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| **7/9/20 Place Value 3 weeks**Y3 Pupils should be taught to:  **count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number**  recognise the place value of each digit in a three-digit number (hundreds, tens, ones)  **compare and order numbers up to 1000**  identify, represent and estimate numbers using different representations ** read and write numbers up to 1000 in numerals and in words**  solve number problems and practical problems involving these ideas. Y4 Pupils should be taught to  **count in multiples of 6, 7, 9, 25 and 1000**  find 1000 more or less than a given number  **count backwards through zero to include negative numbers**  recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)  **order and compare numbers beyond 1000**  identify, represent and estimate numbers using different representations  **round any number to the nearest 10, 100 or 1000**  solve number and practical problems that involve all of the above and with increasingly large positive numbers  **read Roman numerals to 100 (I to C)** and know that over time, the numeral system changed to include the concept of zero and place value.  | **28/9/20 Addition and Subtraction****4 weeks** Y3 Pupils should be taught to:  **add and subtract numbers mentally, including:** ** a three-digit number and ones** ** a three-digit number and tens**** a three-digit number and hundreds** ** add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction**  estimate the answer to a calculation and use inverse operations to check answers  **solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.** Y4 Pupils should be taught to:  **add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate**  estimate and use inverse operations to check answers to a calculation  **solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.**  | **Half Term**  | **19/10****Multiplication and Division – 3 weeks**Y3 Pupils should be taught to:  **recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables**  write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, **including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods**  **solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.** Y4 Pupils should be taught to:  **recall multiplication and division facts for multiplication tables up to 12 × 12**  use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers  recognise and use factor pairs and commutativity in mental calculations  **multiply two-digit and three-digit numbers by a one-digit number using formal written layout**  **solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence** problems such as n objects are connected to m objects.  | **30/11/20****Length, Perimeter and area – 3 weeks**Y3 Pupils should be taught to:  **measure, compare, add and subtract: lengths (m/cm/mm);**  **measure the perimeter of simple 2-D shapes** Year 4  **measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres  find the area of rectilinear shapes by counting squares**  |
| **1****11/01** | **2****18/01** | **3****25/01** | **4****1/2** | **5****8/2** | **6****22/2** |  |  **7****1/3** | **8****8/3** | **9****15/3** | **10****22/3** | **1****29/3** |
| **Multiplication and Division****Multiplication and Division – 3 weeks**Y3 Pupils should be taught to:  **recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables**  write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, **including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods**  **solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.** Y4 Pupils should be taught to:  **recall multiplication and division facts for multiplication tables up to 12 × 12**  use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers  recognise and use factor pairs and commutativity in mental calculations  **multiply two-digit and three-digit numbers by a one-digit number using formal written layout**  **solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence** | **Fractions**Year 3 Pupils should be taught to:  count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10  **recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators**  **recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators**  recognise and show, using diagrams, equivalent fractions with small denominators  **add and subtract fractions with the same denominator within one whole [for example,** **7 5 + 7 1 = 7 6]**  **compare and order unit fractions, and fractions with the same denominators**  solve problems that involve all of the above. Year 4 Pupils should be taught to:  recognise and show, using diagrams, families of common equivalent fractions  count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.  **solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number**  **add and subtract fractions with the same denominator**  recognise and write decimal equivalents of any number of tenths or hundredths  **recognise and write decimal equivalents to 4 1, 2 1, 4 3**  find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths  round decimals with one decimal place to the nearest whole number  **compare numbers with the same number of decimal places up to two decimal places**  solve simple measure and money problems involving fractions and decimals to two decimal places.  |  | **Money**Year 3  add and subtract amounts of money to give change, using both £ and p in practical contexts Year 4  estimate, compare and calculate different measures, including money in pounds and pence solve simple measure and money problems involving fractions and decimals to two decimal places. | **Decimals**Recognise tenths and hundredthsTenths as decimalsTenths on a place value gridTenths on a number lineDivide 1-digit by 10Divide 2-digits by 10HundredthsHundredths as decimalsHundredths on a place value gridDivide 1 or 2-digits by 100recognise and write decimal equivalents of any number of tenths or hundredths  **recognise and write decimal equivalents to 4 1, 2 1, 4 3**  find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths  round decimals with one decimal place to the nearest whole number  **compare numbers with the same number of decimal places up to two decimal places**  | **Statistics**Year 3 Pupils should be taught to:  interpret and present data using bar charts, pictograms and tables  solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.Year 4 Pupils should be taught to:  interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.  |
| **1****19/4** | **2****26/4** | **3****3/5** | **4****10/5** | **5****17/5** | **6****24/5** |  | **7****7/6** | **8****14/6** | **9****21/6** | **10****28/6** | **11****5/7** | **12****12/7** | **13** |
| **Fractions**Year 3 Pupils should be taught to:  count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10  **recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators**  **recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators**  recognise and show, using diagrams, equivalent fractions with small denominators  **add and subtract fractions with the same denominator within one whole [for example,** **7 5 + 7 1 = 7 6]**  **compare and order unit fractions, and fractions with the same denominators**  solve problems that involve all of the above. Year 4 Pupils should be taught to:  recognise and show, using diagrams, families of common equivalent fractions  count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.  **solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number**  **add and subtract fractions with the same denominator**  solve simple measure and money problems involving fractions and decimals to two decimal places. | **Time**Y 3** 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]. Year 4 **read, write and convert time between analogue and digital 12- and 24-hour clocks**  solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.  |  | **Mass Capacity Decimals**Y3 Pupils should be taught to:  **measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)** Y 4 Pupils should be taught to:  Convert between different units of measure [for example, kilometre to metre; hour to minute]Year 4  estimate, compare and calculate different measures,  | **Properties of shape****Position and direction**Year 3 Pupils should be taught to:  **draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them**  recognise angles as a property of shape or a description of a turn  **identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle**  identify horizontal and vertical lines and pairs of perpendicular and parallel lines.Year 4: Pupils should be taught to:  **compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes**  **identify acute and obtuse angles and compare and order angles up to two right angles by size**  identify lines of symmetry in 2-D shapes presented in different orientations  complete a simple symmetric figure with respect to a specific line of symmetry.Pupils should be taught to:  describe positions on a 2-D grid as coordinates in the first quadrant  describe movements between positions as translations of a given unit to the left/right and up/down  plot specified points and draw sides to complete a given polygon.  |