



# Tudhoe Colliery Primary School

## Autumn Term Maths in Year 1



Place Value/Number	Addition/Subtraction	Multiplication/Division	Fractions
<ul style="list-style-type: none"> <li>To read and write numbers from 1-20 in figures and words.</li> <li>To form and recognise numbers up to 20 accurately.</li> <li>To count forwards from any start number up to 100.</li> <li>Identify and represent numbers pictorially and using objects.</li> </ul>	<p><b>TAUGHT SEPARATELY THEN LINKED</b></p> <ul style="list-style-type: none"> <li>To use objects to add on or take from an existing number (1+1 or 1-1)</li> <li>To use objects to add and subtract two existing numbers (1+1 or 1-1)</li> <li>Read, write and interpret mathematical statements involving +, - and =</li> <li>Solve one-step problems involving addition and subtraction</li> </ul>	<p><b>NOT TAUGHT DUE TO FOCUS ON SECURING BASIC NUMBER FACTS</b></p>	<ul style="list-style-type: none"> <li>To recognise half in shapes.</li> <li>To recognise half of an amount of objects.</li> <li>To shade half of a shape</li> </ul>
Measures	Statistics	Geometry	NON-NEGOTIABLE FACTS
<ul style="list-style-type: none"> <li>To know the days of the week.</li> <li>To know the months of the year.</li> <li>Sequence events in chronological order.</li> </ul>	<p>NONE TAUGHT</p>	<ul style="list-style-type: none"> <li>To recognise and name 3D solids.</li> </ul>	<p>ANY NUMBER BOND UP TO 20.</p> <p>ANY SUBTRACTION UP TO 20.</p> <p>DAYS OF THE WEEK.</p> <p>NUMBER RECOGNITION TO 20.</p>



# Tudhoe Colliery Primary School

## Autumn Term Maths in Year 2



Place Value/Number	Addition/Subtraction	Multiplication/Division	Fractions
<ul style="list-style-type: none"> <li>To recognise the place value of each digit in TU numbers.</li> <li>To read and write numbers to at least 100 in figures and words.</li> <li>To count from 0 in 2s, 3s and 5s.</li> <li>To count from any number in 10s.</li> <li>Use place value and number facts to solve problems.</li> <li>Identify and represent numbers in different representations.</li> </ul>	<p style="text-align: center;"><b>TAUGHT SEPARATELY THEN LINKED</b></p> <ul style="list-style-type: none"> <li>To use objects to calculate TU + U (no carry)</li> <li>To use objects to calculate TU - U (no exchange)</li> <li>To use column addition to calculate TU + 10</li> <li>To use column subtraction to calculate TU - 10</li> <li>To use column addition to calculate TU + TU</li> <li>To use column subtraction to calculate TU - TU</li> <li>Recall and use addition and subtraction facts to 20 fluently and use these to help with calculations.</li> <li>Recognise the inverse relationship between addition and subtraction.</li> </ul>	<p style="text-align: center;"><b>TAUGHT SEPARATELY THEN LINKED</b></p> <ul style="list-style-type: none"> <li>To recognise odd and even numbers.</li> <li>To use groups and arrays to represent the 2, 5 and 10 times table.</li> <li>To use grouping and sharing to represent the 2, 5 and 10 times tables.</li> <li>Use the <math>\times =</math> and <math>\div</math> symbols accurately.</li> <li>Show that multiplications can be done in any order with the same result.</li> </ul>	<ul style="list-style-type: none"> <li>To find one half, one quarter and one third of a shape.</li> <li>To find one half, one quarter and one third of an amount.</li> <li>To recognise the equivalence between two quarters and one half.</li> <li>Write simple fractions correctly.</li> </ul>
Measures	Statistics	Geometry	NON-NEGOTIABLE FACTS
<ul style="list-style-type: none"> <li>To measure lengths in cm.</li> <li>To read scales to measure lengths.</li> <li>Compare and order lengths using more than and less than.</li> </ul>	<ul style="list-style-type: none"> <li>To interpret and construct simple pictograms.</li> <li>To answer questions by counting the number in a category.</li> </ul>	<ul style="list-style-type: none"> <li>To identify and describe the features of 3D solids, such as faces, vertices and edges.</li> <li>Compare and sort 3D solids in everyday objects.</li> </ul>	<p>CM IN A M</p> <p>2, 3, 5 AND 10 TIMES TABLES.</p>



# Tudhoe Colliery Primary School



## Autumn Term Maths in Year 3

Place Value/Number	Addition/Subtraction	Multiplication/Division	Fractions
<ul style="list-style-type: none"> <li>To recognise the place value of each digit in HTU numbers.</li> <li>To count from 0 in 3s, 4s and 8s.</li> <li>To count from any number in 100s.</li> <li>To read and write numbers up to 1,000 in figures and words.</li> <li>To find 10 or 100 more.</li> <li>To find 10 or 100 less.</li> <li>Compare and order numbers up to 1,000.</li> <li>Solve number problems involving these ideas and skills.</li> </ul>	<ul style="list-style-type: none"> <li>To use column addition to calculate HTU + TU</li> <li>To use column subtraction to calculate HTU - TU</li> <li>To use column addition to calculate HTU + HTU</li> <li>To use column subtraction to calculate HTU - HTU</li> <li>Add a 3-digit number and 1s.</li> <li>Solve problems, including missing number problems, using these skills.</li> </ul>	<p><b>TAUGHT SEPARATELY THEN LINKED</b></p> <ul style="list-style-type: none"> <li>To use short multiplication to calculate TU x U</li> <li>To use short division to calculate TU ÷ U</li> <li>Use knowledge of times tables to calculate larger multiplications.</li> <li>Solve problems, including missing number problems, using multiplication and division skills and scaling.</li> </ul>	<ul style="list-style-type: none"> <li>To use diagrams to add fractions with the same denominator.</li> <li>To use diagrams to subtract fractions with the same denominator.</li> <li>To find unit-fractions of amounts.</li> <li>Add and subtract fractions within one whole.</li> <li>Solve problems that involve the use of these skills.</li> </ul>
Measures	Statistics	Geometry	NON-NEGOTIABLE FACTS
<ul style="list-style-type: none"> <li>To tell the time on an analogue clock to the nearest minute.</li> <li>Tell the time using Roman Numerals to 12</li> <li>To measure the perimeter of simple 2D shapes.</li> <li>To calculate the perimeter of simple 2D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>To interpret and present data in bar charts.</li> </ul>	<ul style="list-style-type: none"> <li>Draw 2D shapes and model 3D solids.</li> </ul>	<p><b>3, 4 AND 8 TIMES TABLES</b></p> <p><b>SECONDS IN A MINUTE</b></p> <p><b>MINUTES IN AN HOUR</b></p> <p><b>HOURS IN A DAY</b></p> <p><b>DAYS IN EACH MONTH</b></p>



# Tudhoe Colliery Primary School

## Autumn Term Maths in Year 4



Place Value/Number	Addition/Subtraction	Multiplication/Division	Fractions
<ul style="list-style-type: none"> <li>To round to the nearest 10, 100 and 1,000.</li> <li>To find 1,000 less than a number.</li> <li>To find 1,000 more than a number.</li> <li>To read and write numbers up to 1,000 in figures and words.</li> <li>To recognise the place value of each digit in a 4-digit number.</li> <li>To order numbers up to 1,000.</li> <li>Count on in 25s and 1,000s.</li> </ul>	<ul style="list-style-type: none"> <li>To use column addition to calculate <math>ThHTU + ThHTU</math></li> <li>To use column subtraction to calculate <math>ThHTU - ThHTU</math></li> <li>Solve 2-step addition and subtraction problems in context, deciding which operations to use.</li> <li>Use inverse operations to check answers.</li> </ul>	<ul style="list-style-type: none"> <li>To use short multiplication to calculate <math>HTU \times U</math></li> <li>To use short division to calculate <math>HTU \div U</math></li> <li>Solve problems involving adding and multiplying and scaling problems.</li> </ul>	<ul style="list-style-type: none"> <li>To add fractions with the same denominator, crossing a whole boundary.</li> <li>To subtract fractions with the same denominator, crossing a whole boundary.</li> <li>To use diagrams to represent common equivalent fractions.</li> <li>Find the effect of dividing a 1 or 2 digit number by 10 or 100.</li> <li>Solve problems involving increasingly harder fractions where the answer is a whole number.</li> </ul>
Measures	Statistics	Geometry	NON-NEGOTIABLE FACTS
<ul style="list-style-type: none"> <li>To read the time on an analogue clock to any degree of accuracy.</li> <li>To read the time on a digit 12-hour clock.</li> <li>To read the time on a digital 24-hour clock.</li> <li>To convert between 12 and 24 hour times.</li> <li>Write the time shown on an analogue clock accurately.</li> <li>Solve problems involving converting between hours, minutes and seconds.</li> </ul>	<ul style="list-style-type: none"> <li>To interpret and present discrete and continuous data in bar charts or time graphs.</li> <li>Solve problems involving comparisons, sum and difference using information presented in bar charts.</li> </ul>	<ul style="list-style-type: none"> <li>To describe positions on a grid as coordinates in the first quadrant.</li> <li>To plot points on a coordinate grid to complete a polygon.</li> <li>Describe movements in terms of a translation of a given unit to the left/right or up/down.</li> </ul>	<p>6, 7 9 AND 12 TIMES TABLES.</p> <p>DAYS IN A WEEK</p> <p>MONTHS IN A YEAR</p> <p>DAYS IN EACH MONTH</p> <p>PENCE IN A POUND</p>



# Tudhoe Colliery Primary School



## Autumn Term Maths in Year 5

Place Value/Number	Addition/Subtraction	Multiplication/Division	Fractions
<ul style="list-style-type: none"> <li>To count into and out of negative numbers in context.</li> <li>To identify the place value of digits in numbers up to 1 million.</li> <li>To round numbers up to 1 million to any degree of accuracy.</li> <li>To understand the meaning of decimals and express tenths, hundredths and thousandths as fractions and decimals.</li> <li>To multiply and divide numbers by 10, 100 and 1,000.</li> <li>Interpret negative numbers in context, count forward or backwards through 0.</li> <li>Solve number or practical problems that involve all of the above.</li> </ul>	<ul style="list-style-type: none"> <li>To use column addition to calculate with 5 - digit numbers, including into decimals.</li> <li>To use column subtraction to calculate with 5-digit numbers, including into decimals.</li> <li>Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.</li> </ul>	<ul style="list-style-type: none"> <li>To use short multiplication to calculate <math>ThHTU \times U</math></li> <li>To use long multiplication to calculate <math>ThHTU \times TU</math></li> <li>To use short division to calculate <math>ThHTU \div U</math></li> <li>To identify multiples and factors including all factor pairs of a number.</li> <li>To identify square numbers and use the correct notation.</li> <li>Multiply and divide whole numbers by 10, 100 and 1,000.</li> <li>Solve problems involving multiplication and division, using knowledge of factors and multiples.</li> </ul>	<ul style="list-style-type: none"> <li>To add and subtract fractions with common denominators, crossing a whole boundary.</li> <li>To add fractions with uncommon denominators.</li> <li>To subtract fractions with uncommon denominators.</li> <li>To recognise improper fractions and mixed numbers and convert between them.</li> <li>Solve problems involving numbers with up to 3 decimal places.</li> <li>Read and write decimal numbers as tenths or hundredths.</li> <li>To recognise and use thousandths and link these to tenths and hundredths.</li> </ul>
Measures	Statistics	Geometry	NON-NEGOTIABLE FACTS
<ul style="list-style-type: none"> <li>To calculate the perimeter of 2D shapes.</li> <li>To calculate the area of rectangles.</li> <li>To calculate the area and perimeter of compound shapes.</li> <li>Estimate the area of irregular shapes.</li> </ul>	<ul style="list-style-type: none"> <li>To read and interpret tables.</li> <li>To solve comparison, sum and difference problems using information presented in line graphs.</li> </ul>	<ul style="list-style-type: none"> <li>To draw given angles and measure them in degrees.</li> <li>To estimate and compare acute, obtuse and reflex angles.</li> <li>To calculate angles around a point and on a straight line.</li> <li>Know angles are measured in degrees.</li> </ul>	<p>ALL TIMES TABLES.</p> <p>METRIC MEASUREMENT CONVERSIONS.</p> <p>SQUARE NUMBERS.</p> <p>MULTIPLES AND FACTORS.</p>



# Tudhoe Colliery Primary School

## Autumn Term Maths in Year 6



Place Value/Number		Calculations			Fractions
<ul style="list-style-type: none"> <li>To round any number to any required degree of accuracy.</li> <li>To read and write numbers up to 10 million.</li> <li>To identify the value of digits in numbers up to 10 million.</li> <li>To calculate with negative numbers across zero.</li> <li>To express decimals up to 3dp as decimals and fractions.</li> <li>To multiply and divide numbers by 10, 100 and 1,000 into 3dp.</li> <li>Read, write and order numbers up to 10 million.</li> <li>Solve number and practical problems using these skills.</li> </ul>		<ul style="list-style-type: none"> <li>To use long division to calculate <math>\text{ThHTU} \div \text{TU}</math></li> <li>To use short multiplication to calculate multiplication of decimals (1dp and 2dp)</li> <li>To use short division to calculate decimal remainders.</li> <li>To use column addition to calculate addition of more than 3 different numbers.</li> <li>To use column subtraction to calculate subtraction of numbers with varied decimal places.</li> <li>Identify common factors, common multiples and prime numbers.</li> <li>Solve problems involving addition, subtraction, multiplication and division problems, deciding which operations to use and why.</li> <li>Use estimation to check answers.</li> <li>Use knowledge of the order of the four operations to carry out calculations that involve addition, subtraction, multiplication and division.</li> </ul>			<ul style="list-style-type: none"> <li>To divide proper fractions by a whole number.</li> <li>To multiply pairs of common fractions.</li> <li>To add more than 2 fractions with uncommon denominators.</li> <li>To subtract more than 2 fractions with uncommon denominators.</li> <li>To convert between fractions, decimals and percentages.</li> <li>To order fractions using common factors.</li> <li>To identify the value of each digit in decimals up to 3dp.</li> <li>Use written division to calculate decimal remainders.</li> </ul>
Measures	Statistics	Geometry	Algebra	Ratio and Proportion	NON-NEGOTIABLE FACTS
<ul style="list-style-type: none"> <li>To describe positions in all four quadrants.</li> <li>To draw and translate shapes on a coordinate plane.</li> <li>To solve problems involving the conversion of units of measurement up to 2 decimal places.</li> <li>To calculate the area and volume of shapes.</li> <li>Solve problems involving the conversion of measures up to 3dp.</li> </ul>	<ul style="list-style-type: none"> <li>To interpret and construct line graphs.</li> <li>To interpret and construct pie charts.</li> </ul>	NOT TAUGHT	<ul style="list-style-type: none"> <li>To express missing number problems algebraically.</li> <li>To use simple formulae expressed in words.</li> <li>To generate and describe linear number sequences.</li> <li>To enumerate all possibilities of two variables.</li> </ul>	<ul style="list-style-type: none"> <li>To solve problems involving the relative sizes of two quantities, where missing values can be found using multiplication and division facts.</li> <li>To solve problems involving the calculation of a percentage of an amount.</li> <li>To solve problems involving the scale factor of shapes.</li> <li>To solve problems involving unequal sharing or grouping.</li> </ul>	<p>COMMON MULTIPLES, FACTORS AND COMMON FACTORS</p> <p>TIMES BIGGER OR TIMES SMALLER</p> <p>BODMAS MEANINGS</p> <p>CONVERT MILES TO KM</p> <p>PRIME NUMBERS</p>

