Key Stage 2 Maths Planning - Summer B

1. Cedar
2. Cherry
3. Oak

Cedar Class – Year 3

W/B	Focus Area	Year 2 Objectives	Year 3 Objectives	Year 4 objectives
1.6.15	Recap mental and written addition and subtraction strategies	solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens two two-digit numbers Adding three one-digit numbers show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	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.	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.
8.6.15	Multiplication- include problem solving- e.g. missing number problems.	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Calculate mathematical statements for	Count from 0 in multiples of 4, 8, 50 and 100 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Recall multiplication and division facts for multiplication tables up to 12 × 12 Use place value, known and derived facts to multiply and divide

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		multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	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 Estimate the answer to a calculation and use inverse operations to check answers 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	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.
15.6.15	Division	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and	Count from 0 in multiples of 4, 8, 50 and 100 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 Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing	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

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		multiplication and division facts, including problems in contexts.	number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	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.
22.6.15	Measurement- Time	Compare and sequence intervals of time. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. Know the number of minutes in an hour and the number of hours in a day.	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].	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.
29.6.15	Measurement-	Choose and use appropriate standard	measure, compare, add and subtract:	See year 3 objectives

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	volume and capacity	units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°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 =	lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	
6.6.15	Shape- Recognise and draw 2D and 3D shapes. Perimeter, horizontal and vertical lines, different triangles	Identify and 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. Identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid] . Compare and sort common 2-D and 3-D shapes and everyday objects.	Identify and 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 Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] Compare and sort common 2-D and 3-D shapes and everyday objects	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 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
13.6.15	Revise other areas where necessary Place value?			

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Cherry Class – Year 3 & 4

W/B	Focus Area	Year 3 Objectives	Year 4 Objectives
01.06.15	Multiplication	Count from 0 in multiples of 4, 8, 50 and 100 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 Estimate the answer to a calculation and use inverse operations to check answers 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	Order and compare numbers beyond 1000. Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). Round any number to the nearest 10, 100 or 1000.
08.06.15	Division	Count from 0 in multiples of 4, 8, 50 and 100 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 Estimate the answer to a calculation and use inverse operations to check answers 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	Multiply two-digit and three-digit numbers by a 0one-digit number using formal written layout. Recognise and use factor pairs and commutativity in mental calculations.

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15.06.15	Fractions	Count up and down in tenths Recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10 Recognise and use fractions as numbers: unit fractions and non unit fractions with small denominators Compare and order unit fractions, and fractions with the same denominators Recognise and show, using diagrams, equivalent fractions with small denominators Add and subtract fractions with the same denominator within one whole (e.g. + =) Solve problems that involve all of the above	Recognise and show, using diagrams, families of common equivalent fractions Recognise and write decimal equivalents of any number of tenths or hundredths Recognise and write decimal equivalents to ½, ¼ and ¾ Add and subtract fractions with the same denominator 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 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 Solve simple measure and money problems involving fractions and decimals to two decimal places
22.06.15	Time	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,	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.

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		noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year.	
29.06.15	Shape (to include triangles)	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 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 Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
06.07.15	Geometry	Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise) Order and arrange combinations of mathematical objects in patterns and sequences	Describe positions on a 2-D grid as co-ordinates 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
13.07.15	Angles and measures	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 acute and obtuse angles and compare and order angles up to two right angles by size.

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Oak Class – Year 4

W/B	Focus Area	Year 4 Objectives	Year 5 Objectives
01.06.15	Place value	Order and compare numbers beyond 1000. Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). Round any number to the nearest 10, 100 or 1000.	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. Solve number problems and practical problems that involve all of the above. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
08.06.15	Division	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. Recognise and use factor pairs and commutativity in mental calculations.	Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
15.06.15	Shape (to include triangles)	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 Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Identify acute and obtuse angles and	Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

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		compare and order angles up to two right angles by size.	
22.06.15	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.	Solve problems involving converting between units of time.
29.06.15	Statistics	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	
06.07.15	Volume and capacity		Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water].
13.07.15	Angles and measures	Identify acute and obtuse angles and compare and order angles up to two right angles by size.	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees (o).