Long Term Mapping
KS3 MATHEMATICS

		WEEKLY CURRICULUM COVERAGE					
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Autumn	1	NUMBER *Place Value*			NUMBER *Addition*		
	2	NUMBER *Subtraction*			NUMBER *Multiplication*		
Spring	1	NUMBER *Division*			MEASUREMENT *Money*		STATISTICS
	2	MEASUREMENT *Length & Perimeter*			NUMBER *Fractions*		
Summer	1	*NUMBER* *Fractions*			*MEASUREMENT* *Time*		
	2	*GEOMETRY* *Properties of Shapes*			MEASUREMENT *Mass & Capacity*		

Introduction Song	Everybody Get Up! (The 1-20 edition) counting 1 to 20: https://www.youtube.com/watch?v=BWGy2aPm5g4
OR	Squishy Dice
Guidance	*The suggested activities in this mapping should be adapted to meet the needs of each cohort. The word in **bold** is the skill which should be focussed on.*

AUTUMN 1 MEDIUM-TERM PLANNING

Aspiration for Life	Differentiated, aspirational targets dependent on pupil needs.	***Language for Life***	Explicit teaching/ exposure to new and know vocabulary.	***Learning for Life***	Opportunities to develop cross curricular skills e.g. drama

KS3 MATHEMATICS AUTUMN 1

INTENT

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NUMBER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
PLACE VALUE			**ADDITION**		
Partitioning 1s, 10s and 100s	**Order** numbers up to 1000, including numerals and words.	**Compare** numbers to 1000 including numerals and words.	**Adding** 1/2/3-digit numbers not crossing tens or hundreds.	**Adding** 1/2/3-digit numbers including crossing ten and hundreds.	**Solving** problems, including using number facts, missing number problems and place value.
ORAL/MENTAL STARTERS ***(Topic from the previous week is repeated[1])***					
Partition these numbers… Which number have I partitioned?	Partition these numbers… Which number have I partitioned?	Order these numbers/weights etc. Line up in order of…	Which scale has the most/least? Who is the oldest/tallest etc.?	Find your number bond partner. Number Jenga	Find your number bond partner. Addition catch
VOCABULARY					
Partition Ones, tens, hundreds Place value Value	Counting Order Same as/equal Greater than Less than	Bigger than Smaller than Same as/equal Comparing Greater than Less than	Addition Sum of Digits Hundreds, tens and ones All together	Addition Sum of Digits Hundreds, tens and ones All together	Number facts Addition Place value Solve Number facts Number bonds
IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION					
300 + 10 + 3 = 313 Dienes/base ten Place value grids □ = 100, / = 10, ● = 1	Number lines Clothes lines numbers Number cubes Dots underneath numbers	Comparative weighing scales Dienes Number lines Counters	Counters Cubes Dots under numbers	Abacus Base ten Numicons Counting songs	Numicons Cubes Counters Base ten/ dienes
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
How many different ways can the number X be partitioned? Write this number in numerals, 2 tens and 4 ones. Which number is represented by…?	Put these shopping items into the cheapest to the most expensive. Order everyone's birthday. Ordering the heaviest to lightest objects.	Who has the most money? Which item is the cheapest? I have ten muffins; which container should I use? Which cake needs the most flour?	Count the cups of flour you need to bake a cake. Adding pennies. Laying a table	Counting how many of X you need at a supermarket. Adding bigger denominations of money. Group one has ten people, and group two has 45 people, how many people in total?	If I have ten apples and my friends take three, how many do I left? 3+? =10, find the missing number. I have 4 pears; my friend has ten more than me. How many pears does my friend have?

AUTUMN 2 MEDIUM-TERM PLANNING

Aspiration for Life	Differentiated, aspirational targets dependent on pupil needs.	Language for Life	Explicit teaching/ exposure to new and know vocabulary.	Learning for Life	Opportunities to develop cross curricular skills e.g. drama

KS3 MATHEMATICS AUTUMN 2

INTENT

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NUMBER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
SUBTRACTION			**MULTIPLICATION**		
Subtracting 1/2/3-digit numbers, not crossing tens or hundreds.	**Subtracting** 1/2/3-digit numbers including crossing ten and hundreds.	**Solving** problems, including using number facts, missing number problems, place value and inverse relationships.	**Multiplying** by 50 and 100 starting at 0.	**Multiplying** by 3,4 and 8 starting at 0.	**Solving** problems, including using multiplication statements and missing numbers.
ORAL/MENTAL STARTERS *(Topic from the previous week is repeated[1])*					
Subtraction dice Missing number games Number Jenga	Subtraction catch Find your partner Flash cards	Backwards snakes and ladders Subtraction flash cards	Find the missing number What number am I thinking of…	What is 50 times x. Chanting the multiplication table	Draw the array of… Multiplication rock, paper scissors.
VOCABULARY					
Less than Take away Subtract Minus Difference between	Less than Take away Subtract Minus Difference between	Number facts Subtract Solve Number facts Number bonds	Multiply Times Group of	Multiply Times Group of	Multiply Times Group of Number statements Solve
IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION					
Cubes Counters Dienes/base ten Dots under numbers Comprehensive weighing scales Bricks	Cubes Counters Dienes/base ten Dots under numbers Comprehensive weighting scales Sensory blocks	Numicons Cubes Counters Base ten/ dienes Counters	Number songs 50+50+50=150 Place value Waldolf multiplication flowers Arrays	Number songs 3+3+3= 9 Place value Waldolf multiplication flowers Arrays	Number songs 3+3+3= 9 Place value Waldolf multiplication flowers Arrays
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
Taking away pennies to get change If you give away X amount of sweets, how many do you have left? I had 9p, I bought something for 7p, how much money do I have left?	Calculating bills If you give away X amount of sweets, how many do you have left? How much flour do you have left? I had 100 people at my party, 54 have gone home, how many people are left?	Find the inverse of X. How many items can you buy from the shop with £X? Finding the missing number. Number triangle. You have £x amount of money, what kind of holiday can you book?	Find the missing number. How many seats will I need for 4 groups of 50 people? Four friends have £1 each, how many pennies do they have	Three pencils cost 4 pence each, how much will all the pencils costs? I have three groups of 50 students, how many children all together? Find the missing number. My model is 1cm tall, I need it to be 5 times taller, how tall will it be?	Multiplication triangles. What number do I need to multiply to x to get y? What two numbers make x? I have four boxes of 100 pencils, how many pencils do I have in total?

SPRING 1 MEDIUM-TERM PLANNING

Aspiration for Life	Differentiated, aspirational targets dependent on pupil needs.	***Language for Life***	Explicit teaching/ exposure to new and know vocabulary.	***Learning for Life***	Opportunities to develop cross curricular skills e.g. drama

KS3 MATHEMATICS SPRING 1

INTENT

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NUMBER			MEASUREMENT		STATISTICS
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
DIVISION			**MONEY**		**STATISTICS**
Dividing 2-digit numbers by a 1-digit number. Using known multiplication tables.		**Solving** problems, including using division statements, missing numbers and inverse relationships.	**Converting** money.	**Adding and subtracting** money including giving change.	**Interpret** data, using bar charts, pictograms and tables.
ORAL/MENTAL STARTERS ***(Topic from the previous week is repeated[1])***					
Division statements for all learnt multiplication tables.		Division bingo.	If I am 150cm, how tall would I be if I was a fifth of my height?	What is 450p in pounds?	How many items can I buy with ten pounds?
VOCABULARY					
Division/divide How many times… Goes into… Equal		Division How many times… Goes into…	All denominations of currency (£ and p). Converting Value	All denominations of currency (£ and p). Value Change	Interpret Data Pictograms/charts/tables Axis
IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION					
Division songs Waldolf division flowers Sharing objects Books such as: Divide and ride or bean thirteen Covering LEGO studs. Counters/bricks		Waldolf division flowers Sharing objects Books such as: Divide and ride or bean thirteen Covering LEGO studs. Counters/bricks Battenberg cake	100p = £1 £1 = 100p Real money £ and p Dienes Arrays	100p = £1 £1 = 100p Real money £ and p Dienes Arrays	Human pictogram Tally marking Chocolate bar, bar charts LEGOS
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
I have ten cubes and 5 friends; how may cubes will each friend get? Share these cubes between all your friends. Ben says that 2 x 2 x 2 = the same as 2 x 4. Is he right? How do you know? Sort these objects into even groups. This recipe serves 500 people. I need to feed just 5. What are the quantities of ingredients do I need?		Find the inverse of… 10 divided by ? = 5, what is the missing number? Tom said that 2+2+2+2 is the same as 80 divided by 10, is he right?	Convert £4 into pence. How many 20p make £1. If have 450p, how many pounds and pence do I have? Laura says 50p+50p+50p is equal to two pounds, is she right? I get twenty pounds in pocket money, and I spend 675 pence, how much money do I have left?	My shopping costs £7.80, and I pay with a ten pound note, I get a 20p and a £1 coin in change, is this right? I have one 50p piece, two £1 coins and a penny. How much money do I have in pounds? My friend has 100p and I have 550p, how much money do we all together in pound and pence?	Reading data from a sheet. Which group is the largest (when faced with a bar chart or pictogram)? How many blue cars are there in the car park? Represent this in a pictogram Mark a tally every time I say…

SPRING 2 MEDIUM-TERM PLANNING

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KS3 MATHEMATICS SPRING 2

INTENT

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MEASUREMENT			NUMBER		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
LENGTH & PERIMETER			FRACTIONS		
Measuring lengths, including comparing them.	**Measuring** equivalent lengths.	**Calculating** perimeter	**Counting** in tenths, including tenths as decimals.	**Ordering** fractions.	Finding **fractions** of set objects.
ORAL/MENTAL STARTERS *(Topic from the previous week is repeated[1])*					
Measure your height and order yourself.	Who can throw the furthest?	Convert these measure into…	Find the perimeter of this room and convert into m.	Counting in tenths as a group.	Order these fractions…
VOCABULARY					
Centimetre, (cm) Metres (m) Millimetre (mm) Length	Centimetre, (cm) Metres (m) Millimetre (mm) Length Equivalent	Centimetre, (cm) Metres (m) Millimetre (mm) Length Perimeter	Tenths 0.1, 0.2 etc Place value Decimals	Fraction Equal part Tenth, half, quarter, thirds, whole	Fraction Equal part Tenth, half, quarter, thirds, whole Sharing equally
IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION					
Metre sticks/rulers Tape measures Measuring wheels	Metre sticks/rulers Tape measures Measuring wheels 10mm = 1cm 100cm = 1m	Metre sticks/rulers Tape measures Measuring wheels 10mm = 1cm 100cm = 1m	Dienes cubes Fraction shapes Cubes Tenths = 1 whole split into ten equal parts. Pictorial examples under decimals.	Battenberg cake Fraction shapes Decimals shown under the decimals	Battenberg cake Fraction shapes Decimals shown under the decimals Squared paper Base ten/ dienes
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
Which rope is the longest? Who is tallest? Order these ropes by length? I have a stick which is 150cm, and a stick which is 1m, which is longest? How much wrapping paper do I need? How many 2cm boxes can I fit into my 8cm long box?	What is 200mm in cm? Which is longer, 1m or 100mm? How many metres to X? How many millimetres in a metre? 200cm + ? = 1m	Find the missing length of the square/ shape (regular shapes). Which football team has the biggest pitch? Which classroom has the biggest perimeter? How many fence panels will I need? Which is bigger, a square with a side of 1000cm, or a square with a side of 2m? Find the perimeter of this irregular shape.	Order these tenths. I have a cake, I give two tenths to my friend, how many tenths do I have left? If you split one pound between ten people, how much money would each person have?	Order these fractions. Which is bigger, two thirds or one half? Sam told me that two halves is the same as one whole, is he right?	Find one half of this set of cubes. I have one pizza and 4 friends coming over, how should I cut my pizza? My friend said two thirds of 3 pounds is bigger than one half of 3 pounds, is she right? Cut this shape into x.

SUMMER 1 MEDIUM-TERM PLANNING

Aspiration for Life	Differentiated, aspirational targets dependent on pupil needs.	***Language for Life***	Explicit teaching/ exposure to new and know vocabulary.
Learning for Life	Opportunities to develop cross curricular skills e.g. drama		

KS3 MATHEMATICS SUMMER 1

INTENT

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NUMBER			MEASUREMENT		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
FRACTIONS			**TIME**		
Comparing Fractions	**Adding** fractions	**Subtracting** fractions	Months in a year, days in a week and hours in a day.	Telling time to 5 minutes, including roman numerals.	**Recording** and **comparing** durations of events.
ORAL/MENTAL STARTERS ***(Topic from the previous week is repeated[1])***					
Find one half of x.	Which fraction is the largest and which is the smallest?	Add these two fractions together.	Subtract these fractions.	With your partner, order the months of the year.	What time is right now, to the nearest five minutes.
VOCABULARY					
Comparing Fraction Denominator Numerator Ordering	Adding All together Fraction Denominator /numerator	Fraction Denominator /numerator Taking away Subtracting	Days of the week Months of the year Season Hours	Roman numerals Clock Big hand and little hand Half past quarter to, past and on the hour.	Recording Comparing Events Time language
IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION					
Visual representations of the fractions, using various shapes Decimals under each fraction Squared paper Base ten/ dienes LEGO blocks	Visual representations of the fractions, using various shapes Decimals under each fraction Squared paper Base ten/ dienes LEGO blocks Common denominator	Visual representations of the fractions, using various shapes Decimals under each fraction Squared paper Base ten/ dienes LEGO blocks Common denominator	Month names Day names Visual reminders. Calendars Timetables Diaries	Big clocks The four clock method Timetables Timelines Stopwatches Egg timers Sand timers Am/pm	Big clocks The four clock method Timetables Stopwatches Egg timers Sand timers Seconds, minutes,
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
Who has the most slices of cake? My mum bought a new shirt with one third off £21, I bought a shirt with one half off £22. Who got the biggest discount? Order these fractions from smallest to largest.	My friend has ¼ of cake, and I have ¾, how much cake do we have all together? A sale says I get ½ off a dress, there's an additional ¼ off, how much discount d I get all together? Add these fractions.	I have one whole cake, then my friend takes ¼ and my other friend takes a half. How much of the cake do I have left? Subtract these fractions.	How many months older am I than my brother? How many days until… How many hours in a week? My friend says its only five weeks until Christmas, is he right? How many days do we have in school?	What time do we go the school? Tom was meant to be here at 3 o clock, he is 20 minutes late, what time did he arrive? You start work at 9 o clock; it takes you 40 minutes to travel to work. What time should you leave?	How long do you think this sand timer will last? Who can do exercise for the longest? What takes longer, boiling an egg or running 1500m.

SUMMER 2 MEDIUM-TERM PLANNING

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KS3 MATHEMATICS SUMMER 2

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GEOMETRY			MEASUREMENT		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
PROPERTIES OF SHAPES			**MASS & CAPACITY**		
Recognise and describing 2D shapes	**Recognise and describing** 3D shapes	**Angles** in shapes, including right angles.	**Measuring** and **compare** mass, including grams, litres and centimetres.	**Adding** mass, including grams, litres and centimetres.	**Subtracting** mass, including grams, litres and centimetres.
ORAL/MENTAL STARTERS ***(Topic from the previous week is repeated[1])***					
What shapes have 4 sides?	Guess the shape game.	Draw me a cube.	Find these angels using a protractor.	Order these lengths from smallest to largest.	Find the total of all these weights.
VOCABULARY					
Corners Sides Names of common 2D shapes Right angles/angles	Sides Faces Vertices/vertex Names of common 3D shapes	Obtuse Acute Degrees Angles Names of common shapes Right angle	Measure Compare Grams (g)/kilograms (kg) Millilitres(ml) /litres (l) Millimetres (mm)/Centimetres (cm) /metres (m)	Measure Compare Grams (g)/kilograms (kg) Millilitres(ml) /litres (l) Millimetres (mm)/Centimetres (cm) /metres (m)	Measure Compare Grams (g)/kilograms (kg) Millilitres(ml) /litres (l) Millimetres (mm)/Centimetres (cm) /metres (m)
IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION					
Modelling clay/playdough Physical 2D shapes Shapes in the environment Regular and irregular shapes	Modelling clay/playdough Physical 3D shapes Shapes in the environment Regular and irregular shapes	Angel 'eaters' Right angled rulers Protractors Angles in the environment Modelled angles	Measuring jugs of various shapes Rulers of various lengths Tape measure Functioning scales	Measuring jugs of various shapes Rulers of various lengths Tape measure Functioning scales	Measuring jugs of various shapes Rulers of various lengths Tape measure Functioning scales
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
Using real life examples of shapes, e.g. stop signs. What shape am I describing...? Draw me… Make me… What's the biggest shape you can draw?	Using real life examples of shapes, e.g. dice. What shape am I describing...? Draw me… Make me…	How many right angles does a square have? Order these angles. In a regular hexagon, are all the angles the same?	My friend says that 100ml of water weights 100g, is he right? Is this true for all liquids? Who is the tallest in the class in cm? How many fencing panels will I need for my garden?	The recipe says I need 500g of butter, I currently have 430g, how much more do I need? My friend brought 1l of coke, and my other friend brought 3l of coke, how much do we have all together? I had 500g of butter, 500g of flour and 50g of sugar into my cake, how much should it weigh all together?	I have a 2l bottle of pop, I drink half, how much do I left? I need 600g of flour for my cake, the scale states 750g, how much do I have to take out? In the 1500m race, Mo has run 500m, how many metres does he have left to run?