Whole School Overview
Y1-Y6

| Y1 |  |  |  |  |  |  |
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| Number - Number and Place Value | Number - Addition and Subtraction | Number Multiplication and Division | Number - Fractions | Measurement | Geometry Properties of shape | Geometry - Position and direction |
| Pupils should be taught to: <br> [ count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number [3 count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens T given a number, identify one more and one less ? identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal | Pupils should be taught to: <br> [3 read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs [0] represent and use number bonds and related subtraction facts within 20 Tadd and subtract one digit and twodigit numbers to 20, including zero T solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems | Pupils should be taught to: <br> solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. | Pupils should be taught to: <br> [0] recognise, find and name a half as one of two equal parts of an object, shape or quantity [0 recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | Pupils should be taught to: <br> [0] compare, describe and solve practical problems for: <br> Tlengths and heights [for example, long/short, longer/shorter, tall/short, double/half] [0 mass/weight [for example, heavy/light, heavier than, lighter than] <br> ? capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Q time [for example, quicker, slower, earlier, later] T? measure and begin to record the following: ใ lengths and heights | Pupils should be taught to: <br> T3 recognise and name common 2-D and 3-D shapes, including: <br> 回 2-D shapes <br> [for example, rectangles (including squares), circles and triangles] [3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. | Pupils should be taught to: <br> T describe position, direction and movement, including whole, half, quarter and three-quarter turns. |



| Maths - Y2 |  |  |  |  |  |  | Statistics |
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| Number - Number and Place Value | Number Addition and Subtraction | Number Multiplication and Division | Number Fractions | Measurement | Geometry Properties of shape | Geometry Position and direction |  |
| Pupils should be taught to: <br> Count in steps of | Pupils should be taught to: <br> Tlolve problems | Pupils should be taught to: <br> Trecall and use | Pupils should be taught to: <br> ?recognise, find, | Pupils should be taught to: <br> Thoose and use | Pupils should be taught to: <br> Tidentify and | Pupils should be taught to: <br> Torder and | Pupils should be taught to: <br> Tinterpret and construct simple |


| 2, 3, and 5 from <br> 0 , and in tens from any number, forward and backward Trecognise the place value of each digit in a two---digit number (tens, ones) T3identify, represent and estimate numbers using different representations, including the number line Tcompare and order numbers from 0 up to100; use <, > and = signs Tread and write numbers to at least 100 in numerals and in words Tuse place value and number facts to solve problems. | with addition <br> and subtraction: <br> using concrete <br> objects and <br> pictorial <br> representations, including those <br> involving <br> numbers, <br> quantities and <br> measures <br> Wapplying their <br> increasing <br> knowledge of <br> mental and <br> written methods <br> Trecall and use <br> addition and <br> subtraction facts <br> to 20 fluently, <br> and derive and <br> use related facts <br> up to 100 <br> Tadd and <br> subtract <br> numbers using <br> concrete objects, <br> pictorial <br> representations, <br> and mentally, <br> including: a <br> two-digit number <br> and ones, a two- <br> digit number and <br> tens, two two- <br> digit numbers <br> adding three <br> one-digit | multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers Wcalculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs Wshow that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot Tsolve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, | name and write fractions $1 / 3,1 / 4$, $1 / 2$ and of a length, shape, set of objects or quantity Wwite simple fractions for example, $1 / 2$ of $6=3$ and recognise the equivalence of $2 / 4$ and $1 / 2$. | appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( ${ }^{\circ} \mathrm{C}$ ); Capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels compare and order lengths, mass, volume/capacity and record the results using >, < and = recognise and use symbols for pounds ( $£$ ) and pence (p); Gcombine amounts to make a particular value find different combinations of coins that equal the same amounts of money solve simple problems | describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line ?identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces Tidentify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid] | arrange <br> combinations of mathematical objects in patterns and sequences Quse mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise). | pictograms, tally charts, block diagrams and simple tables <br> Task and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Task and answer questions about totalling and comparing categorical data. |
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|  | numbers <br> lashow that <br> addition of two <br> numbers can be <br> done in any <br> order <br> (commutative) <br> and subtraction <br> of one number <br> from another <br> cannot <br> arecognise and <br> use the inverse <br> relationship <br> problems in <br> between addition <br> and subtraction <br> and use this to <br> check <br> calculations and <br> solve missing <br> number <br> problems. | in a practical <br> context involving <br> addition and <br> subtraction of <br> money of the <br> same unit, <br> including giving <br> change compare <br> and sequence <br> intervals of time <br> tell and write the <br> time to five <br> minutes, <br> including quarter <br> past/to the hour <br> and draw the <br> hands on a clock <br> face to show <br> these times <br> know the number <br> of minutes in an <br> hour and the <br> number of hours <br> in a day. |  |
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| Maths - Y3 |  |  |  |  |  |  | Statistics |
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| Number - Number and Place Value | Number Addition and Subtraction | Number Multiplication and Division | Number Fractions | Measurement | Geometry Properties of shape | Geometry Position and direction |  |
| Pupils should be taught to: <br> locount from 0 in multiples of 4,8 , 50 and 100; find 10 or 100 more or less than a given number | Pupils should be taught to: <br> Tadd and subtract numbers mentally, including: Q a three-digit | Pupils should be taught to: <br> Trecall and use multiplication and division facts for the 3,4 and 8 multiplication tables | Pupils should be taught to: <br> Tcount up and down in tenths; recognise that tenths arise from dividing an object into 10 | Pupils should be taught to: <br> 国measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass (kg/g); | Pupils should be taught to: <br> 2 draw 2-D <br> shapes draw and make 3-D shapes using modelling materials; | Pupils should be taught to: | Pupils should be taught to: <br> Tinterpret and <br> present data <br> using bar <br> charts, pictograms <br> and tables <br> [] solve one-step and two-step |


| [] recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <br> [0 compare and order numbers up to 1000 <br> Q identify, represent and estimate numbers using different representations [] read and write numbers up to 1000 in numerals and in words Q solve number problems and practical problems involving these | number and ones <br> [0 a three-digit <br> number and tens <br> [3 a three-digit <br> number and <br> hundreds <br> ? add and <br> subtract <br> numbers <br> with up to three <br> digits, <br> using formal <br> written methods <br> of columnar <br> addition and <br> subtraction <br> T estimate the <br> answer to a <br> calculation and <br> use inverse <br> operations to <br> check <br> answers <br> Q solve problems, including <br> missing number <br> problems, using <br> number facts, <br> place value, and <br> more complex <br> addition and <br> subtraction. | [0 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 <br> [ 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. | 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 aadd and subtract fractions with the same denominator within one whole [for example, $5 / 7$ | volume/capacity ( $1 / \mathrm{ml}$ ) <br> [0 measure the perimeter of simple <br> 2-D shapes <br> 回 add and <br> subtract <br> amounts of money to give change, using both $£$ and $p$ in practical contexts [7] tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24hour 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 | recognise 3-D <br> shapes in <br> different <br> orientations and <br> describe them <br> [1] recognise <br> angles as a <br> property of <br> shape or a <br> description of a <br> turn <br> (1) identify right <br> angles, recognise <br> that two right <br> angles make a <br> half-turn, three <br> make three <br> quarters of a <br> turn and four a <br> complete turn; <br> identify whether <br> angles are <br> greater than or <br> less than a right <br> angle <br> Gidentify <br> horizontal <br> and vertical lines <br> and pairs of <br> perpendicular <br> and parallel <br> lines. | questions [for example, 'How many more?' and 'How many fewer?’] using information presented in scaled bar charts and pictograms and tables. |
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| Maths－Y4 |  |  |  |  |  |  | Statistics |
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| Number－Number and Place Value | Number－ Addition and Subtraction | Number－ Multiplication and Division | Number－ Fractions | Measurement | Geometry－ Properties of shape | Geometry－ Position and direction |  |
| Pupils should be taught to： <br> 2 count in multiples of $6,7,9,25$ and 1000 <br> ［］find 1000 more <br> or less than a <br> given number <br> 回count <br> backwards <br> through zero to <br> include negative <br> numbers <br> ［］recognise the place value of each digit in a four－digit number | Pupils should be taught to： <br> Tadd and <br> subtract <br> numbers <br> with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate ［0 estimate and use inverse operations to check answers to | Pupils should be taught to： <br> 国 recall <br> multiplication and division facts for multiplication tables up to $12 \times$ 12 <br> ［0 use place value， known and derived facts to multiply and divide mentally， including： multiplying by 0 and 1 ；dividing by 1；multiplying together three | Pupils should be taught to： <br> ［ recognise and show，using diagrams， families of common equivalent fractions回count up and down in hundredths； recognise that hundredths arise when dividing an object by one hundred and dividing tenths | Pupils should be taught to： <br> T Convert <br> between different <br> units of measures，for example， kilometre to metre；hour to minutes） ？measure and calculate the perimeter of a rectangular shapes，（including squares）in centimetres and metres | Pupils should be taught to： <br> ？compare and classify geometric shapes，including quadrilaterals and triangles， based on their properties and sizes <br> Q identify acute and obtuse angles and compare and order angles up to two right angles by size | Pupils should be taught to： <br> ［ describe <br> positions on a 2－D grid as coordinates in the first quadrant <br> Q describe <br> movements <br> between <br> positions <br> as translations of <br> a given unit to the left／right and up／down ［3 plot specified points and draw | Pupils should be taught to： <br> ［3 interpret and <br> present <br> discrete and <br> continuous <br> data using <br> appropriate <br> graphical <br> methods， <br> including bar <br> charts and <br> time graphs． <br> 国 solve <br> comparison， <br> sum and <br> difference <br> problems <br> using |


| (thousands, hundreds, tens, and ones) <br> Torder and compare numbers beyond 1000 <br> T] identify, <br> represent <br> and estimate <br> numbers using <br> different <br> representations <br> Qround any <br> number to the <br> nearest 10, <br> 100 or 1000 <br> Ts solve number <br> and practical <br> problems that <br> involve all of <br> the above and <br> with <br> increasingly large positive numbers <br> Tread Roman <br> numerals to 100 <br> (Ito C) and know <br> that over time, <br> the numeral <br> system changed <br> to include the <br> concept of zero <br> and place value. | a calculation <br> T? solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. | numbers <br> [] recognise and use factor pairs and commutativity in mental calculations [3 multiply twodigit and threedigit numbers by a one digit number using formal written layout <br> Ta 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. | by ten. <br> Ta solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including nonunit fractions where the answer is a whole number Tadd and subtract fractions with the same denominator T? recognise and write decimal equivalents of any number of tenths or hundredths Trecognise and write decimal equivalents to $1 / 2$ , $1 / 43 / 4$ <br> T] find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the | afind the area of rectangular shapes by counting squares lestimate and calculate different measures, including money in pounds and pence T3 read, write and convert time between analogue and digital 12 and 24-hour clocks T? solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. | Tidentify lines of <br> symmetry in 2-D <br> shapes <br> presented in <br> different <br> orientations <br> G complete a <br> simple <br> symmetric <br> figure with <br> respect to a <br> specific line of symmetry. | sides to complete a given polygon. | information presented in bar charts, pictograms, tables and other graphs. |
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|  |  |  | answer as ones， tenths and hundredths T？round decimals with one decimal place to the nearest whole number T？compare numbers with the same number of decimal places up to two decimal places团 solve simple measure and money problems involving fractions and decimals to two decimal places． |  |  |  |  |
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| Maths－Y5 |  |  |  |  |  |  | Statistics |
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| Number－Number and Place Value | Number－ Addition and Subtraction | Number－ <br> Multiplication and Division | Number－ Fractions | Measurement | Geometry－ Properties of shape | Geometry－ <br> Position and direction |  |
| Pupils should be taught to： <br> T read，write， order and compare numbers to at least 1000000 | Pupils should be taught to： <br> Ta add and subtract whole numbers with more than 4 digits，including | Pupils should be taught to： <br> Q identify multiples and factors， including finding all factor pairs of | Pupils should be taught to <br> ［0 compare and order fractions who denominators are all multiples | Pupils should be taught to： <br> T Convert between different units of metric measure（for example， | Pupils should be taught to： <br> 回 identify 3－D <br> shapes， including cubes and other cuboids， | Pupils should be taught to： <br> 回 identify， describe and represent the position of a shape following | Pupils should be taught to： <br> 国 solve <br> comparison， <br> sum and <br> difference <br> problems <br> using |


| and determine the value of each digit <br> ？count forwards or backwards in steps of powers of 10 for any given number up to 1000000 <br> ［ interpret negative numbers in context，count forwards and backwards with positive and negative whole numbers， including through zero国round any number up to 1000000 to the nearest 10，100， 1000， 10000 and 100000回 solve number problems and practical problems that involve all of the above <br> T］read Roman numerals to 1000 （M）and recognise years written in Roman numerals | using formal <br> written methods <br> （columnar <br> addition and <br> subtraction） <br> Ta add and <br> subtract <br> numbers <br> mentally with <br> increasingly large <br> numbers <br> Tuse rounding to <br> check <br> answers to <br> calculations <br> and determine， <br> in the context of <br> a problem，levels <br> of accuracy <br> T？solve addition <br> and subtraction <br> multi－step <br> problems in <br> contexts， <br> deciding which <br> operations and <br> methods to use <br> and why． | a number，and common factors of two numbers T know and use the vocabulary of prime numbers， prime factors and composite （nonprime） numbers Testablish whether a number up to 100 is prime and recall prime numbers up to 19 ？multiply numbers up to 4 digits by a one－or two－digit number using a formal written method，including long multiplication for two－digit numbers T multiply and divide numbers mentally drawing upon known facts divide numbers up to 4 digits by a one－digit number using the formal written method of short division | of the same number ？identify，name and write equivalent fractions of a given fraction， represented visually， including tenths and hundredths Qrecognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $>1$ as a mixed number［for example，2／5＋ $4 / 5=11 / 5$ ］ ？add and subtract fractions with the same denominator and denominators that are multiples of the same number multiply proper fractions and mixed numbers by whole and | kilometre and metre； centimetre and metre； centimetre and millimetre；gram and kilogram；litre and millilitre） ⿴囗 understand and use approximate equivalences between metric units and common imperial units such as inches， pounds and pints t measure and calculate the perimeter composite rectilinear shapes in centimetres and metres ？calculate and compare the area of rectangles （including squares），and including using standard units， square centimetres（cm2） and square metres（m2）and estimate the area of irregular shapes | from 2－D <br> representations <br> ［］know angles <br> are measured in degrees： <br> estimate and <br> compare <br> acute，obtuse <br> and reflex angles <br> ［］draw given <br> angles，and <br> measure them in <br> degrees（o） <br> identify： <br> Q angles at a <br> point and one <br> whole turn（total <br> 360o） <br> Q angles at a <br> point on a <br> straight line <br> and a turn <br> （total 1800） <br> Q other multiples <br> of 90 o <br> 回 use the <br> properties of <br> rectangles to <br> deduce <br> related facts and <br> find missing <br> lengths and <br> angles <br> ［ distinguish <br> between <br> regular and <br> irregular | a reflection or translation， using the appropriate language，and know that the shape has not changed． | information presented in a line graph complete， read and interpret information in tables， including timetables． |
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|  |  |  | numbers, <br> supported by <br> materials and <br> diagrams <br> T] read and write <br> Decimal <br> numbers as <br> fractions [for <br> example, $0.71=$ <br> 71/100] <br> Trecognise and <br> use thousandths <br> and relate them <br> to tenths, <br> hundredths and <br> decimal <br> equivalents <br> Tround <br> decimals <br> with two <br> decimal <br> places to the <br> nearest whole <br> number and to <br> one decimal <br> place <br> ? read, write, <br> order and <br> compare <br> numbers with up <br> to three decimal <br> places <br> [] solve problems <br> involving <br> number up to <br> three decimal <br> places <br> [] recognise the | [0 estimate <br> volume <br> [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] Ta solve problems involving converting between units of time回use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. | polygons based <br> on reasoning <br> about equal <br> sides and angles. |  |  |
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|  | Maths - Y6 |  |  |  |  |  |  |  |
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| Number - Number and Place Value | Number Addition, Subtraction, Multiplication and Division | Number - <br> Fractions <br> including decimals <br> and \% | Ratio and Proportion | Algebra | Measurement | Geometry Properties of shape | Geometry Position and direction | Statistics |
| Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: | Pupils should be taught to: |


| T？read，write， order and compare numbers up to 10000000 and determine the value of each digit <br> T］round any whole number to a required degree of accuracy T］use negative numbers in context，and calculate intervals across zero T？solve number and practical problems that involve all of the above． | T0 multiply multi－ digit numbers up to 4 digits by a two－digit whole number using the formal written method of long multiplication Q divide numbers up to 4 digits by a two－digit whole number using the formal written method of long division，and interpret remainders as whole number remainders， fractions，or by rounding，as appropriate for the context ？divide numbers up to 4 digits by a two－ digit number using the formal written method of short division where appropriate， interpreting remainders according to the context ［］perform mental calculations， including | T use common <br> factors <br> to simplify <br> fractions； <br> use common <br> multiples to <br> express fractions <br> in the same <br> denomination <br> 国 compare and <br> order fractions， <br> including <br> fractions＞ 1 <br> 回 add and <br> subtract <br> fractions with <br> different <br> denominators <br> and mixed <br> numbers，using <br> the concept of <br> equivalent <br> fractions <br> ［0 multiply simple <br> pairs of proper <br> fractions， <br> writing the <br> answer in <br> its simplest form <br> ［for example， $1 / 4$ $\times 1 / 2=1 / 8]$ <br> Q divide proper <br> fractions by <br> whole <br> numbers［for <br> example， $1 / 3 \div$ $2=1 / 6]$ <br> 国 associate a | ？solve <br> problems <br> involving the <br> relative sizes of <br> two quantities <br> where missing <br> values can be <br> found by using <br> integer <br> multiplication <br> and division <br> facts <br> 回 solve <br> problems <br> involving the <br> calculation of <br> percentages <br> ［for <br> example，of <br> measures，and <br> such as $15 \%$ of <br> 360 and the <br> use of <br> percentages for <br> comparison <br> Q solve <br> problems <br> involving similar <br> shapes where <br> the scale factor <br> is known or can <br> be found <br> a solve <br> problems <br> involving <br> unequal sharing <br> and grouping <br> using | Tase simple formulae Q generate and describe linear number sequences国 express missing number problems algebraically ［9］find pairs of numbers that satisfy an equation with two unknowns回 enumerate possibilities of combinations of two variables | ？solve problems involving the calculation and conversion of units of measure，using decimal notation up to three decimal places where appropriate Q use，read， write and convert between standard units， converting measurements of length，mass， volume and time from a smaller unit of measure to a larger unit，and vice versa， using decimal notation to up to three decimal places Q convert between miles and kilometres ⿴囗 recognise that shapes with the same areas can have different | 回 draw 2－D <br> shapes using <br> Given <br> dimensions and <br> angles <br> ［？recognise， describe and build simple <br> 3－D shapes， including <br> making nets <br> ［？compare and classify <br> geometric <br> shapes <br> based on their <br> properties and <br> sizes and find <br> unknown <br> angles in any <br> triangles， <br> quadrilaterals， <br> and regular <br> polygons <br> ［？illustrate and <br> name parts of <br> circles，including <br> radius，diameter <br> and <br> circumference <br> and know that <br> the diameter <br> is twice the <br> radius <br> T］recognise <br> angles <br> where they <br> meet at a point， | 回 describe positions on the full coordinate grid（all four quadrants） <br> ？draw and translate simple shapes on the coordinate plane，and reflect them in the axes． | ［？interpret and construct pie charts and line graphs and use these to solve problem <br> ［7 calculate and interpret the mean as an average． |
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|  | of <br> accuracy. | answers to be <br> rounded to <br> specified <br> degrees of <br> accuracy <br> Q recall and use <br> equivalences <br> between simple <br> fractions, <br> decimals <br> and percentages, <br> including in <br> different <br> contexts. |  |  |  |  |
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