Totley Primary School

Mathematics

A sequenced curriculum

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Maths Curriculum

Intent, Implementation and Impact

Intent

To develop a curriculum which:

- Instils a love of maths and gives children the necessary knowledge and skills they need to be successful, confident and accurate mathematicians, so they are ready for their next stage in education and be confident mathematicians in life.
- ✓ Is at least as demanding as the National Curriculum
- ✓ Teaches children to be independent, resilient and creative thinkers, while transferring knowledge across curriculum areas.
- ✓ Enables teachers to teach using the most effective strategies.
- ✓ Tailors learning to meet children's individual needs and strengths.
- ✓ To teach children know themselves as reflective learners, able to identify their own next steps in learning.

	Mathe	matics	
Retrieval Practice	Number Knowledge	Arithmetic	Reasoning

Reasoning mathematically is the most important factor in a pupil's success in mathematics. Nunes (2009).

That is why, at every level of challenge, and whatever stpage and age, every child is given the opportunity to reason and solve problems.

Oracy

We use the language of problem solving in a clear progression. The Mead Trust (2019) Noting < Describing < Explaining < Convincing < Justifying < Proving

The Oracy Framework, which is used across all curriculum areas, is applied in maths to teach children how to reason, explain, prove and justify. The Meta Mates are used to teach the strands of mathematical reasoning of proving, explain, pattern sniffing, predicting and concluding. Again, orcay is the vehicle through which we teach these important skills.

Implementation

Content and Sequence

- Long-term planning is deliberately spaced and interleaved for revision and over-learning of the content. School sequencing materials are used as the starting point for curriculum planning, which is structured into four cycles. In each cycle, all strands of maths are taught.
- We believe mastery is achieved over time and through practice; this is reflected in the design and implementation of our maths curriculum and maths lessons.
- Retrieval Practice allows children to become secure within their knowledge and skills. Activities are used to revise previous content. These are useful assessment opportunities: feedback is given to groups or the whole class as identified. Retrieval Practice starters are used to revise previous content and address misconceptions as identified through observing children's work and responses. Teachers have the freedom to determine the most useful learning to retrieve, and this is balanced alongside the Ebbinghous forgetting curve of sequenced retrieval.
- Every day, children count and practise essential number knowledge. This is sequenced in such a way as to equip children with the most useful knowledge for subsequent reasoning lessons. The Number Knowledge session is systematic and deliberate: teachers model, children practise through call and response
- Arithmetic is taught discretely from year 3. This is sequenced to equip children with the calculation methods they need to apply in subsequent reasoning lessons.
- In Foundation Stage Two, children build a secure foundation of mathematics. Learning is contextualised and given purpose within the continuous provision. Adults lead learning through direct teaching, group work and observations of independent learning. Subitisation, number sense and counting are a significant focus of the curriculum.
- From year 1, the *Learning Journey* model is used to sequence the reasoning learning of a given objective. Component steps on the learning journey are progressive. Within each step, children have the opportunity to *acquire/refine, practise/apply*, and *extend/deepen* their learning. Each level of challenge builds on prior learning and extends thinking. Problem solving and reasoning are inherent at every level of learning, and concrete manipulatives are used by all children to scaffold and deepen thinking.
- Component steps are intentionally planned so learning is cumulative and revisited across four week cycles, to give all children the opportunity for deliberate practice and the tools to reach a greater depth standard when appropriate.

Teaching and Learning, Assessment and Feedback

- Starting points are identified through accurate teacher assessment and prior learning.
- Summative assessment is made towards the end of each cycle using assessment materials curated by us, including Maths No problem assessment resources, to match the content of our curriculum. Assessment checks what has been learnt (remembered) and analysis informs subsequent retrieval practice (teachers identify the things children need more opportunities to remember) and informs periods of consolidation. The curriculum model allows flexibility in order to respond to the strengths and needs of children.
- The intended learning is always the focus of actions in the classroom. Activities and resources are carefully chosen and deliberately designed to focus effort towards practising the learning intentions. Activities are rich in problem solving, reasoning and purposeful thinking. Children record their work with precision, care and pride.
- The working wall displays the steps of learning, and useful scaffolds and models for children to refer to in order to build independence.
- Reasoning is a right of all children at all stages of learning, not a privilege of the highest attaining.
- Concrete resources are the right of all children, not the crutch of the lowest attaining.
- Feedback is given is response to timely and continuous formative assessment in every lesson. Teachers use a range of formative assessment tools, including questions and observations to gauge children's level of understanding and knowledge. This is used to either offer support and scaffolds, or to give opportunities to deepen learning. Feedback is given in line with our feedback policy, including *Yippee Yellow* and *Green Pen Work* to check, consolidate or challenge.

Impact

- No ceiling is placed on any learner: teaching groups are flexible and adapted according to emerging learning needs and the level of support that is needed to enable all children to access the right level of challenge and way of learning for their needs. Children speak positively about the ability to drive their learning through self-assessment and the opportunities they have for extra practice time or additional challenge that the learning journey affords them.
- Nearly all children leave Totley Primary School having achieved at least the expected standard and as confident mathematicians, ready to take on the next stage in their education. Many reach a greater depth standard.
- SEND children make at least expected progress and reach their attainment targets.
- Disadvantaged children make progress that is at least in line with their peers.
- Children leave Totley Primary School as confident, knowledgeable mathematicians and with a positive attitude towards mathematics.

Farly Years		-	2022	2			2022	
Foundation Stage 2	2022		Expected standard	High level		Expected standard	High level	KS1 to KS2 Progress Measure
Children reaching a GLD	80%		83%	21%		88%	28%	+2.4
Farly Vears			2023	6			2023	
Foundation Stage 2	2023	Key Stage One	Expected standard	High level	Key Stage Two	Expected standard	High level	KS1 to KS2 Progress Measure
Children reaching a GLD	83%		81%	11%		88%p	40%	+1.7
Early Voars			2024	ļ			2024	
Foundation Stage 2	2024		Expected standard	High level		Expected standard	High level	KS1 to KS2 Progress Measure
Children reaching a GLD	72%		90%	17%		92%	27%	+1.7

The progress of disadvantaged children was higher than their peers: +2.4 Progress was higher still for pupils with SEND: +3.2

				What i	s in the w	orld arou	und me?				What	t happen	s in the w	orld arou	nd us?			How d	lo we k	eep the v	world su	per?	
Curriculum	n		Autumn	1 (7 Weeks	s)		Autumn	2 (7 Weeks	5)	Spri	ng 1 (6 W	Veeks)		Spring 2	(6 Weeks)		Sum	mer 1 (6 W	(eeks)	Si	ummer 2	2 (7 Week	(S)
Questions	5	What is it like at school?	What does my family look like?	What is special to me?	What is Diwali? (24.10)	What is harvest?	What is my favourite story?	What is Hanukkah? (18-26.12)	How is Christmas celebrated?	What is it like where I live?	Let's celebrate Chinese New Year!	Which comes first the chicken or the egg?	Where does it live and how does it grow?	How are weddings celebrated around the world?	What is Ramadan? (22.3- 21.4)	How is Easter celebrated ? (9.4)	What makes our world super?	How do we keep our world super?	What makes me super?	How does art make the world a better place?	Pirates	How have I changed in a year?	Transition
	Number focus	0 / 1	2/3	4 / 5	Subitising to 5	6 / 7	8 / 9	10	Subitising to 5	Counting in 2's	Countin g in 5's	Counting in 10's	11 / 12	13 / 14	15	16	17 / 18	19 / 20	Odd and Even number s	Place Value	Odd and Even numbers	Place Value	
	Daily Number Sense								Counting Count	g marbles, cour ing is unavoida and understand	ting when linin Using langud ble in the prov Retriev ing of number	ng up (Counting age of ordinal nu rision – tidy-up tirr val challenges in r is encouraged ir	1:1, in 2's, 5's and imbers, Number I nes, resources lab the Maths area n other areas of t	1 10's, counting b Blocks welled with amou	ackwards etc) nt of objects art of challenges								
	Time / Measure								Food Tech:	Language of Real world expe	time, dates, d erience of med	ays and months asuring ingredien	– daily routines / ts using non-stan	timetable / caler dard and standa	ndar rd measurement:	5							
Mathematics	Number and Numerical Patterns	BA	SELINE	Orally counting objects 1:1 Subitising Orally counting 1-10		Autumn Number line Ordering numbers 0-5 / 0- 10 Number formatio n Orally counting objects 1:1 Orally counting 1-5/1-10	Addition / Subtractio n One More than a number 0- 10 One Less than a number 0- 10	How tall am 1? Orally counting objects 1:1 Orally counting 1-10	Christmas Counting Estimation	Ordering numbers 0-5 / 0-10 Number formation	Addition Number Bonds to 5 / 10 Subtracti on Taking a one-digit number away from another up to 10 Challen ge: from numbers up to 20 Chinese New Year Ordinal numbers	Doubling Halving	Counting Careful 1:1 counting of BeeBot steps 1 more / 1 less	Addition Repeated addition to solve problems			Addition and Subtracti on Using numicon Place Value Compari ng amounts	Doubling Halving		Place Value Compari ng numbers	Addition G in 2's, 5's and 10's	Addition / Subtracti on Using a number line	
	Shape, Space and Measure (Non-Statutory)	BA	SELINE	Dinc / Ra (V Nan Beg I Use cre	besaur pictures ngoli Patterns Voodwork) ning basic 2D shapes pin to identify properties 2D shapes to ate pictures			How tall am 1? Comparin g height Measuring height using non- standard units	Christmas Pictures Naming basic 2D shapes Begin to identify properties Use 2D shapes to create patterns		Woodwo rk 2D shape pattems Naming basic 2D shapes Begin to identify properti es		Beebots Positional language		2D shape Sort and compare shapes by their properties.	3D Shape Sort and compare shapes by their properties			3D Shape Using 3D shapes to play and build Discussi ng and compari ng 3D shapes based on their properti es		Using coins – Begin to understa nd and compar e the value of coins		
	Retrieval Practise				Counting objects and matching to numeral	Naming basic 2D shapes Using 2D shapes to make a repeatin g pattern	Counting objects on a number line	Repeating patterns with autumn shape printing	Counting Christmas objects	One More / One Less	Measurin g and compari ng the height of the animals from the CNY story	Missing Number tracks	Number Bonds to 5/10	Addition / Subtractio n	Have I gotten taller? Comparin g height Measuring height using non- standard units	Doubling and Halving	Missing number tracks	2D/3D shape	Addition / subtract ion using numico n	Positional languag e (BeeBots) 3D Shape	Number bonds	Compari ng heights Have I grown? How much have I grown?	

		What's in	the worl	orld around me?			What h	happens in [•]	the world	l around	US?		How	do we keep	ep the world super?)
Curriculu	Α	Autumn 1 What is it like at school? What does my family look like? W			Autumr	1 2	Sprir	ng 1		Spring 2			Summe	er 1		Summer	2
Question s	What is it like at school?	What does my family look like?	What is special to me?	What is harvest?	What is my favourite story?	How is Christmas celebrated?	Do bears live in Totley?	How do people celebrate around the world?	Which comes first the chicken or the egg?	Where does it live and how does it grow?	How is Easter celebrated?	What makes our world	How do we keep our world super?	What makes me super?	How does art make the world a better	Children's Choice: Pirates	How have I changed in a year?
							M	athemat	ics	9.000		30001.					
	Stable Order: Unders	standing the ve	rbal sequence c	of counting; b	eing able to sc	ay the number nan	nes in sequential orde	er. Daily counting a	of marbles, child	dren in the line	, doing the caler	ndar dates					
	One-to-One Corresp	oondence: Unde	erstanding that	when saying t	the names of th	ne numbers in sequ	vence, each object r	receives one count o	and one only o	ne count. Durii	ng taught sessior	ns, tidying u	C				
Principles	Cardinality: Understo	anding that the	last number spo	ken in a cour	nting sequence	e names the quant	ity for that set. During	g taught sessions, tid	lying up								
Counting	Abstraction: Underst sounds, imaginary o	anding that it d bjects, etc. Duri	loesn't not matte ing taught sessic	er what you c ns, tidying up	count, how we o, numbers of th	count stays the sa ne week	me. For example, an	y set of objects can	be counted as	a set, regardle	ess of whether th	ey are the s	ame colour, st	nape, size, etc. This c	an also include	non-physical t	things such as
	Order Irrelevance: K	nowledge that	the order that it	ems are cour	nted in is irrelev	ant—left-to-right, r	ght-to-left, in a rando	om fashion—as long	as every objec	t in the set is g	iven one count o	and only on	e count.				
	Numbers of the wee	k: 0,1,2,3,4,5		Numbers of	the week: 6,7,	<u>8,9,10</u>	Number focus: Cou 10's	unting in 2's, 5's &	Numbers of th	e week: 11,12	<u>,13,14,15</u>	Numbers	10, 11, 12, 13, 1	<u>4, 15</u>	Numbers 16,	<u>17, 18, 19, 20</u>	
	To be able to count one correspondenc	bers of the week: 0,1,2,3,4,5 e able to count orally and count with o correspondence. e able to match amounts and compar- pers 0-5 and 6-10 using language of mo- ewer or the same as (using counters, d con, dominoes, fingers, numeral, irregu gements and groups of objects). gin to able to form numbers 0-10 with ng accuracy. able to order numbers 0 -10 and say w nore or one less than a number is. able to subitise – using dice, Numicon			to count orally respondence.	and with one-	To be able to coun objects or pictures	nt a range of accurately with	To recognise of 11-15 confide	and be able to ntly.	o form numbers	To know c 15 confide	and be able to ently.	form Numbers 0-	To know and 20	be able to forn	n Numbers 16-
	To be able to match numbers 0-5 and 6-1 less, fewer or the sar	n amounts and 10 using languag me as (using co	compare ge of more, unters, dice,	To be able compare n more, less, f	to match amo umbers using lo fewer, the same	unts and anguage of e, equal 0-10	one-to-one corresp To be able to matc	condence.	To be able to and say what	order number one more and	s confidently d one less is.	To be able subtractic	e to solve addi n problems in	tion and a range of ways.	To be able to 20 and say w	confidently or nat one more c	der numbers 0- or one less is
	Numicon, dominoes arrangements and g	s, fingers, numer groups of objec form numbers 0	al, irregular ts). -10 with	fingers, mor arrangeme	ney numeral, iri ney numeral, iri nts and groups	aominoes, regular s of objects).	compare using ma language (counter dominoes, fingers, i irregular arrangem	ithematical rs, dice, Numicon, money numerals, ents)	To be able to backwards us	count forwarc ing a number	ls and line.	To be able forwards o	e to order num and backward	bers and count s	To be able to backwards o	count forward n a number line	s and e.
	growing accuracy.	 dominoes, fingers, numeral, irregular ents and groups of objects). o able to form numbers 0-10 with occuracy. to order numbers 0 -10 and say what or one less than a number is. to subitise – using dice, Numicon, fingers, numerals, irregular ents. Recognising different amounts number 		To know an confidently.	id be able to fo	orm numbers 0-10	To know and be at numbers 11-15 with	To know what to use halving	halving mear I language suc	ns and be able ch as sharing,	To be able whole)	e to Share equ	ally (part, part,	To independe calculations u	ently solve subtr using a preferre	raction d method.	
	one more or one les	n to able to form numbers 0-10 with accuracy. ble to order numbers 0 -10 and say what re or one less than a number is. ble to subitise – using dice, Numicon, es, fingers, numerals, irregular		To be able one more o	to order numbe or one less is.	ers and say what	accuracy.	equal and even. To be able to halve shapes and number			To be able	e to halve num	bers.	To independe	ently solve addi	ition	
	To be able to subitise dominoes, fingers, n arrangements. Reco	e – using dice, N umerals, irregulo ognising differen	Numicon, ar 1t amounts	To know an able to cou	lything can be unt actions and	counted and be I sounds.	To be able to order what is one more o confidently.	r numbers and say or one less	To know that I	naive snapes halves are equ	ana numbers. val.	To know n even.	umber facts, f	ocus on odds and	To be able to	halve numbers	a metrioa. s and know acts.
	willion courning.			To be able dominoes, f arrangeme amounts wi	to subitise using fingers numera ents. (Recognisii ithout counting	g dice, Numicon, I, irregular ng different 1.)	To be able to coun backwards on a nu the number line to and one less.	nt forwards and umber line and use find one more	To be able to objects.	find halves wit	h concrete	To be able doubling To be able	e to double nu facts. e to recall num	mbers and recall	To be able to double numb	double and kr er facts.	now and recall
Number and Numerical				To begin to recognise '·	know the mec +', '-' and '=' si	aning of and igns	To know the meani recognise '+', '-' ar	ing of and nd '=' signs.	number facts. To be able to	begin to reca	ll double	and 10 cc To be able	onfidently. e to subitise dif	ferent amounts in	To be able to confidence.	count in 2s, 5s	and 10s with
Patterns				To know the two or more	at addition invo e groups of obj	olves combining ects.	To begin to be able addition number se concrete objects.	e to solve some entences using	number facts. To be able to	share equally	using part, part	different o Have a str	contexts rong sense of r	numbers to 12			
				To begin to number ser	be able to solv ntences using c	ve some addition concrete objects.	To begin to be able subtraction numbe	e to solve some er sentences using	whole. Focus	on odds and e and even num	evens. Inbers to 10	recognisir counting facts.	ng, writing, adc back or on and	ling taking away d recalling number			
				To begin to when some	know the grou thing is taken o	ıp gets smaller away.	concrete objects.		then 20			To be able	e to count in 2	s, 5s and 10s			
				To begin to subtraction	be able to solv	ve some nces using	To know the group something is taken	gets smaller when away.	To be able to dominoes, fing arrangements	Subitise using gers numeral, i s.	dice, Numicon, rregular						
					bjects.		sentences with cor	ncrete objects.	To be able to	add usina diff	erent addition						
				again.	know a aoubi	e is the same	To be able to begir facts.	n to recall double	methods. (Fing number lines of	gers, Numicon and mentally).	, manipulates,						
				concrete re	esources.	timation is and	To be able to subiti amounts.	ise different	To know and o bonds to 5.	confidently rea	call number						
				be able to r	make sensible	estimates.	To understand that are used to describ	ordinal numbers be.									
							To use ordinal numl where an animal c	bers to explain came in a race.									

		- · · · ·				
	To know different times of the day, days of the	To know that we can measure how long or	To recognise and know the value of	To use non-standard units of measure to	To know and recognise coins and be able	To be able to recognise different coins
	week and months of the year.	tall an object is and use this to compare.	1p,2p, 5p, 10p, 20p and £1.	measure and compare length and height.	to add amounts using coins.	and make amounts using them.
	To show interest in 2D shapes and be able to use	To use non-standard units of measure to	To know that coins are used in	To confidently name common 2D shapes		
	these to create a picture or repeating pattern	measure and compare length and beight	exchanging for things or services and	and shape properties	To use a range of coins to make different	To be able to talk about their day,
	inese to create a pictore of repeating partern.	measure and compare lengin and height.		and shape properties.	amounts.	referring to different times of the day.
		- · · · ·	Use this in practical play, beginning			
	To name common 2D snapes and snape	To know that we can measure now much	to use the concept of giving	to snow interest in 2D snapes and be able	To know different ways we tell and record	To confidently recognise and name
	properties.	something weighs and use this to	change'.	to use these to create a picture or		common 2D shapes using their properties
		compare.		repeating pattern.	the time.	common 2D shapes using mell properties.
	To be able to select and rotate shapes building		To begin to know that a clock is used			
	an awareness that a shape can have shapes	To use balance scales to compare	to tell time	Use positional language confidently to	To be able to make comparisons with	To confidently recognise and name 3D
	within it.	heavier/ lighter.		make comparisons and describe.	length, weight and capacity.	shapes using their properties.
			To be able to talk about patterns in			
	To begin to use money in role play, beginning to	To use non-standard units of measure to	overts using language first then	To confidently recall days of the week and	To know and be able to talk about some	to be able to recognise, complete and
Shape	recognise different coins	weigh and compare.	evenis using language list, men,	months of the year.		create their own patterns.
Shape,			after before.		3D shapes and shape properties.	
space		To know that coins are used in exchanging				To be able to make comparisons with
and	To begin to know different times of the day, days	for things or sonvices and use this in	To begin to know and be able to talk		To recognise 3D shapes in the environment	length weight and agreeity wing non
Mogeuro	of the week and months of the year.		about some 2D shapes and shape		and in their play (e.g. building/malleable)	lengin, weight and capacity using non-
Measure		practical play.	ubout some op snapes and snape			standard units of measure.
	To use positional language to describe		properties.		To a sufficient the second state of the second state of	
	themselves or others.	To be able to recognise some coins and			to confidently recall days of the week and	To confidently recall days of the week and
		begin to match amount to coin values	To recognise 3D shapes in the		months of the year.	months of the year
		1p,2p, 5p	environment			moning of the year.
		To name common 2D shapes and shape	To be able to talk about and identify			
		properties.	To be able to talk about and identity			
			patterns and create own patterns.			
		To show interest in 2D shapes and be able				
		to use these to create a picture or	To confidently recall days of the			
		repeating pattern.	week and months of the year			
		To know different times of the day, days of				
		the week and months of the year				
		The week and morning of the year.				

Year One	1	2	3	4	5	6	7	8	9	10
	Subitise to 5 Teen numbers	Reading numbers to 100 Partition numbers	1 more 1 less Count in 10s	Number bonds to 10 Teen numbers	1 more 1 less Number bonds to 20	Count in multiples of 10 up to 120 Odd / even (numicon)	Shape names & properties (e.g. number of sides) Reading numbers to 100	Subitise teen numbers (Numicon, bar model, array) Lots of 10s	Doubles Number bonds	Count in 2s up to 24 Subitise – teen numbers
Autumn	Place Value Counting and understanding of numbers within 100. WALT count and understand numbers within 100. -sort objects -count objects -count objects from a larger group -represent objects	Place Value 1 more, 1 less Counting in 2s. WALT find 1 more. -count on from any number -1 more -1 less -compare groups by matching	Addition _+_using the part-whole model. WALT add numbers -Part-whole model -Addition- adding together -Addition- adding more -Addition problems	Subtraction using a part- whole model WALT find a part. WALT subtract by finding a part. WALT find out how many are left. WALT find a part.	Multiplication Count in 2s, 5s and 10s to add equal groups. WALT add equal groups -Count in 2s -Count in 10s -Count in 5s -Recognise equal groups -Add equal groups	Shape Recognise common 2D shapes from their properties. WALT recognise common 2D shapes from their properties -recognise and name 2D shapes -Make patterns with 2D shapes	Measure Comparing length. WALT measure and compare length -compare lengths and heights -measure length using objects -measure length in centimetres	Time Language of time, dates, days and months. Read the time to o'clock Understanding of <i>half.</i> WALT use language of time, dates, days and months WALT tell the time to o'clock -days of the week -months of the year -hours, minutes and seconds -Tell the time to the hour	Conso	idation
	1	2	3	4	5	6	7	8	9	
	2s sequence Reading numbers to 100	Recognising diennes (2digit) Place value – tens/ones	number bonds to 10 Doubles	Teen numbers	Place value tens/ones bonds 10	Number bonds to 20 Subtraction (within 10)	Addition Count in 2s	3D shapes Counting in 10s	+10 -10	
Winter	Consolidation	Place Value Understand and compare 2-digit numbers. WALT compare numbers -Partition into tens and ones -Fewer, more and the same -Less than, greater than, equal to -Compare numbers -the number line to 50 -1 more, 1 less	Money Understand and compare value of coins WALT understand and compare the value of coins -unitising -recognise coins- recognise notes -count in coins	Addition +_using a number line WALT add 1 digit and 2 digit numbers up to 30 -add by counting on -add one susing number bonds -find number bonds to 20 -use doubles to 20	Consolidation	Subtraction using a number line WALT subtract 1 digit a 2 digit numbers up to 30 -subtract ones using number bonds -subtraction- counting back -subtracting- finding the difference	Multiplication Count in 2s, 5s and 10s to solve 1-step multiplication problems. -make arrays -make doubles	Shape Recognise common 3D shapes by their properties WALT identify, describe and sort 3D shapes. -recognise and name 3D shapes -sort 3D shapes -make patterns with 2D and 3D shapes	Measure Comparing weight. WALT measure and compare the mass of objects -heavier and lighter -measuring mass -compare mass	

	1	2	3	4	5	6	7	8	9	10
	Counting in 5s up to 60	Odd / even	doubles	Count in 2s up to 24	Counting in 10s	Teen numbers	Read numbers up to 100	+10 -10	Count in multiples of 5 up to 60	Count in multiples of 10 up to 120
Spring	Position and Direction Positional language (half, quarter turn of a circle). WALT describe position and direction -describe turns -describe turns -describe position- left and right -describe position- forwards and backwards -describe position- above and below	Place Value WALT compare 2- digit numbers. -1 more, 1 less - Estimate a number on a number line -Compare numbers with the same number of tens -Compare any two numbers	Addition and Subtraction Compare answers WALT solve and compare addition and subtraction number sentences -related facts -missing number problems	Multiplication Count in 2s, 5s and 10s to solve 1-step multiplication problems. WALT count in 2s, 5s and 10s to solve 1-step multiplication problems. -make arrays -make doubles	Division Understand that division is sharing amounts into groups. WALT solve 1 step division problems -Make equal groups- groups -Make equal groups- sharing	Fractions To understand the concept of a half (objects, shapes and quantities). WALT find half of objects, shapes and quantities. -recognise a half of an object or a shape -Find half of an object or a shape -recognise half of a quantity	Shape Sort and compare shapes by their properties. WALT sort and compare shapes by their properties	Measure Comparing capacity. WALT measure and compare capacity. -full and empty -compare volume -measure capacity -compare capacity	Time Read and compare (earlier/later) times on a clock. WALT compare earlier and later times. -before and after -tell the time to the half hour	Consolidation
	1	2	3	4	5	6	7	8	9	10
	Count in multiples of 5 up to 60 Count in multiples of 10 up to 120	+1 and -1	+10 and -10	Subitise teen numbers (Numicon)	Count in multiples of 5 up to 60 Count in multiples of 10 up to 120	Odd or even	Bonds to 10	Read numbers to 100	Count in multiples of 5 up to 60 Count in multiples of 10 up to 120	Count in multiples of 5 up to 60 Count in multiples of 10 up to 120
Summer	Consolidation	Place Value WALT compare the answers to calculations using all four operations. -Recognise equal groups -Add equal groups -Make equal groups- grouping -Make equal groups-sharing	Addition and Subtraction Solve problems using money and measures. WALT use addition and subtraction to solve money and measure problems. -related facts -missing number problems	Multiplication Count in 2s, 5s and 10s to solve problems, and compare answers. WALT compare multiplication answers. -make arrays -make doubles	Division Understand division is sharing an amount into groups. WALT share and group to divide.	Fractions Half and quarter of shape, amount and objects. WALT use half and quarter. -Recognise a quarter of an object or shape -Find a quarter of an object or shape -Find a quarter of a quantity	Shape Sort and compare shapes by their properties. WALT compare and sort shapes by their properties.	Measure Understand and use cm and m to measure and compare. WALT measure length to the nearest cm and m.	Time Read clock to quarter past the hour. Record time using hours, minutes and seconds by reading a digital stopwatch. WALT read and compare the time to o'clock, half past and quarter past.	Consolidation

Year Two	1	2	3	4	5	6	7	8	9	10
	Bonds to 10	+1 and -1	+10 and -10	Count in 2s up to 24	Count in multiples of 10 up to 120	Count in multiples of 5 up to 60	2D Shape	3D	Bar model Bonds to 20	Odd/Even
Autumn	Place Value Representing number -dienes -partitioning -number facts -fact families Ordering number Place value of two-digit number (10s, 1s) WALT use the numbers to 20. WALT count objects to 100 by making 10s. WALT recognise tens and ones. WALT use a place value chart.	Place Value Identify 1 more and one less. -10 more and 10 less WALT partition numbers to 100. WALT write numbers to 100 in words. WALT flexibly partition numbers to 100. WALT write numbers to 100 in expanded form.	Addition Use addition facts to 20. Derive and use related facts up to 100 WALT use related facts. WALT use bonds to 100. WALT add and subtract 1s. WALT add and subtract 1s. WALT add by making ten. WALT add three 1-digit numbers. WALT add to the next 10. WALT add across a 10.	Subtraction Subtraction facts to 20. Derive and use related facts up to 100 WALT subtract across a 10. WALT subtract from a 10. WALT subtract a 1-digit number from a 2-sigit number. WALT find 10 more or 10 less.	Multiplication Count in steps of 2, 3, and 5 from 0, and in 10s Multiplication facts for the 2, 5 and 10 times tables WALT recognise equal groups. WALT make equal groups WALT add equal groups WALT use the multiplication symbol. WALT use arrays. WALT count in 3s.	Division Recall and use division facts for the 2, 5 and 10 multiplication tables. WALT make equal groups – sharing WALT make equal groups – sharing WALT use the 2 times-table WALT divide by 2 WALT double and halve.	Fractions Recognise, find, name and write simple fractions of a length, shape, or quantity WALT use parts and whole WALT use equal and unequal parts WALT find a half. WALT find a half. WALT find a quarter. Measure Compare and order lengths, mass or capacity WALT compare mass. WALT measure in grams. WALT use the four operations with mass. WALT compare volume and capacity.	Shape properties of 2-D and 3D shapes (symmetry, sides, vertices, faces etc.) WALT recognise 2D and 3D shapes. WALT use lines of symmetry on shapes. WALT sort 2D shapes. WALT sort 3D shapes.	Consolidation, c an	ontingency and gap alysis
	WALT recognise tens and ones. WALT use a place value chart. 1 Numicon bonds to 7 8 9	2	3	4	5	6	7	8	9	
	Numicon bonds to 7 8 9	Z S Whole part bonds to 7 8 9 Time		Mixed Shape	Recall multiplies of 5 up to 12x10 in any order	Flipped Bonds to 10 (e.g. 10 = 6+4)	Bonds to 20	Time		
Winter	Place Value Estimate, represent and identify numbers on a number line. Read and write number in words (to 100) WALT use 10s on the number line to 100. WALT use 10s and 1s on the number line to 100. WALT estimate numbers on a number line. WALT compare objects.	Money and Place Value Use symbols for pounds (£) and pence (p); combine coins to make amounts WALT count money in pence. WALT count money in pounds (notes and coins). WALT count money- pounds and pence WALT make the same amount.	Addition and subtra WALT add and subtr WALT add two 2-dig across a 10) WALT add two 2-dig (across a 10) WALT solve mixed a subtraction problem WALT compare num WALT complete mis problems.	iction ract 10s. git numbers (not git numbers ddition and ns. hber sentences. ssing number	Multiplication Solve problems involving multiplication and division using concrete resources and arrays. WALT use the ten time-table WALT use the 5 times-table WALT use the 5 and 10 times- table	Division Solve problems involving division, using materials and arrays. WALT use odd and even numbers. WALT divide by 10. WALT divide by 5 Consolidate- addition and subtraction	Fractions Write simple fractions e.g. 1/2 of 6 = 3 and recognise the equivalence of 2/4 and ½ WALT find a third. WALT find the whole. WALT use unit fractions. WALT use non-unit fractions. WALT recognise equivalence of two quarters and one half. WALT find three quarters.	Measure Choose and use the best units to estimate and measure length/height/mass (kg / g) WALT measure in millilitres and litres. WALT use the four operations with volume and capacity.	Consolidation Week	

		WALT compare amounts of money. WALT make a pound.								
	1	2	3	4	5	6	7	8	9	10
	Coins, notes and amounts	Coins, notes and amounts	Reading 101 102 etc	Missing number	Draw dienes to solve + -	+ - x ÷ < > =	Recall facts to 10 + -	Scales - metre stick	Count in 2s up to 24	Count in multiples of 10 up to 120
Spring	Place Value Apply to money- giving change. WALT compare objects. WALT compare numbers. WALT order objects and numbers.	Addition Solve problems with quantities and mea Subtraction Solve problems with quantities and mea WALT add two 2-dig a 10) WALT solve mixed a subtraction probler WALT compare nun WALT complete mis problems.	n numbers, sures. n numbers, sures. git numbers (across addition and ns. nber sentences. ssing number	Multiplication Solve problems ir mental strategies Division Solve problems u methods (times ta problems in cont WALT use the 5 a WALT use odd an WALT divide by 1 WALT divide by 5	a context and apply /known facts. sing mental able facts) and exts. nd 10 times-table id even numbers. 0.	Shape Identify 2D shapes as the face of 3D shapes. Compare and sort 2D and 3D shapes WALT sort 2D shapes. WALT sort 3D shapes.	Measure Choose, estimate and use measures- cm, m, °C, ml and l. WALT use temperature. Position Order and arrange into patterns and sequences (objects and numbers). WALT use the language of position and movement. WALT describe turns. WALT use shape patterns with turns.	Time Tell and write the time to five minutes including quarter to/past. WALT tell the time to quarter hour intervals. WALT use the hours in a day.	Data Ask and answer questions by counting objects in categories or sorting objects into given categories. WALT make tally charts. WALT read information in dates. WALT use block diagrams. WALT draw and interpret pictograms.	Consolidation Week
	1	2	3	4	5	6	7	8	9	10
	Count in multiples of 5 up to 60	Recall facts to 10 + -			Mixed multiples	Odd/ Even	Time	+9	-9	Review
Summer	Place Value Compare numbers using < = and > Plot, with increasing accuracy, numbers on a blank number line. WALT compare objects. WALT compare numbers. WALT order objects and numbers.	Addition and Subtraction Recognise addition and subtraction as inverse operations. WALT add two 2- digit numbers (across a 10) WALT solve mixed addition and subtraction problems.	SATs	SATs	Multiplication and division Recognise multiplication and division as inverse operations. Use Estimation	Time Tell and write the time to five minutes including quarter to/past. WALT tell the time to 5 minutes. WALT use minutes in an hour.	Data Ask and answer questions by counting objects in categories or sorting objects into given categories. WALT make tally charts. WALT read information in dates. WALT use block diagrams. WALT draw and interpret pictograms.	Shape properties of 2-D and 3D shapes (symmetry, sides, vertices, faces etc) WALT describe 2D and 3D shapes. WALT compare 2D and 3D shapes. WALT make patterns with 2D and 3D shapes.	Contingency we longer than a we single session recal 3 i	eks to give space for ek for some areas or Il of taught topics. Year ready.

WALT compare			
number			
sentences.		1	
WALT complete			
missing number			
problems.			
		(

Year 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Number	Times	Tables 2s, 5s	and 10s	Number b	onds to 20	Times	table 3s	Counting in from ar	10s and 100s number	Pairs to 100	Times T	ables 4s	Times Tab	ples 3s and 4s
Maths	WALT: R WALT: P WALT: N WALT: H WALT: R WALT: F WALT: F WALT: F WALT: C WALT: C WALT: C	epresent num artition numb umber line to undreds epresent num artition numb lexible partitic undreds, tens ind 1, 10 or 10 umber line to stimate on a r ompare numb rder numbers ount in 50s	abers to 100 ers to 100 abers to 1,000 pring of numb and ones 00 more or les 1,000 number line to pers to 1,000 a to 1,000	bers to 1,000 is 5 1,000		WALT: Add num the formal writt exchange WALT: Add num the formal writt exchange ones WALT: Add num the formal writt exchange tens WALT: Add num the formal writt exchange tens a WALT: Subtrace digits, using th method – no e	abers with up t ten (column) m abers with up t ten (column) m abers with up t ten (column) m and ones ct numbers with te formal writt exchange	o 3 digits, using ethod – no o 3 digits, using ethod – o 3 digits, using ethod – o 3 digits, using ethod – h up to 3 en (column)	WALT: Subtrac using the form exchange one: WALT: Subtrac using the form exchange tens WALT: Subtrac using the form exchange tens WALT: Add an digits, using th – with exchange	t numbers with hal written (colu s t numbers with hal written (colu t t numbers with hal written (colu s and ones d subtract num he formal writte ge	n up to 3 digits, Imn) method – n up to 3 digits, Imn) method – n up to 3 digits, Imn) method – bers with up to 3 n (column) method	WALT: Multiply x _ (no exchange) WALT: Multiply x _ (with exchange) WALT: Divide ÷ _ (no exchange) WALT: Divide ÷ _ (with exchange) WALT: Divide ÷ _ (with remainders) WALT: Reason using multiplication WALT: Use multiplication and division to scal amounts		
Spring	1	ALT: Count in 50s				6 7 8			9 10 11		11	12		
Number Knowledge	Times	1 2 3 4 5 Times Tables 8s Mi				imes Tables			Bond	s to 60	Times by 1	10 and 100		
Maths	Times Tables 8s Mix WALT: Understand the denominators of unit fractions WALT: Measure in the WALT: Meas			Measure in meti Measure in cent rres Use equivalent l Add and subtrac What is perimet Measure perime Calculate perime	tres and centimetres metres timetres and timetres and lengths (m and cm) lengths (cm and mm) ct lengths ter? eter eter wALT: Use scales WALT: Measure mass in WALT: Use equivalent m grams) WALT: Compare mass WALT: Compare mass WALT: Add and subtract WALT: Measure capacity milliliters WALT: Measure capacity and milliliters			n grams h kilograms and f nasses (kilogram t mass t mass ty and volume in ty and volume in	grams WALT: Ad s and WALT: Su WALT: Pa WALT: U of object WALT: No set of obj litres	dd fractions ubtract fractions artition the whole nit fractions of a set s on-unit fractions of jects	Contingency , gap analysis and consolidatio n			
Summer	1	2	3	4 5 6 7				8	9	10	11	12		
Arithmetic							Fluent in 5							
Number Knowledge		1 2 3 4 5 Bonds to 100 9, 11, 12 more and 1 (24 clocks) 9			ore and 12 less clocks)				Mixed Times Tables					

Maths	WALT: Estimate answers WALT: Inverse operations	WALT: Convert pounds and pence WALT: Add money WALT: Subtract money WALT: Find change	WALT: Roman numerals to 12 WALT: Tell the time to 5 minutes WALT: Tell the time to the minute WALT: Read the time on a digital clock WALT: Use a.m. and p.m. WALT: Use a.m. and p.m. WALT: Use years, months and days WALT: Use years, months and days WALT: Use hours and hours WALT: Use hours and minutes to use start and end times WALT: Use hours and minutes to find duration	WALT: Turns and angles WALT: Right angles WALT: Compare angles WALT: Measure and draw lines accurately WALT: Identify horizontal and vertical lines WALT: Parallel and perpendicular lines	WALT: Recognise and describe 2D shapes WALT: Recognise and describe 3D shapes WALT: Make 3D shapes	WALT: Interpret pictograms WALT: Draw pictograms WALT: Interpret bar charts WALT: Draw bar charts WALT: Collect and represent data WALT: Two-way tables	Consolidation		
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Yea	ar 4 u mn	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Numb	ARITH			3	6					7		12			
er Knowl	Count ing	2,5,10	4	3	6	8	9	9	4,8	7	7	12	12	6,9	8
euge	Retrie val	Baseline	2,5,10	4	3	6	8	Baseline	9	4,8 6,7		9	12	12	Baseline
Maths		Place Valu compare Tth Th.H.T WALT: rep different w WALT: rea numbers u and words WALT: find a given nu WALT: ord numbers.	e Read, write O resent numbrays. d, write and i p to 10,000 in I 1000 more o mber. er and compa	, order and ers in identify n numerals or less than are 4 digit	Place value Rounding WALT: round numb the nearest 10 WALT: round numb the nearest 1,000 TTRS DAY	pers to pers to pers to	Addition and sult + numbers with using formal me Inverse and estii (rounding) WALT: subtract numbers using f column subtract WALT: add 4 dig using formal col addition. WALT: use inver checking strateg addition and sub calculations. WALT: use round estimate answe checking strateg	otraction up to 4 digits thods mation 4 digit ormal ion. it numbers umn se as a ty for traction ding to rs as a y.	Multiplicati on WALT: multiply 2 digit numbers by 1 digit number. WALT: multiply 3 digit numbers by 1 digit numbers.	Decimals order comparing deci Fractions and d equivalence Use decimal numbe and recognise t hundredths as a whole. WALT: understand frac equivalence. W compare and o and fractions V decimal numbe	ing and mals & integers ecimals e and apply r WALT: read enths and a fraction of a ction and decimal ALT: rder decimals VALT: round cimals	Dec cont. ROUNDING TO ESTIMATE * WALT: use rounding to estimate answers as a checking strategy Place value Multiply and divide by 10, 100 and 1,000 WALT: multiply by 0, 1, 10, 100 and 1,000WALT: divide by 1,10, 100 and 1,000.	Place value: WALT: multiply by 0, 1, 10, 100 and 1,000 WALT: divide by 1,10, 100 and 1,000	Measure Convert, compare and calculate units of length, capacity and mass WALT: convert between cm and mm. WALT: convert between m and cm. WALT: convert between m and cm. WALT: convert between m and km, kg and g, I and ml.	Contingency, consolidation and gap analysis
Spr	ing	1	2	3	4	5	6	7	8	9	10	11	12		
Numb	ARITH		11												
er Knowl	Count ing	7	11	11,12	9	6	2,3,4,5,10	6	7	9	11	12	chant all		
edge	Retrie val	6,9	7	11	12	8,9	Baseline	6	7	9	11	12	Baseli ne		

Maths		Place Value WALT: understand negative numbers. WALT: use negative numbers.		Division Number problems involving ÷/x WALT Use short division WALT Divide with remainders		Area and Perimeter WALT Count the perimeter of rectilinear shapes WALT Calculate the perimeter of rectilinear shapes WALT Measure the perimeter of shapes WALT Find the area of shapes through counting WALT Explore the relationship between area and perimeter		Assessmen ts	Data Interpret & Present WALT solve problems using info in charts and tables WALT construct charts using info from a table WALT interpret and construct a line graph		Shape WALT identify right, acute and obtuse angles WALT: order and compare angles (in sum 1 folder 23/24) WALT classify and compare properties of quadrilaterals WALT compare and classify triangles WALT Identify lines of symmetry	Decimals WALT Solve measure and money problems involving decimals to 2DP	Continge ncy, consolida tion and gap analysis		
Sum	mer	1	2	3	4	5	6	7	8	9	10	11	12		
Numb er Knowl edge	Retrie val	8	3,4 Unofficial TTRS check	9,6 8		6, 7 all		MTC			Gap analysis fr	ap analysis from MTC			
edge Fractions Maths Fractions WALT: retrieve pri knowledge of fraction WALT: compare ar order mixed fraction WA;T – understan improper fractions WALT: convert betw mixed and improper fractions WALT: add fraction WALT: add fractions		tions crieve prior of fractions. mpare and ed fractions nderstand fractions. rert between d improper tions d fractions	Position WALT: describe position using coordinates grid. WALT: plot coordinates WALT: draw 2D shapes on a grid. WALT: translate on a grid.		Calculatio n Factor pairs	Fracti WALT: find equiv famil WALT: find fractio WALT: subtract WALT: subtrac numb	ons ralent fractions ies ons of amounts two fractions t from whole pers	TimeWALT: convertWALT Tell thebetweentime to theseconds,nearest minuteminutes andWALT Read anduser comanuse romanWALT: convertnumeralsbetween days,numerals		Contingency, con	o analysis				

Year Five	1	2	3	4	5	6	7	8	9	10
Autumn	Addition	Subtraction	Multiplication	Multiplication	Division	Division	Consolidate 4 operations	Equivalent fractions	Multiply (1 & 10 & 100)	Divide (1 & 10 & 100)
	Place Use numbers to at I 3dp Plac WALT understan 1,000 WALT: count forw in powers of 10 Place WALT round n 1,000	Place ValueAdditionumbers to at least 1 000 000 and 3dp Place ValueAdd whole numbers with more solve addition multi-step problem method to and SubtractionALT understand numbers up to 1,000,000.Subtraction SubtractionT: count forwards or backwards powers of 10 up to 1 000 000 Place ValueSubtract whole numbers with wALT solve subtraction multi-stepVALT round numbers within 1,000,0002123			Multiplication Mul to 4 digits by a o num WALT Multiply r digits by a one num	tiply numbers up ne- or two-digit bers numbers up to 4 - or two-digit bers	Division Divide numbers up to 4 dig number WALT Divide nu digits by a one- digi	Fractions Recognise and use the per cent symbol % and compare and order fractions, decimals and percentages WALT apply knowledge of tenths and hundredths to fractions, decimals and percentages		
	1	2	3	4	5	6	7	8	9	
Winter		Inverse	Equiv fractions	Inverse x ÷ Compare fractions /Consolidate		Equivalet Fractios & Compare (done through LJ)	Mixed and Improper Fractions (done through LI)	Add and Subtract Fractions/Consoli dation of arithmetic (done through LI)	Multiply & Divide (1 & 10 & 100)	
	Shape Perimeter of composite rectilinear shapes WALT find the perimeter of polygons and compound shapes Calculate and compare the area of rectangles WALT find the area of rectilinear and compound shapes		Properties of Number Multiples, factors, factor pairs and common factors, prime, square, cube WALT understand the number properties incl prime numbers. WALT understand the properties of square and cubed numbers.	Consolidation and continge	ncy	ASSESSMENT WEEK Shape Draw and measure angles Identify. Know and use angles rules on a line and round a point WALT estimate and calculate angles on a straight line WALT estimate and calculate angles round a point	Fractions I name and write equivalent fractions of a given fraction Compare and order fraction WALT find equivalent fract WALT identify and convert mixed fractions WALT compare and order eq fractions including improper WALT: add and subtract frac	dentify, n. ns ions. improper and uivalent and mixed tions	Shape Properties of 2D shapes. Know angles are measured in degrees: estimate and compare angles WALT calculate the interior angles of a range of triangle types WALT properties of quadrilaterals including regular, irregular, parallel and perpendicular WALT calculate the interior angles of various quadrilaterals	

	1	2	2 3		5	6	7	8	9	10
	Multiply fractions by a whole number	Multiply by known facts	lultiply by known Divide by known facts Sc icts nu		Square and cube numbers	Equivalent Fractions	Consolidation and continge	ncy		
Spring	Place Value WALT Interpret and use negative numbers in a variety of worded problems WALT Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Use, read, writ standard units of WALT estimate and WALT I can multiply a to convert units of me WALT estimate and	Measure te and convert between f length, mass and volume d compare different units of measure nd divide by 10, 100 and 1000 easure d calculate volume	Time WALT convert different units of time WALT solve problems involving times including timetables	ASSESSMENT WEEK	FDP WALT compare and convert between FDP WALT find percentages (multiple of 10s) of a given amount WALT find any percentage of a given amount	Shape WALT know the properti shapes WALT identify 3D shapes representation (nets)	Position Identify, describe and repres the position of a shape follor reflection or translation WALT plot shapes co-ordinates in all 4 quadran WALT translate a shape acro quadrants WALT 2D shapes on a mirror line		and represent shape following a slation olot shapes using II 4 quadrants shape across 4 WALT reflect hirror line
	1	2	3	4	5	6	7	8	9	10
	Consolidation and con									
Summer	Consolidation and contingency		Measure Dat WALT estimate and compare different units of measure WALT Use all four operations wALT Solve problems to solve problems involving measures.		nd interpret icluding timetables. sing information h	Proportion WALT Solve problem and division, includin fractions and problem	ns involving multiplication ng scaling by simple ms	Consolidation an	d contingency	

Year Six	1	2	3	4	5	6	7	8	9	10
Year Six Autumn	1 Recall multiplies of 2-12 up to 12x in any order Addition and subtraction to 2 d.p. WALT compare, add and subtract numbers up to 10 000 000 and up to 3dp -Compare numbers with up to 7 digits and 3 decimal places.	2 Recall multiplies of 2-12 up to 12x in any order X and ÷by 10, 100 and 1,000 WALT compare, add and subtract numbers up to 10 000 000 and up to 3dp -Add and subtract numbers. - Add and subtract with decimal numbers.	3 Recall multiplies of 2-12 up to 12x in any order Dividing by 1 and 2 digit numbers WALT convert, compare and calculate fractions, decimals and percentages	4 X 10 and x 100 any 2- digit number and 1 or 2 d.p. number Adding fractions with different denominators WALT understand and use algebra -Use formula expressed in words and algebraically. -Find pairs of numbers that satisfy	5 ÷ 10 and ÷ 100 any 2- digit number and 1 or 2 d.p. number Dividing fractions WALT convert units of measures WALT interpret data -Convert between standard units of measurement (lengths, mass and capacity).	6 Fraction – decimal equivalents Finding percentages of amounts WALT use properties of shapes -Find unknown angles using shape property knowledge. -Classify and compare	7 Fraction – percentage equivalents Short and long multiplication WALT round whole numbers and decimals -Round numbers to a given amount -Round numbers to solve problems	8 2 d.p. bonds to 1 Multiplying fractions WALT use long multiplication Multiplicatio n WALT use long division Division -Multiply 4 digits by 2 digits	9 Recall multiplies of 0.2-1.2 up to 12x in any order Order of operations WALT solve fraction calculations . Fractions with different denominat ors and mixed numbers, using the	10 Contingency, consolidation and gap analysis
			compare between fractions, decimals and percentages. -Calculate the difference between fractions, decimals and percentages of amounts.	satisfy equations. -Describe number sequences -Use algebra to solve problems	 -Convert between miles and km. -Solve temperature problems. -Solve time problems. 	shapes based on their properties. -Find the area of shapes.	solve problems.	by 2 digits -Multiply decimal numbers. -Divide 4 digit by 2 digit. -Divide decimal numbers.	concept of equivalent fractions -Add and subtract fractions.	
	1	2	3	4	5	6	7	8	9	
Winter	State place value of a digit in any number up to	Continue number sequence (+/- 200, +/- 50 etc.)	Round to nearest 20, 50 and 100	Recall multiplies of 2-12 up to	Recall multiplies of 2-12 up to	Recall multiplies of 2-12 up	X 10 and x 100 any 2- digit number	÷ 10 and ÷ 100 any 2- digit number	Fraction – decimal equivalents	

	10million and			12x in any	12x in any	to 12x in	and 1 or 2	and 1 or 2		
	3 d.p. Square and cube numbers	Subtracting fractions with different		order	Order Contingency,	any order	d.p. number	d.p. number		
	WALT understand and use ratio -Use and simplify the notation of ratio. -Use ratio in scale drawings. -Use ratio to solve problems.	WALT calculate the perimeter and area of shapes. -Calculate the area of a triangle. -Calculate the area of a parallelogram.	WALT calculate angles -Identify and use vertically opposite angles. -Identify and use the angles in regular polygons.	WALT find common factors. WALT compare fractions, decimals and percentages	WALT identify, measure and calculate the parts of a circle. WALT calculate averages	WALT calculate using percentage s -Calculate percentages of amounts. -Find the 'whole' from a given percentage.	WALT measure and draw angles using a protractor.	WALT interpret pie charts	WALT use knowledge of place value to solve problems	
	1	2	3	4	5	6	7	8	9	10
	Fraction – percentage equivalents	2 d.p. bonds to 1	Recall multiplies of 0.2-1.2 up to 12x in any order	Recall multiplies of 0.2-1.2 up to 12x in any order	State place value of a digit in any number up to 10million and 3 d.p.	Continue number sequence (+/- 200, +/- 50 etc.)	Round to nearest 20, 50 and 100	Recall multiplies of 2-12 up to 12x in any order	Recall multiplies of 2-12 up to 12x in any order	Recall multiplies of 2- 12 up to 12x in any order
Spring				onsolidation						
1 0	WALT use knowledge of fractions to solve problems	WALT use algebra to solve problems	WALT find the volume of shapes WALT solve measure problems	WALT solve problems involving the calculation of percentages	WALT solve problems involving similar shapes where the scale factor is known or can be found	WALT Calculate, estimate and compare volume of cubes and cuboids using standard units.	WALT Use angle facts to find missing angles. Properties of 2D shapes.	Contingenc	l gap analysis	
	1	2	3	4	5	6	7	8	9	10
Summer	X 10 and x 100 any 2- digit number	÷ 10 and ÷ 100 any 2-digit number and 1 or 2 d.p. number	Fraction – decimal equivalents	2 d.p. bonds to 1	Recall multiplies of 0.2-1.2 up to	Recall multiplies of 0.2-1.2	State place value of a digit in any number up	Continue number sequence (+/-	Round to nearest 20, 50 and 100	Recall multiplies of 2- 12 up to 12x in any order

а	and 1 or 2						12x	in any	up to	12x in	to 10r	nillion	200, +	-/- 50		
d.p	.p. number						01	der	any	order	and 3	3 d.p.	ete	c.)		
C con B	Contingency, nsolidation and gap analysis	SATS	Additi on and subtra ction to 2 d.p.	X and ÷by 10, 100 and 1,000	Dividi ng by 1 and 2 digit numb ers	Addin g fractio ns with differ ent deno minat ors	Dividi ng fractio ns	Findin g perce ntages of amou nts	Short and long multip licatio n	Multip lying fractio ns	Order of opera tions	Squar e and cube numb ers	Subtra cting fractio ns with differ ent deno minat ors	Gap analys is and consol idatio n	Contingency, consolidation and gap analysis	Transition
			WALT us WALT ca	WALT use scale and proportion. WALT calculate duration.			WALT pr line, bar WALT co graph. WALT ca problem: WALT ca	esent and in and climate nvert using lculate and s. lculate time	nterpret da graphs. a line conv compare ir e difference	ita in ersion n money	WALT cal WALT us problems WALT cal amounts. WALT cal	culate gross e FDP to sol culate perc	s and net pa ve money entages of	эу.		