Building Brighter Futures Together

Eastwood Community School's Maths Curriculum Number and Place Value

	A Pre-School mathematician :	A Nursery mathematician :	A Reception mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	• Combines objects like stacking cups. • Puts objects inside others and takes them out again. • Enjoys finger rhymes with numbers • Reacts to changes in amount in a group of up to 3 items. • Compares amounts by saying, "lots", "more", or "same". • Demonstrates counting like behaviour, such as making sounds, pointing or saying some numbers in sequence. • Count in everyday contexts, sometimes skipping numbers (1-2-3-5) • I can understand when an adult uses numbers in meaningful contexts. (*eg. Here is your other glove, now you have 2. Please give me one car.)* • Climbs and squeezes themselves into different types of spaces • Builds with a range of resources (blocks and boxes, indoors and outdoors) • Completes insert puzzles • Compares sizes using gestures and language (bigger/little/small/high/low/tall/heavy) • I can begin to organise and categorise objects. Eg. Putting all the teddies together or putting cars and bricks in a separate pile. • Notices patterns and arranges things in patterns	• Has fast recognition of up to 3 objects without having to count (subitising) • Recites numbers past 5 • Says one number for each item in order • Links numerals and amounts (showing the right number of objects to match the numeral) • Solves real world mathematical problems with numbers up to 5. • Compares quantities using language: 'more than' 'fewer than' I know and enjoy some number rhymes and songs off by heart (*eg. 2 Little Dickie Birds, 12345 Once I caught a Fish Alive, 5 Little Monkeys)* • I show an interest in numerals in the environment. • I can use some number names in play. • I can begin to represent numbers using fingers, marks on paper or pictures. • I know that not only objects, but anything can be counted, including steps, claps or jumps. • I am beginning to show an interest in number problems.	• Counts objects, actions and sounds • Can subitise up to 5 (fast recognition of a group of quantities without counting) • Links the number symbol with its cardinal number value • Counts beyond 10 • Counts verbally beyond 20 • I can recognise some larger numerals of personal significance • Compares numbers (groupings of items, including groups that are the same) • Understands the 'one more/one less' relationship between consecutive numbers. • Explores the composition of numbers to 10 including addition facts • Explores the composition of numbers to 10 including subtraction facts • Recalls number bonds to 5 • Recalls number bonds to 10 • Recalls double facts • I can record what I am doing using numbers and marks that I can interpret and explain
Subject Specific vocabulary relative to ARE	Lots More Same Give me Show me Bigger Little Small High Low Tall Heavy 1, 2, 3, 4, 5 Put Match Number, Counting, Count Sizes, Pattern Guess, Up, Down, Over Under, Next to, Inside, Same Different	All the vocabulary from the previous year plus: More than Fewer than Next How many? Order First Second Say Subitising Groups In front of Behind Continue (pattern) Sort Half 6-10	All the vocabulary from the previous year plus: One more One less Digit Order Exactly Biggest Equal to Beside Order Sequence Repeating pattern Compare Estimate Match Count on Count back Odd, Even Halving, Doubling First, Next Then, After that, Finally Collect, Gather10-20 and begin
Cultural Capital & Learning Beyond the Classroom opportunities	Shopping, using money in a context Using money in a cafe Outdoor walks – how many…? What numbers can you see?	Shopping Café Allotment – counting, comparing	Shopping Café Allotment – counting, comparing

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Eastwood Community School's

Maths Curriculum
Number and Place Value

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Count to and across 100, forward and backwards, beginning with 0 or 1 from any number.** **Count, read and write numbers to 100 in numerals.** **Say what is one more or one less than any number.** **Identify and represent numbers using objects and pictorial representations including the number line and use the language of: equal to, more than, less than (fewer), most least** **Read and write numbers from 1 to 20 in numerals and words.** **Count in multiples of 2, 5 and 10.**	**Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.** **Recognise the place value of each digit in a 2-digit number.** **Say what is ten more or ten less than any number.** **Identify, represent and estimate numbers using different representations, including the number line.** **Compare and order numbers from 0 up to 100; using < > = signs.** **Read and write numbers to at least 100 in numerals and in words.** **Use place value and number facts to solve problems.**	**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 3-digit number.** **Compare and order numbers up to 1,000.** **Identify, represent and estimate numbers using different representations.** **Read and write numbers to 1,000 in numerals and words.** **Solve number problems and practical problems using above.** **Round numbers to the nearest 10.** **Read Roman numerals to 10.**
Subject Specific vocabulary relative to ARE	count, read, write, forward, backward, numerals, more, less, multiples, 100, identify, represent	count, forward, backward, place value, more, less, 2 digit identify, represent, estimate, compare, order, read, write, numerals, words, place value. solve problems	count, multiples, recognise, compare, order, 3 digit identify, represent, estimate, round, read Roman Numerals number problems and practical problems
Cultural Capital & Learning Beyond the Classroom opportunities	• Perform a song • Make a treasure map • Seasonal numerical walks (acorns, leaves, sign posts, cars etc…) • Playground games/ number tracks / number activities – old games that grandparents played • Games from different cultures	• Play a board game • Make a song/ rap using the number • Walk to a local landmark/ field / place • Climb something taller than you. • Go find it – find something that is bigger, taller.	• Design and make a board game • Learn a new game • Baking/ cooking using weighing scales, measurements.

Maths Curriculum
Number and Place Value

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Count in multiples of 6, 7, 9, 25 and 1,000.** **Read and write numbers up to 100,000.** **Find 1,000 more or less than a given number.** **Count backwards through zero to include negative numbers.** **Recognise the place value of each digit in a 4-digit number.** **Order and compare numbers beyond 1,000.** **Identify, represent and estimate numbers using different representations.** **Round any number to the nearest 10, 100 or 1,000.** **Solve number and practical problems with the above (involving increasingly large numbers).** **Read Roman numerals to 100 and know that over time the numeral system changed to include the concept of zero and place value.**	**Read, write, order and compare numbers to at least 1,000,000.** **Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.** **Determine the value of each digit in numbers up to 1,000,000.** **Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.** **Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000.** **Solve number problems and practical problems with the above.** **Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.**	**Read, write, order and compare numbers up to10,000,000.** **Determine the value of each digit in numbers up to 10,000,000.** **Round any whole number to a required degree of accuracy.** **Use negative numbers in context, and calculate intervals across zero.** **Solve number problems and practical problems with the above.** **Read and write Roman numerals to 1,000 (M) and recognise years written in Roman numerals.**
Subject Specific vocabulary relative to ARE	multiples, read, write, more, less, backwards, negative numbers, place value, 4-digit number, order, compare, identify, represent and estimate representations, round practical problems Roman numerals	Read, write, order and compare, forwards or backwards, digit, determine the value, interpret negative numbers, count forwards and backwards, rounding, solve number problems and practical problems, read Roman numerals	Read, write, order and compare, determine the value round, negative numbers, number problems and practical problems, read and write Roman numerals
Cultural Capital & Learning Beyond the Classroom opportunities	Take part in a treasure hunt using QR codes (Ipads) Make a thermometer Create a song and actions for Roman Numerals (perform in front of an audience) Visit a museum Learn to play a new game of cards Write a script or video how to round number/ multiply and divide by 10,100,1000	Write in hieroglyphics Research about other numerical place value charts. Visit from a baker Visit from banker talking about negative numbers and overdrafts. Plan and cook a meal using Orienteering (Use maps) make a large scale model	Plan a tour around your local area Visit from bank discussing interest and budgeting. Use orienteering QR codes. Organise tea for parents/ carers (looking at costs, people, rounding figures)

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Eastwood Community School's Maths Curriculum
Addition and Subtraction

	A Pre-School mathematician :	A Nursery mathematician :	A Reception mathematician:
National curriculum & Focus curriculum learning objectives Eastwood specific objectives in response to audit of our learner's needs	• **Combines objects like stacking cups.** • **Puts objects inside others and takes them out again.** • **Reacts to changes in amount in a group of up to 3 items.**	• **I am beginning to show an interest in number problems.**	• **Explores the composition of numbers to 10 including addition facts** • **Explores the composition of numbers to 10 including subtraction facts** • **Recalls number bonds to 5** • **Recalls number bonds to 10** • **Recalls double facts** • **I can record what I am doing using numbers and marks that I can interpret and explain**
Subject specific vocabulary relative to ARE	Count Number How many? Get me More Put Sort Lots Same Build Taller Shorter Small Make, Full Empty Fill Pour Tip More Less Counting Share	All the vocabulary from the previous year plus: Less More Altogether Pattern How many Say Order Same as Big Medium Little Group Half full Half empty Collect Sort Measure Match Compare	All the vocabulary from the previous year plus: Forwards Backwards Last Fewer than One more than One less than Add Subtract Take away Tally Number bond Difference Doubles Double Equally Odd Even Compare Fewer Equal tp Altogether Each Subtract
Cultural Capital & Learning Beyond the Classroom opportunities	Shopping, using money in a context Using money in a cafe Outdoor walks – how many…? What numbers can you see?	Shopping Café Allotment – counting, comparing	Shopping Café Allotment – counting, comparing

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Eastwood Community School's Maths Curriculum Addition and Subtraction

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Read, write and interpret mathematical statements involving addition, subtraction and equals signs.** **Represent and use number bonds and related subtraction facts to 10 and 20.** **Add and subtract 1-digit and 2-digit numbers to 20, including zero.** **Solve one-step problems that involve addition and subtraction, using objects and pictorial representations.** **Solve missing number problems Eg 7 = ? – 9 (trio triangle).**	**Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.** **Solve problems with addition and subtraction applying my 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 and pictorial representations, and am beginning to do this mentally.** **Add and subtract numbers using concrete objects and pictorial representations, and begin to do this mentally (2-digit number and ones, 2-digit number and tens, two 2-digit numbers, three 1-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 missing number problems with two digit numbers (trio triangle).**	**Add and subtract mentally, including: A 3-digit number and ones, a 3-digit number and tens, a 3-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 operation to check answers.** ***Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.*** **Solve problems including missing numbers using the inverse operation with numbers up to 3 digits (trio triangle).** **Solve more complex addition and subtraction problems**
Subject specific vocabulary relative to ARE	plus, add, more, altogether, sum, total, take away, less than, fewer than, minus, leave, subtract, difference, Numbers to 20, represent, number bonds, step problems, pictorial representations, missing number problems, trio triangle,	Plus add more altogether sum total increase addition partition , take away, less than fewer than minus leave subtract, decrease difference Concrete objects , 2 digit, 2 one digit numbers pictorial representations, numbers, quantities and measures, mental and written methods, recall, use, commutative, inverse , missing number	add more altogether sum total increase addition partition Take away, less than, fewer than, minus leave, subtract, decrease difference Add and subtract, 3 digits, formal written method, column addition and subtraction, estimate, inverse, solve number problems, solve complex addition and subtraction problems
Cultural Capital & Learning Beyond the Classroom opportunities	Make some biscuits Role play shop Visit local supermarkets Seasonal Walks Local area – recognise numbers, counting items, solving problems Playground activities/ games	Visit local supermarkets – compare prices of different items Playground activities games Walk around local area – local park Bake a cake – use skills of measuring and quantities.	Saving Schemes – Visit from a banker Adding up costs of items Organising a class treat Adding up cost of snack. Budgeting for class treat/ school trip

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Eastwood Community School's

Maths Curriculum
Addition and Subtraction

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Add and subtract numbers with up to 4-digits using the formal written methods of columnar addition and subtraction.** **Add and subtract numbers mentally with numbers up to 4 digits.** **Estimate and use inverse operation to check answers in a calculation.** **Solve problems including missing numbers using the inverse operation with numbers up to 4 digits (trio triangle).** **Solve addition and subtraction 2-step problems in contexts, deciding which operations and methods to use and why.**	**Add and subtract whole numbers with more than 4 digits, including using formal written methods.** **Add and subtract numbers mentally with increasingly large numbers.** **Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.** **Solve problems including missing numbers using the inverse operation with numbers with more than 4 digits (trio triangle).** **Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.**	**Add and subtract whole numbers with more than 5 digits, including using formal written methods.** **Perform mental calculations, including with mixed operations and large numbers.** **Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.** **Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.** **Solve problems which involve the inverse operation.**
Subject Specific vocabulary relative to ARE	Add and subtract, up to 4 digits formal written methods, column addition and subtraction, estimate, inverse, mentally, solve problems, 2-step problems, deciding, operations and methods,	Add, subtract, more than 4 digit, mentally, increasingly large numbers rounding, inverse, multi-step, deciding, operations and methods, .	Add, subtract, more than 5-digit, mental calculations, mixed operations and large numbers, estimation, inverse operation, solve problems. .
Cultural Capital & Learning Beyond the Classroom opportunities	Create own game linked to addition and subtraction for other class Take part in a sporting event Participate in a class Mini Olympics – time, add, calculate differences.	Home finances – budgeting _ Interview parents Talk to Business Manager in school Visit from our KS2 Budget Holder – Interview (cost of pencils etc…)	School fayre – Invite parents, cost for entry, games Fundraiser (Dragon's Den, Junior Apprentice, Mathonnaire) Organise mini events, competitions between classes Design and produce a business ideas and pitch to investors. Plan to buy stock across KS2 with support from Budget Holder

Multiplication and Division

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays.** **Recall and use multiplication and division facts for the 2x tables.**	**Recall and use multiplication and division facts for the 2, 5 and 10x 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 multiplication and division facts, including problems in context.**	**Recall and use multiplication and division facts for the 3, 4 and 8x tables.** **Write and calculate mathematical statements for multiplication and division using the multiplication tables, including for 2-digit numbers, using mental and progressing to formal written methods.** Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. **Solve missing number problems using the inverse operation (trio triangle).** Solve integer scaling problems using multiplication and division. Solve correspondence problems in which n objects are connected to m objects.
Subject specific vocabulary relative to ARE	Multiplication - lots of, groups of Division - share, half, halve, left over, equally solve multiplication division, concrete objects, pictorial representations, arrays, recall multiplication and division facts, 2x table	Multiplication - lots of, groups of, times, multiply, multiplied by, multiple of, twice, double, repeated, arrays Division - share, half, halve, left over, equally, share equally, divide, divided, divided by, divided into, group in pairs Even, odd, mathematical statements, 2,5,10x tables, commutative, repeated addition, mental methods, problems in context.	Multiplication - groups of, lots of, multiply, multiplied, multiplied by, twice, double, repeated, partition, product Division - remainder, left over, share, half, halve, divided, divided by, divided into 3,4,8x tables, formal written methods, inverse operations, integer scaling problems, correspondence problems n connected to m.
Cultural Capital & Learning Beyond the Classroom opportunities	Board games Male a 2x table rap or song, perform it Concrete objects from nature walk Physical/ human array Trip to supermarket Class party/picnin event – sharing food	Trip to supermarket 4 x 5 p = 20p School trip/ adventure (shells on the beach) Allotment vegetable patch – plan a bed in an array/ tray Learn or make own raps for 2,5,10 x tables. Make a venn/ carooll diagram	Create a game on PPT or Kahoot Use SCRATCH to create a new game to learn times tables Make own physical trio triangle Use money / shop for scaling up down

Maths Curriculum
Multiplication and Division

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Recall multiplication and division facts up to 12x12.** **Multiply three numbers together.** **Recognise and use factor pairs (and commutativity) in mental calculations.** **Multiply 2-digit numbers by a 1-digit number using formal written layout.** **Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.** **Solve missing number problems using the inverse operation with 2 digit numbers (trio triangle).** **Solve problems using the distributive law to multiply 2-digit numbers by 1-digit.** Solve integer scaling problems using multiplication and division. Solve complex correspondence problems where n objects are connected to m objects.	**Identify multiples and factors, including finding all factor pairs and common factor pairs.** **Use the vocabulary of prime numbers, prime factors and composite numbers and establish whether a number up to 100 is prime and recall prime numbers up to 19.** **Multiply numbers up to 4 digits by a 1-digit (or 2-digit number) using a formal written method.** **Multiply numbers up to 4 digits by a (1-digit or) 2-digit number using a formal written method.** **Multiply and divide numbers mentally drawing on known facts and the inverse operation.** **Divide numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders.** **Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates.** **Solve missing number problems using the inverse operation with numbers up to four digits (trio triangle).** **Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.** **Recognise and use square numbers and cube numbers, and the notation for squared and cubed.** **Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.** **Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.**	**Identify common factors, common multiples and prime numbers.** **Multiply multi-digit numbers up to 4 digits by a 2 digit whole number using the formal written method of long multiplication.** **Divide numbers up to 4 digits by a 2 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 2 digit number using the formal written method of short division where appropriate.** **Solve problems involving addition, subtraction, multiplication and division.** **Solve missing number problems using the inverse operation with numbers beyond four digit numbers (trio triangle).** **Use my knowledge of the order of operations to carry out calculations involving the four operations.**
Subject specific vocabulary relative to ARE	**Multiplication : groups of, lots of, multiply, multiplied, multiplied by, twice, double,** **repeated, partition, product, multiple, associative law** **Division remainder, left over, share, half, halve, divided, divided by, divided into** 12 x 12	Multiples, factors, factor pairs, common factors pairs, prime numbers, prime factors, composite numbers, multiply 4 digit by 1 or 2 sigit number short multiplication, divide 4 digit by 1 digit, short division, remainders, missing number problems, inverse, multiply and divide by 10,100,1000, square numbers, cube numbers	Common factors, common multiples, prime numbers, multi-digit up to 4 digit by 2 digit, long multiplication, long division, remainders, fractions, decimals, inverse, problems.

	Multiplication and division facts, factor pairs, commutativity, 2 digit by 1 digit, formal written methods, missing number problems Integer scaling problems, complex correspondence problems,		
Cultural Capital & Learning Beyond the Classroom opportunities	Plan and calculate amount of food, cost for food for sleepover and Year 4 residential. Visit from restaurant worker – (table layout, number of people, cost) Visit to the local deli to calculate cost of food.	Design and build a rocket (to scale) Local engineer to come and speak about scaling up/ down Design and make a space buggy Make a large scale model Plan and cook a meal for a family of 2,4,6 etc… Perform a presentation/ rap using key vocabulary	Rations for War and Conflict Make a scaled model of the Titanic First class and class menu – cost prices, compare Visit to Eden Camp Knit a scarf for WW2 soldier (scaling up, costing, measuring) Organise party entrepreneurial event

Fractions/ Decimals and Percentages

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	**Recognise, find and name a half of an object, shape or quantity.** **Recognise, find and name a quarter of an object, shape or quantity.**	**Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.** Write simple fractions (eg ½ of 6 = 3) and recognise the equivalence of 2/4 and 1/2.	Count up and down in tenths. **Recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10.** Recognise and can 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. Compare and order unit fractions and fractions with the same denominator. **Find the effect of multiplying a 1-digit or 2-digit number by 10 and 100.**
Subject specific vocabulary relative to ARE	recognise, find, name ½, ¼ object, shape and quantity	recognise, find, name 1/3 , ¼ 2/4 ¾ length, set of objects. shape and quantity simple fraction, recognise equivalence.	Tenths, unit fractions, non-unit fractions, small denominators, equivalent fractions (diagrams), add and subtract same denominator, compare, order, multiply and divide by 10 and 100 , shifting.
Cultural Capital & Learning Beyond the Classroom opportunities	Practical tasks – food party Treasure Hunt	Shape hunt Art - leaf rubbings (half on an object) Baking – (finding ½ of ingredients, ,measuring)	Baking – (finding ½ of ingredients, ,measuring) DT (Food Technology)

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Eastwood Community School's Maths Curriculum

Fractions/ Decimals and Percentages

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	Recognise and show families of common equivalent fractions. Count up and down in hundredths. Recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. Solve problems involving increasingly harder factions and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Add and subtract factions within the same denominator. Recognise and write decimal equivalents of any number of tenths or hundredths, 1/4, 1/2 and ¾. **Find fractions (1/2, ¼ and ¾) of a given amount.** **Find the effect of dividing a 1-digit or 2-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 2 decimal places. Solve simple measure & money problems involving fractions & decimals to 2 decimal places.	Compare and order fractions whose denominators are multiples of the same number. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper fractions and convert from one form to the other. **Find fractions of an amount.** Write mathematical statements >1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions & mixed numbers by whole numbers, supported by materials & diagrams. Read and write decimal numbers as fractions. Recognise & can use thousandths and relate them to tenths, hundredths and decimal equivalents. **Round decimals with 2 decimal places to the nearest whole number and 1 decimal place.** **Read, write, order and compare numbers with up to 3 decimal places.** Solve problems involving numbers up to 3 decimal places. Recognise the percent symbol and understand that percent relates to 'number parts per hundred'. Write percentages as a fraction with denominator hundred, and as a decimal. Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator or a multiple of 10 or 25.	Use common factors to simplify fractions and use common multiples to express fractions in the same denomination. Compare and order fractions. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in the simplest form. Divide proper fractions by whole numbers. Associate a fraction with division to calculate decimal fractions equivalents for a simple fraction. **Identify the value of each digit to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.** **Multiply 1-digit numbers with up to 2 decimal places by whole numbers.** Use written division methods in cases where the answer has up to 2 decimal places. Round decimals with up to 3 decimal places to the required degree of accuracy. Solve problems which require answers to be rounded to specified degrees of accuracy. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Subject Specific vocabulary relative to ARE	Common equivalent fractions, count hundredth, add and subtract within same denominator, find fractions ½, ¼ and ¾ of an amount, divide by 1 2 digit by 10,100. Round decimals, compare numbers by 2dp, money and measure problems,	Compare, order fractions, identify name, write equivalent fractions, mixed and improper fractions, find fractions of an amount, add, subtract, multiply and divide fractions, round decimals, read write order and compare decimals up to 3dp, percent symbol, write percentages as a fraction over 100 and as a decimal, solve problems for ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator or a multiple of 10 or 25.	Common factor, simplify fraction, common multiples, Compare order fractions, add subtract , multiply and divide proper fractions, multiply and divide by 10,100,1000, answers to 3dp, multiply 1 digit by 2 digit, round decimals up to 3dp, recall and use equivalence between fractions, decimals and percentages.
Cultural Capital & Learning Beyond the Classroom opportunities	Treasure Hunt Mini Races – timing how long it takes, distances. Environmental tally chart cars, leaves – How many out of / percentages etc… Explain rounding calculation policy – video and present to other Year 4 class / new child in school	Spotting and sharing good discounts – local supermarket Visit local shops in town and spot percentage signs Sales person come in to talk about discounts, Kitchen staff (Mel) to share costing of food for everyone and set a task for children to complete	Planning a trip , Calculating VAT Organising graduation – food, Visit from banker (sales, interest rates etc) Fundraising project

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Measurement

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	Compare, describe and solve practical problems for lengths and heights. Compare, describe and solve practical problems for mass/weight. Compare, describe and solve practical problems for capacity and volume. **Compare, describe and solve practical problems for time.** Measure and begin to record lengths, heights, mass/weight, capacity and volume. **Recognise and know the value of different denominations of coins and notes.** **Tell the time to the hour and to half past the hour and draw hands on a clock face to show these times.** **Sequence events in chronological order using language.** **Recognise and use language relating to dates, including days, weeks, months and years.**	Choose and use standard units to estimate and measure mass in kg and g using scales, temperature. in °C using thermometers and capacity in l and ml using equipment. Choose and use standard units to estimate and measure length/height in any direction in m and cm using rulers. Compare and order lengths, mass, volume/capacity and record the results using < > and =. **Recognise and use symbols for £ and p and combine amounts to make a particular value.** **Find different combinations of coins that equal the same amount of money.** **Solve simple problems in a practical context involving addition and subtraction of money of the same units, including giving change.** **Compare and sequence intervals of time.** **Tell and write the time to five minutes 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.**	Compare lengths using m, cm &mm, mass using kg & g, volume/capacity using l & ml. Measure lengths using m, cm & mm, mass using kg & g and volume/capacity using l & ml. Add and subtract lengths using m, cm & mm, mass using kg & g and volume/capacity using l & ml. Measure the perimeter of simple 2D shapes. Add and subtract amounts of money to give change, using both £ and p in a practical context. **Tell and write the time from an analogue clock (12 hour clock), 24 hour clock and Roman numerals).** Estimate and read time with increasing accuracy to the nearest minute. Rand compare time in terms of seconds, minutes and hours. **Use the following vocabulary: o'clock, am, pm, morning, afternoon, noon & midnight.** **Know the number of seconds in a minute and the number of days in each month, year and leap year.** **Compare the duration of events.**
Subject Specific vocabulary relative to ARE	Compare, describe, solve, time, measure, length, heights, mass/weight, capacity, volume, coins, notes, time , hour, half past, sequence, chronological, dates, days, weeks, months, years,	Estimate, measure, mass g/kg, length, height m and cm, compare order, capacity, volume, £ symbol and p, combine, value, combinations, change, addition and subtraction, time, five minutes, minutes, hour, hours in day, sequence, intervals, time.	**Compare lengths m, cm &mm, mass, kg & g, volume/capacity l & ml, measure, add and subtract, perimeter 2d shapes, money,** **Tell , write analogue clock (12 hour clock), 24 hour clock Roman numerals, estimate, read time, read, compare time seconds, minutes and hours, o'clock, am, pm, morning, afternoon, noon & midnight, seconds in a minute days in each month, year and leap year, compare the duration of events.**
Cultural Capital & Learning Beyond the Classroom opportunities	Baking a cake Visit from local baker Making a family tree Organising a birthday party Organising a trip LOTC – measure different objects – natural resources	Visit from local gardener or Lesley take children on a trip yo the allotment – perimeter of difference sections in the allotments. Measure temperature inside classroom and outside – keep record linked to Science plants	Visit from Hanover carpets to measure carpet in classroom. Visit from a local decorator

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Eastwood Community School's
Maths Curriculum
Measurement

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	Convert between different units of measurements Measure and calculate the perimeter of a rectilinear figure in cm and m. Find the area of rectilinear shapes by counting squares. **Compare different measures, including money in £ and p.** **Estimate different measures, including money in £ and p.** **Calculate different measures including money in £ and p.** **Read, write and convert time between analogue and digital 12 hour clocks.** **Read, write and convert time between analogue and digital 24 hour clocks.** **Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.**	Convert between different units of metric measure. Understand and use approximate equivalences between metric units and common imperial units. Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles (incl squares), and including using standard units (cm^2 and cm^3) to estimate the area of irregular shapes. Estimate volume and capacity, **Solve problems involving converting between units of time (including use of timetables).** **Use all four operations to solve problems involving money using decimals, including scaling.**	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 of up to 3 decimal places. Convert between miles and kilometres Calculate the area of composite and irregular shapes using the formulas for calculating the area of rectangles and triangles. Recognise that shapes with the same areas can have different perimeters and vice versa. Calculate the area of parallelograms and triangles. Recognise when it is possible to use the formulae for the area of shapes. **Calculate, estimate and compare volume of cubes and cuboids, using standard units.** Recognise when it is possible to use the formulae for the volume of shapes. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.
Subject Specific vocabulary relative to ARE	**Convert units of measurements, measure, calculate perimeter, rectilinear figure, cm and m, area of rectilinear shapes, compare money in £ and p, estimate different measures, read, write and convert time, analogue and digital 12 hour clocks, solve problems, converting hours to minutes; minutes to seconds; years to months; weeks to days.**	**Convert, metric measure, approximate equivalences metric units and common imperial units, calculate perimeter of composite calculate and compare the area of rectangles, standard units (cm^2 and cm^3) area of irregular shapes, volume, capacity, converting time (including use of timetables), four operations,**	**Read, write, convert, converting measurements of length, mass, volume and time, convert miles and kilometres, calculate area composite and irregular shapes, formula, parallelograms and triangles., calculate, estimate, compare volume of cubes and cuboids, using standard units.**
Cultural Capital & Learning Beyond the Classroom opportunities	Create a sculpture trail. Create a time machine Visit to local supermarket Trip to different parks/ fields – measurement link. Bus station visit	Field trip – linked to perimeter Bus timetable planning a visit Using train timetable Haworth steam train visit	Timetables – planning visits for trips Visit from local businesses (conversion) Visit from a bus driver

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Eastwood Community School's Maths Curriculum
Geometry

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:

National curriculum & Focus curriculum learning objectives Eastwood specific objectives in response to audit of our learner's needs	Recognise and can name common 2D shapes (rectangles, including squares, circles and triangles. Recognise and can name common 3D shapes (cuboids, including cubes, pyramids and spheres. **Describe position, directions and movement, including half, quarter and three-quarter turns.**	Identify and describe the properties of 2D shapes, including the number of sides and line of symmetry in a vertical line and the properties of 3D shapes incl. the number of edges, vertices and faces. Identify 2D shapes on the surface of 3D shapes. Compare and sort common 2D shapes and everyday objects and common 3D shapes and everyday objects. Order and arrange combinations of mathematical objects in patterns and sequences. **Use 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 anti clockwise).**	Draw 2D shapes and make 3D shapes using modelling materials. Recognise 3D shapes in different orientations and describe them. Recognise that angles are a property of shape or a description of a turn. Identify right angles. Recognise that two right angles make a half-turn & three make a three quarter turn. Identify whether angles are greater than or less than a right angle. Identify horizontal, vertical lines and pairs of perpendicular and parallel lines.
Subject specific vocabulary relative to ARE	Recognise, name common 2D shapes, rectangles, squares, circles, triangles, common 3D shapes, cuboids, cubes, pyramids and spheres, describe position, directions and movement, half, quarter and three-quarter turns.	Identify, describe, properties, 2D shapes, sides and line of symmetry, vertical line, properties of 3D shapes, edges, vertices and faces, surface, compare, sort common 2D shapes, order, arrange combinations, patterns and sequences, position, direction, movement, rotation turn, right angles, quarter, half and three-quarter turns, clockwise and anti-clockwise	Draw, make, identify right angles, recognise half-turn, right angle, horizontal, vertical lines, pairs of perpendicular and parallel lines.
Cultural Capital & Learning Beyond the Classroom opportunities	Make 3D models from recycled materials (DT) Shape Hunt Treasure maps / reading a map/ map of local area Linked to PE (Sport) Gymnastics creating different movements/ shapes (group work) Beebots Race track	Stained Glass windows Shape sort (common materials) Collect a range of 3D items Make models of Tudor Houses Printing symmetrical patterns Rangoli Patterns (Diwali – festivals)	Use clay, salt dough, make models of dinosaurs. Train Tracks Local area walk

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Eastwood Community School's Maths Curriculum Geometry

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood specific objectives in response to audit of our learner's needs	Compare and classify geometric shapes 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 2D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry. Describe positions on a 2D 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.	Identify 3D shapes, including cubes and other cuboids, from 2D representations. Know angles are measured in degrees. Identify, estimate and compare acute, obtuse and reflex angles. Draw given angles and measure them in degrees. Identify angles at a point and one whole turn. Identify angles at a point on a straight line and ½ a turn. Identify other multiples of 90°. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular & irregular polygons based on reasoning about equal sides & angles. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Compare and classify geometric shapes based on the properties and sizes. Describe simple 3D shapes. Draw 2D shapes given dimensions and angles. Recognise and build simple 3D shapes, including making nets. Find unknown angles in any triangles, quadrilaterals and regular polygons. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. Solve problems involving finding the missing angles when lines meet. Illustrate and name parts of circles, including radius, diameter and circumference. Know the diameter is twice the radius. Draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes. Describe positions on the full co-ordinate grid (all four quadrants).
Subject specific vocabulary relative to ARE	Compare, classify geometric shapes, acute, obtuse angles, symmetry, coordinates quadrant, positions, movements, translations, left/right and up/down, plot specified points and polygon.	cubes and other cuboids, angles, degrees estimate and compare acute, obtuse and reflex angles, measure, whole turn, straight line, regular & irregular polygons, reflection, translation.	Compare, classify geometric shapes 3D, dimensions, angles, recognise, nets. unknown angles, triangles, quadrilaterals and regular polygons, angles, point, straight line, vertically opposite, missing angles, illustrate, name, circles, including radius, diameter and circumference, diameter, radius, translate simple shapes, reflecr quadrants.
Cultural Capital & Learning Beyond the Classroom opportunities	Game of battleships – learning the rules of the game Roblox building of materials. Race track	Angle hunt	Angle hunt / Treasure hunt Battleships

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Eastwood Community School's Maths Curriculum Statistics

	A Year 1 mathematician :	A Year 2 mathematician :	A Year 3 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood specific objectives in response to audit of our learner's needs	Use a tally chart to record data.	Interpret and construct simple pictograms, tally charts and block diagrams. Interpret and construct simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.	Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables.
Subject specific vocabulary relative to ARE	Tally hart, record data Maths in Science, DT, ART	Interpret, construct simple pictograms, tally charts, block diagrams, tables, quantity, totalling and comparing categorical data.	Interpret, present data, bar charts, pictograms, tables, one-step and two-step problems, scaled bar charts, pictograms and tables.
Cultural Capital & Learning Beyond the Classroom opportunities	Collect minibeasts Tally chart local transport Litter picking Recycling materials	Linked to community and care projects – litter collected in classes Which class collected most pen lids etc…?	Plan a survey, collect data and analyse data

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Eastwood Community School's Maths Curriculum Statistics

	A Year 4 mathematician :	A Year 5 mathematician :	A Year 6 mathematician:
National curriculum & Focus curriculum learning objectives Eastwood Specific objectives in response to audit of our learner's needs	Explain the difference between discrete and continuous data. 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.	Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables, including timetables.	Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average.
Subject Specific vocabulary relative to ARE	discrete and continuous data, bar charts, time graphs. comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Solve comparison, sum and difference, line graph. complete, read and interpret information in tables, timetables.	Interpret, construct pie charts and line graphs and use these to solve problems, calculate and interpret the mean as an average.
Cultural Capital & Learning Beyond the Classroom opportunities	Linked to community and care projects *Collect data and analyse* *Use time graphs – PE link*	Linked to community and care projects *Use class timetable , bus, train timetable* *Plan a journey for class.*	Plan a survey, collect data and analyse data Science –experiments and calculating mean