		Maths long term plan - Year 4	
Week	Topic	Objectives	Vocabulary
1	Number - place value identifying place value of 4-digit numbers 1000 more/less	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) find 1000 more or less than a given number	numeral; thousands; hundreds;tens;ones represents; stands for; equal to;exact; digit; place value;more;less;inequality sign;increase;decrease
2	Number - place value ordering and comparing numbers rounding numbers	order and compare numbers beyond 1000 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	numeral; thousands; hundreds;tens;ones represents; stands for; equal to; inequality sign; ascending / descending order; estimate; approximately; exact; round; nearest; multiple of; digit; divisible;compare;order;size
3	Number - place value Roman numerals	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.	Roman numeral; ;one; five;ten;fifty;hundred;
4	Number - place value counting in multiples negative numbers	count in multiples of 6, 7, 9, 25 and 1000 count backwards through zero to include negative numbers	count;multiple;mulitples;sequence;count up;count back;continue;pattern;rule;next;consecutive;zero; minus;positive;negative;order;asecending;descending
5	Addition and subtraction 4 digit numbers written method	add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate estimate and use inverse operations to check answers to a calculation	method;columns;place value;value;thousdands;hundreds;tens;onesexchange;add; addition; more; plus; increase; sum; total; increase; total; altogether; score; double; halve; subtract; minus; decrease; leave; hw many are left; difference between; how many more/fewer; equals; sign; is the same as; tens boundary; hundreds boundary; units boundary; tenths boundary; inverse;
6	Addition and subtraction 4 digit numbers written method and problem solving	add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	method;columns;place value;value;thousdands;hundreds;tens;onesexchange;add; addition; more; plus; increase; sum; total; increase; total; altogether; score; double; halve; subtract; minus; decrease; leave; hw many are left; difference between; how many more/fewer; equals; sign; is the same as; tens boundary; hundreds boundary; units boundary; tenths boundary; inverse;
7	Measure - time 12/24 hour clock Consolidation from Year 3	Convert between different units of measure Tell and write the time from analogue and 12 and 24 hour clocks (year 3)	days of the week; months of the year; seasons; fortnight; month; year; leap year; century; calendar; date; morning; afternoon; evening; night; am; pm; noon; midnight; today; yesterday; tomorrow; before; after; next; last; now; soon; early; late; quick; quicker; quickest; quickly; fast; fastest; faster; slow; slower; slowest; old; older; oldest; new; newer; newest; takes longer; takes less time; how long ago?; how long will it be to?; how long will it take to?; timetable; arrive; depart; hour; minute; second; watch; hands; digital; analogue; 24-hour; 12-hour; numerals
8	Consoldiation - QLA focus sessions		
		Half term	
9	Multiplication multiplication facts for the times tables multiply and divide by 0 and 1	recall multiplication and division facts for multiplication tables up to 12 × 12 use place value, known and derived facts to multiply and divide mentally multiplying by 0 and 1; dividing by 1	lots of; groups of; times; multiply; multiplication; product; repeated addition; array; row; column; double; halve; share; divide; division; divisible; remainder; factor; quotient; divisible by inverse
10	Multiplication multiplying 3 numbers factor pairs	multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations	lots of; groups of; times; multiply; multiplication; product; repeated addition; array; row; column; double; halve; share; divide; division; divisible; remainder; factor; quotient; divisible by inverse
11	Multiplication multiplying 2/3 digitis by a one digit number using written method (expanded and/or short)	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	lots of; groups of; times; multiply; multiplication; product; repeated addition; array; row; column; double; halve; share; divide; division; divisible; remainder; factor; quotient; divisible by inverse;method;expand;exchange;columns
12	Measure area and perimeter	measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares	measure;area; perimeter; count; squares;add;covers; surface; square centimetre (cm2); square metre (m2);
13	Assessment week		
14	Measure converting measures	Convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence	measurement; convert; standard unit; unit; metric; scale; nearly; roughly; approximately; length; width; height; depth; breadth; wide; narrow; furthest; nearest; distance; perimeter; kilometre; metre; centimetre; millimetre; mass; weight; balances; kilogram; half-kilogram; scales; capacity; holds; contains; full; empty; litre; half-litre; millilitre; pint; gallon; measuring cylinder; hour; minute; second; half past; quarter to; quarter past; dialogue; analogue;

15	Consolidiation - QLA focus sessions		
		half term	
16	Fractions add and subtract with the same denominator equivalent fractions	add and subtract fractions with the same denominator recognise and show, using diagrams, families of common equivalent fractions	part; equal parts; fraction; fractions; numerator; denominator; equivalent; one whole; half; quarter; one whole; eighth; third; sixth; ninth; tenth; twelfth; eleventh; fifth; twentieth; hundreth; thousandth;add;subtract;same;equivalent
17	Fractions fractions of quantities	fractions to divide quantities, including non-unit fractions where the answer is a whole number solve problems involving increasingly harder fractions to calculate quantities	part; equal parts; fraction; fractions; numerator; denominator; equivalent; one whole; half; quarter; one whole; eighth; third; sixth; ninth; tenth; twelfth; eleventh; fifth; twentieth; hundreth; thousandth;add;subtract;same;equivalent;divide
18	Decimals counting up/down in tenths dividing by 10	find the effect of dividing a one- or two-digit number by 10 identifying the value of the digits in the answer as ones, tenths	part; equal parts; fraction; fractions; numerator; denominator; equivalent; one whole; tenths;divide;place value;decimal;place holder;
19	Decimals counting up/down in hundreths dividing by 100	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten recognise and write decimal equivalents of any number of tenths or hundredths identifying the value of the digits in the answer as ones, tenths and hundredths	part; equal parts; fraction; fractions; numerator; denominator; equivalent; one whole; tenths;hundrethsdivide;place value;decimal;place holder;
20	Decimals ordering and rounding decimal equivalents	recognise and write decimal equivalents to a quarter, a half and three quarters and 100, 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	part; equal parts; fraction; numerator; denominator; equivalent; one whole; half; quarter;three quarters; tenth; hundreth; decimal; decimal point; decimal place; compare;order;ascending;descending
21	Consolidiation - QLA focus sessions		
half term			
22	Decimals Money	solve simple measure and money problems involving fractions and decimals to two decimal places.	money;coin;note/pence;poound;decimal;price;cost;bought;spend;spent;pay;change; total;amount;more than;less than;
23	Decimals Money	solve simple measure and money problems involving fractions and decimals to two decimal places.	money;coin;note/pence;poound;decimal;price;cost;bought;spend;spent;pay;change; total;amount;more than;less than;
24	Shape angles	identify acute and obtuse angles and compare and order angles up to two right angles by size	two-dimensional; three dimensional; equilateral; isosceles; scalene; rhombus; parallelogram; trapezium; raduis; diameter; circumference; right angle; acute; obtuse
25	Shape quadrilaterals and triangles symmetry	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes 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.	two-dimensional; three dimensional; equilateral; isosceles; scalene; rhombus; parallelogram; trapezium; draw; sketch;vertices; regular; irregular; two-dimensional; three dimensional; equilateral; isosceles; scalene; rhombus; parallelogram; trapezium; regular; irregular; symmetrical; reflective symmetry; line symmetry; translation; repeating pattern;
26	assessment week		
27	Measures time	Convert between different units of measure 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	morning; afternoon; evening; night; am; pm; noon; midnight; today; yesterday; tomorrow; before; after; next; last; now; soon; early; late; quick; quicker; quickest; quickly; fast; fastest; faster; slow; slower; slowest; old; older; oldest; new; newer; newest; takes longer; takes less time; how long ago?; how long will it be to?; how long will it take to?; timetable; arrive; depart; hour; minute; second; watch; hands; digital; analogue; 24-hour; 12-hour; numerals
		half term	
28	Position/direction co-ordinates plotting co-ordinates to draw shapes on a grid	describe positions on a 2-D grid as coordinates in the first quadrant plot specified points and draw sides to complete a given polygon.	Over, underneath, above, below, top, bottom, side, out, in, outside, inside, around, infront, behind, before, after, beside, next to, opposite, apart, between, middle, edge, centre, corner, direction, journey, route, map, plan, higher, lower, sideways, across, close, far, near, along, through, to, from, towards, away, ascend, descend, grid, row, column, origin, coordinates; horizontal; vertical; diagonal; parallel; perpendicular; x axis; y axis;
29	Position/direction translation	describe movements between positions as translations of a given unit to the left/right and up/down	Over, underneath, above, below, top, bottom, side, out, in, outside, inside, around, infront, behind, before, after, beside, next to, opposite, apart, between, middle, edge, centre, corner, direction, journey, route, map, plan, higher, lower, sideways, across, close, far, near, along, through, to, from, towards, away, ascend, descend, grid, row, column, origin, coordinates, clockwise, anti-clockwise; compass point; north; south; east; west; horizontal; vertical; diagonal; parallel; x axis; y axis; quadrant; movement; whole/half/quarter turn; rotate; compasses;
30	Decimals	find the effect of dividing a one- or two-digit number by 10 identifying the value of the digits in the answer as ones, tenths	part; equal parts; fraction; fractions; numerator; denominator; equivalent; one whole; tenths;divide;place value;decimal;place holder;

31	Decimals including Money	solve simple measure and money problems involving fractions and decimals to two decimal places.	part; equal parts; fraction; fractions; numerator; denominator; equivalent; one whole; tenths;divide;place value;decimal;place holder;
32	Consolidation - QLA focus sessions		
		half term	
33	Measures time	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.	days of the week; months of the year; seasons; fortnight; month; year; leap year; century; calendar; date; 12-hour; 24-hour; analogue; digital; minutes; seconds; hours
34	Statistics tables pictograms bar charts	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.	tally chart, bar chart, line graph, pictogram, average, data, total, axis, diagram, Venn-diagram, title, most popular, most common, least popular, least common, maximum, minimum.
35	Statistics tables pictograms bar charts	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.	tally chart, bar chart, line graph, pictogram, average, data, total, axis, diagram, Venn-diagram, title, most popular, most common, least popular, least common, maximum, minimum.
36	Consolidation - written arithmetic methods	add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate estimate and use inverse operations to check answers to a calculation multiply two-digit and three-digit numbers by a one-digit number using formal written layout	
37	Assessment week		
38	Consolidation - QLA focus sessions		
39		TRANSITION WEEK	