fractions (unit fractions) |  |  |  |

Explain the relationship between repeated addition of a proper fraction and multiplication of fractions (unit fractions)
Explain the relationship between repeated addition of a proper fraction and multiplication of fractions (non-unit fractions)
Multiply a proper fraction by a whole number (within a whole)
Multiply a proper fraction by a whole number (greater than a whole)
Multiply an improper fraction by a whole number
Multiply a mixed number by a whole number (product is within a whole)
Multiply a mixed number by a whole number (product is greater than a whole)
Find a unit fraction of a quantity
Explain the relationship between finding a fraction of a quantity and multiplying a whole number by a unit fraction
Explain the relationship between dividing by a whole number and multiplying a whole number by a unit fraction
Use their knowledge of multiplying a whole number by a unit fraction to solve problems
Find a non-unit fraction of a quantity (mental calculation)
Find a non-unit fraction of a quantity (written calculation)
Multiply a whole number by a proper fraction
Explain when a calculation represents scaling down and when it represents repeated addition
Find the whole when the size of a unit fraction is known
Find a unit fraction when the size of a non-unit fraction is known
Find the whole when the size of a non-unit fraction is known
Find the unit fraction when the size of a non-unit fraction is known
Use representations to describe and compare two fractions (1/4 and 3/12)
Use representations to describe and compare two fractions ( $1 / 5$ and $5 / 10$ )
Use representations to describe and compare two fractions (pouring context)
Correctly use the language of equivalent fractions
Explain the vertical relationship between numerators and denominators within equivalent fractions ( $1 / 5,1 / 3$ and equivalent) Use their knowledge of the vertical relationship to solve equivalent fractions problems
Explain the horizontal relationship between numerators and denominators across equivalent fractions ( $1 / 5,1 / 3$ and equivalent) Explain the relationship within families of equivalent fractions
Use their knowledge of equivalent fractions to solve problems
Explain and represent how to divide 1 into different amounts of equal parts
Identify and describe patterns within the number system
Use their knowledge of common equivalents to compare fractions with decimals
Practise recalling common fraction-decimal equivalents

| Week 8 Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |  |
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| Unit 9 -Converting units (2wks) <br> Memorised unit conversions to convert between units of measure Apply memorised unit conversions to convert between units of measure <br> Convert from and to fraction and decimal fraction quantities of larger units <br> Derive common conversions over 1 <br> Carry out conversions that correspond to 100 parts <br> Solve measures problems involving different units <br> Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints Convert between miles and kilometres <br> Solve problems involving converting between units of time | Unit 10-Angles (3wks) <br> Compare the size of angles where there is a clear visual difference Use the terms acute, obtuse and reflex when describing the size of angles or amount of rotation with relation to right angles <br> Use a unit called degrees ( ${ }^{\circ}$ ) as a standard unit to measure angles <br> Estimate the size of angles in degrees using angle sets <br> Measure the size of angles accurately using a protractor |  |  | $$ |  |

Year 5 Yearly Overview (Linked to NCETM Curriculum Prioritisation Materials)


