

St Anne's Mental Calculation Policy



Date approved:	19 th February, 2024
Date of review:	Summer Term 2025

Rationale:

This policy lays out the expectations for mental calculations and has been created to support the teaching of a mastery approach to mathematics. This is underpinned by the use of models and images that support conceptual understanding and this policy promotes a range of representations to be used across EYFS, KS1 and KS2.

A Mastery Approach:

A mastery approach to learning involves the following five "big ideas" of effective maths teaching:

Coherence - a coherent learning progression offering deep and connected

understanding

Representation and Structure concrete, pictorial and abstract representations are carefully structured

to help pupils "see the maths"

Mathematical Thinking - looking for patterns and relationships, making connections, conjecturing,

reasoning and generalising, communicating ideas using precise vocabulary

Fluency - - efficient, accurate recall of key number facts and procedures, allowing

pupils to move between different contexts and representations, choosing

strategies

Variation - - conceptual variation presents different representations of key features,

while procedural variation presents different ways of proceeding through

the learning journey (via scaffolding and support, etc)

Concrete - Pictorial - Abstract:

Mathematical understanding is developed through use of representations that are initially concrete (e.g. counters, multilink cubes, dienes, etc), and then pictorial (e.g. part-whole models, place value columns with images of counters in them, etc) to then facilitate abstract working (e.g. formal written methods).

This policy is a guide through an appropriate progression of representations. If at any point a pupil is struggling with the abstract, they should revert to familiar pictorial and/or concrete materials/representations as appropriate. As children move through the different stages, representations should be modelled alongside each other to ensure a secure understanding is maintained. Children should only move onto the abstract method when they have a secure understanding of the concept through an appropriate concrete and pictorial representation. This policy should be used in conjunction with the St Anne's Mathematics policy, our Written Calculation Policies and the White Rose calculation policy, as well as our Key Instant Recall Facts documents, which we share with our families to supplement the learning children receive in school. Teachers are also encouraged to refer to the NCETM Ready-To-Progress Criteria resources in ascertaining when children are ready to move on to new learning.

Vocabulary:

Children will continually recap vocabulary learned in previous years to ensure that their understanding and usage of the terminology is fully developed, broad and specific in application. Vocabulary from previous years is included in each year group's columns in black, while new vocabulary that may not have been previously encountered is in

green. Teachers are encouraged to check this list of vocabulary at the beginning and end of a relevant unit to ensure that they are modelling the full breadth and depth of vocabulary to the children, and that the children are using it in their verbal and written responses accurately and confidently.

Please see appendix 4 of the written calculation policies for notes on precise vocabulary, and for a comprehensive glossary, please see the separate document "NCETM Maths Glossary KS1-KS3" which is saved in PDF format with our calculation policies in the shared area.

Contents:

Mental Calculations in Reception	-	-	-	-	-	-	-	-	р3
Mental Calculations in Year 1 -	-	-	-	-	-	-	-	-	p4
Mental Calculations in Year 2-	-	-	-	-	-	-	-	-	р6
Mental Calculations in Year 3-	-	-	-	-	-	-	-	-	р8
Mental Calculations in Year 4-	-	-	-	-	-	-	-	-	p10
Mental Calculations in Year 5-	-	-	-	-	-	-	-	-	p12
Mental Calculations in Year 6-	-	-	-	-	-	-	-	-	p14

Mental Calculations in Reception

<u>Place Value</u>	<u>Addition</u>	Subtraction	Multiplication	<u>Division</u>
Count objects, actions and sounds.	Link the number symbol (numeral) with its cardinal number	Take away a single number.	Jump along a number line in steps of	Share objects into equal groups.
Subitise	value.	Find one less than a given number.	Look at patterns and counting.	Recognise patterns.
<u>Vocabulary:</u>	Find one more than a given number.	Recognise some	Grouping objects,	<u>Vocabulary:</u>
subitise count	Recall number bonds	relationships between numbers and patterns.	counting groups of the same size.	groups of, grouping, sharing,
number (1, 2, 3, etc)	to 10. Double numbers.	Count backwards in ones.	Double numbers.	share, shared, each,
order compare	<u>Vocabulary:</u>	Vocabulary:	Talk about odds and evens.	equal, equally,
bigger larger	add,	take (away),	<u>Vocabulary:</u>	same size, same amount
biggest smaller	more, altogether,	leave, how many are	odd,	
smallest in the middle	total, double,	left/left over? how many have gone?	even, double,	
forwards backwards	count up/on, and,	one less, two less,	groups of, ones, twos,	
first, second, etc	make, part,	ten less, how many fewer is	tens, count in	
	whole	than? difference between,		
		is the same as		

Key Instant Recall Facts	<u>Place Value</u>	<u>Addition</u>	Subtraction	Multiplication	<u>Division</u>
Autumn 1: Number bonds to 5	Count to and	Add one-digit	Subtract one- digit and two-	Vocabulary:	Find $\frac{1}{2}$ and $\frac{1}{4}$ of
Number bonds to 5	across 100, forward and	and two-digit numbers to 20,	digit numbers to	odd, even,	a set of objects
Autumn 2:	backwards,	including zero	20, including	•	Vocabulary:
Number bonds to 10	beginning with	merdanig zer o	zero	double, groups	vocabular y.
7 12207 20720	0 or 1, or from	Vocabulary:	2010	of, ones, twos,	groups of,
Spring 1:	any given	<u></u>	Vocabulary:	threes,	grouping,
Recognise numbers to 50	number	add, more,		fives, tens,	sharing,
		altogether,	take (away),	count in,	share, shared,
Spring 2:	Count in	total,	leave, how many	(forwards	
Know halves and doubles	multiples of	double,	are left/left	from/	each,
to 10	twos, fives and	count up/on,	over? how many	backwards	in pairs,
	tens	and, make,	have gone? one	from),	ins,
Summer 1:			less, two less,	how many	equal,
Know number bonds for	Count and read numbers to 100	part, whole,	ten less, how	times,	equally, same
each number up to 10	in numerals	plus,	•	lots of,	size, same
Summer 2:	in numerais	equals,	many fewer is	groups of,	amount,
Tell the time to the	Read numbers	equal to,	than?	once,	division, divide,
nearest half an hour	from 1 to 20 in	number line,	difference	twice,	divided by,
	numerals and	number bond	between, is the	-	dividing, divided
Rapid Recall	words		same as,	times,	into
<u>Rapia Recuir</u>			minus,	multiple/s of	
Represent and use	Given a number,		subtract,		
number bonds and related	identify one		how much less	times,	
subtraction facts within	more and one		is?	multiply,	
20	less		half,	multiplied by,	
	Find 10 more		halve,	repeated	
Doubles of numbers to 10	and 10 less of		equals,	addition,	
Name de de la confession de la constant	numbers to 100			array,	
Near doubles of numbers to 10				row,	
ιο 10	Order numbers			column	
Recall number bonds 1-10	to 100				
	Was also da sua				
Recognise odd and even	<u>Vocabulary:</u>				
numbers to 20	subitise, count,				
Doubibles and assubing	number				
Partition and combine a	(1, 2, 3, etc),				
two digit number - tens	order, compare				
and ones.	bigger, larger				
	biggest, smaller				
Know pairs of multiples of	smallest, in the				
10 up to 100 (e.g. 40+60,	middle, forwards,				
70+30 etc.)	backwards, first,				
Find half of even	second, etc				
numbers to 20 using	multiples,				
knowledge of doubling to	value,				
help.	numeral,				
	more,				
	greater,				
	less,				

inequality sign,		
equal,		
same,		
part-whole		
model,		
number line,		
number track,		
bar model,		
100-square,		
place value,		
column,		
column,		

Facts Autumn 1: Number bonds to 20 Autumn 2: Doubles and halves for numbers to 20 Spring 1: 2 x table (x and +) Spring 2: 10 x table (x and +) Summer 1: 5 x table (x and +) Summer 2: Tall the time to the nearest 5 minutes Recall and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg 9-19-10 Devive all bonds to 100. Doubles of all numbers to 20 Doubles of all numbers to 20 Doubles of multiples of 10 eg 40-40 or 3-5-5-5 Derive all bonds to 100. Doubles of multiples of 10 eg 40-40 or 3-5-5-5 Compare make the party number (rans, ones) 10 and 5 eg 40-40 or 3-5-5-5 Derive all bonds to 100. Doubles of multiples of 10 eg 40-40 or 3-5-5-5 Compare make the party number (rans, ones) 10 and 5 eg 40-40 or 3-5-5-5 Compare by the party number (rans, ones) 10 and 5 eg 40-40 or 3-5-5-5 Compare by the party number (rans, ones) 10 and 5 eg 40-40 or 3-5-5-5 Compare by the party number (rans, ones) 10 and 5 eg 40-40 or 3-5-5-5 Count in in steps of 2, 3, and 5 from aventally, including: number and ones gg 27-6 - a two-digit numbers to gg 30-20 - two two-digit numbers to be done in any or order (crossing 10s done done were numbers to 20 Becognise the place value of 21 Recall and use addition, and the two-digit number and ones gg 27-6 - a two-digit number and ones gg 27-6 - a two-digit number and ones gg 27-6 - a two-digit numbers to who the done in any or order (crossing 10s done done were numbers to be done in any order (crossing 10s done done were numbers to be done in any order (crossing 10s done done were numbers to 20 Becombact the party of the party of the done in any order (crossing 10s done done were numbers to 20 Becombact the party of the party of the party of the done in any order (crossing 10s done done were numbers to 20 Becombac	Key Instant Recall	<u>Place Value</u>	Addition	Subtraction	Multiplication	Division
Autumn 1: Number bonds to 20 Autumn 2: Doubles and halves for numbers to 20 Spring 1: 2x table (x and +) Spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 minutes Read numbers for cach facts in a 20 fluently 20 fluently Derive and use related facts up to 100 ep-Pairs of multiples of 10 ep-Pairs of multiples of 10 ep-Pairs of multiples of 10 and subtraction facts for multiples of 10 and subtraction facts for the 2, 5 and 10 multiplication and even numbers to a tleast 100 in numerals and in words Number 1: Summer 1: 5x table (x and +) Summer 2: 10x table (x and +) Summer 2: 10thet me to the nearest 5 minutes Regaid Recall and use addition and subtraction facts for the 2, 5 and 10 multiplication and even numbers one-digit number ond etes one-digit number on dress one-digit number on the done in any multiple of 10 eg-919. 11, each digit in a two-digit number (commutative) Recal and use addition and subtraction facts for the 2, 5 and 10 multiplication of the deep. 27-6 Add near multiple of 10 ey-919. 11, each digit number on ones eg-92. 2 \(\frac{1}{2}\). 11/2 \(\frac{2}{2}\) 2. 2\(\frac{1}{2}\). 11/2 \(\frac{2}{2}\) 2. 3\(\frac{1}{2}\). 11/2 \(\frac{2}{2}\) 2. 4\(\frac{1}{2}\). 11/2 \(\frac{2}{2}\) 2. 5\(\frac{1}{2}\). 11/2 \(\frac{2}{2}\)	<u>Facts</u>					
Autrun 1: Number boats to 20 Autrun 2: Doubles and halves for numbers to 20 Spring 1: 2x table (x and +) Spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 minutes Recall and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg plans for 10 and subtraction facts to 20 Doubles of multiples of 10 Devive and bloom to 100. Doubles of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even numbers to 20 Half of multiples of 10 eg plaff of 60=30, 90=45 Odd and even n		Count in steps of	A alal 10.1100 b a.m.a	Cubtoset	Recall and use	Recall and use
Auturna 2: Doubles and halves for numbers to 20 Spring 1: 2x table (x and +) Spring 2: 10x table (x and +) Summer 1: Compare and order numbers to 20 Tell the time to the peace self in interest of 20 (20 fleartly) Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Cout in tens from any number and tens eg. 27 + 6 (20 fleartly) Doubles of all numbers to 20 Doubles of all numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Cout maker, from any number and tens eg. 27 + 6 (20 fleartly) Doubles of all numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Cout in tens from any number and tens eg. 27 + 6 (20 fleartly) Doubles of all numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Cout in tens from any number (rens, number) Auturna 2: Lout table (x and +) Summer 1: Compare and order numbers to 20 Flaff of multiple and tens eg. 27 + 6 (and ones eg. 27 + 6 (and even numbers to 20 floor. 35 + 35 (and number) Derive all bonds to 100. Flaff of multiples of 10 eg. 30 + 70 = 100 Codd and even numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Codd and even numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Codd and even numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Codd and even numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Codd and even numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 100 Codd and even numbers to 20 Flaff of multiples of 10 eg. 30 + 70 = 10	Autumn 1:	2, 3, and 5 from			multiplication	division facts
Autumn 2: Doubles and halves for numbers to 20 Spring 1: 2x table (x and +) Spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 minutes Recall and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg-P3 to 20 Doubles of all numbers to 20 Doubles of multiples of 10 og 9, 10 and 10 mumbers on the same to 20 Half of even numbers to 20 Half of multiples af 10 eg half of 60 = 30, 90:45 Odd and even numbers to 20 To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next	Number bonds to 20	0	•		facts for the 2,	for the 2, 5 and
Autuma 2: Doubles and halves for numbers to 20 Spring 1: 2x table (x and +) Spring 2: Ox table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 miurtes Rapid Recall and use addition and subtraction facts to 20 Derive and use related facts up to 100 eg-Pains of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to			_	•	5 and 10	10 multiplication
mumbers to 20 Spring 1: 2x table (x and +) Spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Table (x and +) Summer 3: Compare and order numbers from out production and subtraction facts to 20 fluently ones) Derive and use related facts up to 100 G9 -Pa 10 Gad 5 - 4 two-digit numbers od two-digit numbers on two-		Count in tens	_		multiplication	tables, including
spring 1:	Doubles and halves for	,			tables, including	
Spring 1: 2x table (x and +) Spring 2: 10x table (x and +) Summer 1: Summer 1: Summer 2: Tell the time to the nearest 5 minutes Recal and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 Beg-Pairs of multiples of 10 eg. 30 + 72 = 100 And to apply a division, and with to add to an umbers to 20 and beg of 20 Doubles of all numbers to 20 and seed and what to add to an umber to 20 the following for the count in halves to 20 and 5 equal, sense to 20 and seed above to 20 and 5 equal, sense to 10 and 5 eq 40440 or 35-35 Doubles of all numbers to 20 dd and even numbers to 20 dd and even numbers to 100 in numer and tens eg 36 + 20 and to an the tens eg 36 + 20 mumbers of adding three one-digit numbers of the tens eg 36 + 20 mumbers of adding three one-digit numbers of the time to the numbers of 20 fluently Doubles of all numbers to 20 fluently signe, equal, sense one to 100 and 5 eq 40440 or 35-35 Codd and even numbers to 20 fluently even to add to an umber to reach the number to reach the numbers and tens eg 36 + 20 mumbers on the tens eg 36 - 20 Subtract a two-digit numbers on two-digit numbers of 20 fluently from 0 up to 100, use c, and = a subtract, and subtract, and subtract, and subtract two double of mumbers on two-digit numbers on definition for two numbers on two-digit numbers on definition for two numbers on two-digit numbers on two-digit numbers on definition of two numbers on two-digit numbers on definition of two numbers on two-digit numbers on definition of two numbers on two-digit numbers on definition of two numbers on two-digit numbers	numbers to 20	· ·	eg. 27 · 0			and even
Spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 multiple and in add bathraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg 30 + 20 Derive and bends to 100. Doubles of all numbers to 20 Doubles of multiples of 10 eg 40+40 or 35+35 Doubles of multiples of 10 eg half of 60 s 30, 90-45 To know what to add to a numbers to 100 more to mumbers to 100 more to mumbers to 100 eg half of 60 s 30, 90-45 To know what to add to a numbers to 100 eq equal, same, and make part, benchmarks to 100 equal, same, and make part, benchmarks to 20 To know what to add to a number to reach the ext multiple of 100 equal, same, and make part, benchmarks to 100 To know what to add to a number to reach the ext multiple of 100 equal, same, equal, same, equal, same, equal, same, part-whole model, serving and tense g3 6-20 of at least 100 in and subtraction facts to 20 To know what to add to a number to reach the ext multiple of 100 eq 30 + 20 to 20 To know what to add to a greater, less, inequality sign, equal, same, equal, same, part-whole model, serving and tense g3 6-20 of at least 100 in words of two numbers of at least 100 in unmbers of at least 100 in words of two numbers of at least 100 in words of two numbers on be done in any buttoptcat two two-digit numbers to worder numbers on be done in any order (commutative) for commutative) for commutative) for commutative) for commutative) for subtract, su		or backward	- a two-digit	og. 17 o		numbers
Spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 minutes Recall and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to 100. Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 eg as 10 and 5 eg 40-40 or 35±35 Derive dend mumbers to 20 Doubles of all numbers to 20 Doubles of for multiples of 10 eg as 10 and 5 eg 40-40 or 20 Doubles of for multiples of 10 eg as 10 and 5 eg 40-40 or 20 Doubles of for multiples of 10 eg as 10 and 5 eg 40-40 or 20 Doubles of for multiples of 10 eg as 10 and 5 eg 40-40 or 20 Half of even numbers to 20 Doubles of for multiples of 10 eg and of 60 as 30, 90-45 To know what to add to an umber to reach the next multiple of 10 eg, and make the reception, more of the place, search in the middle, forwards, a first, second, tree, multiple, sed to 20 To know what to add to an umber to reach the next multiple of 10 eg, and more to each end in any order (consuitative) - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add near multiple of 10 eg 9, 19, 11, 21. - Add mare multiple of 10 eg 9, 19, 11, 21. - Add mare multiple of 10 eg 9, 19, 11, 21. - Add mare multiple of 10 eg 9, 19, 11, 21. - Add mare multi				Subtract a two-	numbers	
spring 2: 10x table (x and +) Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 minutes Rapid Recall and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 eg a53-35 Doubles of multiples of 10 eg a53-35 Codd and even numbers to 20 Half of even numbers to 20 Half of multiples of 10 eg aflor fo 0-30, 90-45 Codd and even numbers to 20 To know what to add to a number to reach the mext multiple of 10 eg. 32 2 2 2 2 2 2 2 2 2 2 2 3 2 3 2 3 2 3	2x table (x and ÷)					
Two two-digit numbers Two			- J	_		
Summer 1: 5x table (x and +) Summer 2: Tell the time to the nearest 5 minutes Rapid Recall and use addition and subtraction facts to 20 fluently one facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to 100. Derive all bonds to 100. Doubles of all numbers to 20 Doubles of all numbers to 20 Half of even numbers to 20 Half of even numbers to 20 Half of feven numbers to 20 Half of for any portage and order numbers to 20 Half of multiples of 10 eg and of multiples of 10 eg half of 60= 30, 90=45 To know what to add to an number to reach the next multiple of 10 eg. 37 multiple of 10 eg. 30 multiples of 100 eg. 30 multiples of 100 eg half of 60= 30, 90=45 To know what to add to an number to reach the next multiple of 10 eg. 30 multiples of 100 eg. 30 multiple of 100 eg. 30 multiples of 100 eg. 30 multiples of 100 eg. 30 multiple of 100 eg. 30 mul			- two two-digit		•	10
Summer 1: 5x table (x and *) Summer 2: Tell the time to the nearest 5 minutes Rapid Recall and use addition and subtraction facts to 20 fluently ones? Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to 100. Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 335-35 Language, larger biggest, smaller and and the ford for multiples of 10 and 5 eg 40+40 or 35-35 To know what to add to an numbers to 100 To know what to add to an numbers to 100 To know what to add to an number to reach the next multiple of 10 eg. 32 to 100 To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know what to add to an number to reach the next multiple of 10 (e.g.) To know much and next multiple of 10 (e.g.) To k	TOX table (x and ÷)	words	numbers	Subtract two		V b - d
Summer 2: Tell the time to the nearest 5 minutes Recall and use addition and subtraction facts to 20 fluently Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to 100. Derive all bonds to 100. Derive all fof even numbers to 20 Half of even numbers to 20 Half of 60 = 30, 90-45 Half of even numbers to 20 Half of 60 = 30, 90-45 Odd and even numbers to 20 To know what to add to a number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know what to add to an number to reach the next multiple of 10 (e.g. 30 + 70 = 100 To know hat to add to an number to reach the next multiple of 10 (e.g. 40 + 70 + 70 + 70 + 70 + 70 + 70 + 70 +	Summan 1.	C		two-digit	•	vocabulary:
Summer 2: Tell the time to the nearest 5 minutes Rapid Recall Recall and use addition and subtraction facts to 20 fluently ones) Derive and use related facts up to 100 eg-dairs of multiples of 10 eg, 30 + 70 = 100 Derive all bonds to 100. Derive all			- adding three	numbers		
Summer 2: Tell the time to the nearest 5 minutes Rapid Recall Recognise the place value of each digit in a two-digit number (tens, ones) Derive and use related facts up to 100 eg 9:100 for 10 eg. 30 + 70 - 100 60 + 2 = 100 Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 eg 40+40 or 10 and 5 eg 40+40 or 20 Half of even numbers to 20 Half of even numbers to 20 Half of multiples of 10 eg half of 60 = 30, 90=45 Odd and even numbers to 20 To know what to add to a number to reach the enext multiple of 10 (e.g. 33 or 20.3 and 20.3 are signs. To know what to add to a number to reach the enext multiple of 10 (e.g. 33 or 20.3 are signs.) To know what to add to a number to reach the enext multiple of 10 (e.g. 33 or 20.3 are signs.) To know what to add to a number to reach the enext multiple of 10 (e.g. 33 or 20.3 are signs.) To know what to add to a number to reach the enext multiple of 10 (e.g. 33 or 20.3 are signs.) To know what to add to a number to reach the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the place value of each digit in a two-digit number. In the less, the less in the same as, multiple of in the less in the same as, multiple of in the less in the same as, multiple of in the less in the same as, multiple of in the less in the same as, multiple of in the less in the same as, multiple of in the less in the same as, multiple of in the less in the same as, multiple of in the less in the s	ox tuble (x unu +)		one-digit	(crossing 10s	(commutative)	
Tell the time to the nearest 5 minutes Rapid Recall Recognise the place value of each digit in and subtraction facts to 20 fluently Nocabulary: number (tens, ones)	Summer 2:	· ·	numbers	boundaries)	Multiply single	grouping,
Rapid Recall Recognise the place value of each digit in a two-digit number (tens, ones) Derive and use related facts up to 100 eg-giro of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Doubles of multiples of 10 eg, 35+35 Half of even numbers to 20 Half of multiples of 10 eg, anumber to reach the multiples, value, numeral, more, greater, less, inequalt, wing, anumber to 100 To know what to add to a number to reach the next multiple, of 10 (e.g., 30 + 30 + 30 + 30 + 30 + 30 + 30 + 30		· ·				sharing,
Recall and use addition and subtraction facts to 20 fluently perior and use related facts up to 100 eg-Pairs of multiples of 10 eg § 1,1 11/2 , 2 of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 10 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 10 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 10 eg § 2,1 11/2 , 2 of 2 in momber to 20 of 20 ender the last of 20 ender the		- 319113		<u>Vocabulary:</u>		share, shared,
Recall and use addition and subtraction facts to 20 fluently unwher (tens, ones) Derive and use related facts up to 100 eg-Pairs of multiples of 10 end of 5 eg 40+40 or 35+35 order in a gellest, in the middle, forwards, backwards, first, 20 that of numbers to 20 Half of multiples of 10 eg, half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiples of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the next multiple of 10 (e.g. 30 that is a number to reach the number to reach the number to reach the next multiple of 10 (e.g. 30 that is a number to reach the number		Recognise the	•			each, in
Recall and use addition and subtraction facts to 20 fluently number (tens, ones) Derive and use related facts up to 100 eg-Pairs of multiples of 10 eq. 35+35 Derive all bonds to 100. Derive all bon			_		P	pairs, ins,
and subtraction facts to 20 fluently number (tens, ones) Derive and use related facts up to 100 eg-Pairs of multiples of 10 and 5 eg 40.40 or 35+35 Half of even numbers to 20 To know what to add to a number to reach the next multiples of 100 To know what to add to a number to reach the next multiple of 10 (e.g. 3 and part-whole model, and make to a number to reach the next multiple of 10 (e.g. 3 and part-whole model, and make to a number to reach the next multiple of 10 (e.g. 3 and part-whole model, and to a number to reach the next multiple of 10 (e.g. 3 and part-whole model, and the middle, forwards and the middle, forwards, form, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, and the fet fleft over? how many are left/left over? how many theres, fives, tens, count in, (forwards from), how many times, lots of groups of, once, twice, — times, multiple/s of joint in, (forwards from), how many times, lots of groups of, once, twice, — times, multiple/s of joint in, (forwards from),	Recall and use addition		21.	subtraction,	Vocabulary:	•
Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to 100. Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 To know what to add to a number to reach the next multiple of 10 (e.g. 32 + 20). To know what to add to a number to reach the next multiple of 10 (e.g. 32 + 20). Derive and use related facts up to 100 eg-Pairs of multiples of 20 Count in halves add, more, altogether, total, double, cover? how many are left/left over? how many are left/left over? how many of threes, double, groups of, ones, twos, threes, count up/on, altogether, total, double, groups of, ones, twos, threes, count up/on, and, make, part, whole, plus, equal to, number line, digit, the middle, plus, equal to, number line, digit, the middle, forwards, bisses than, operation, smallest, in the middle, forwards, first, second, etc. Odd and even numbers to 20 Half of 60= 30, 90=45 To know what to add to a number to reach the next multiple, of 10 (e.g. 2) and 10 (e.g. 2)	and subtraction facts to	_	V b l	take (away),		•
Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 20 To know what to add to a number to reach the next multiple of 10 (e.g.) Derive and use related facts up to 100 Count in halves eg ½ 1, 1 1/2 , 2, 2 ½ add, more, altogether, total, double, count yon, altogether, total, double, groups of, ones, twos, threes, fives, tens, count in, hundred less, how many or fewer is thow many of fewer is thow many of fewer is thow many of fewer is those into the fewer is the same as, minus, subtract, how much less is than, operation, sackwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal ty on number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) Derive and use related facts up to 102 eg ½; 1, 1 1/2 , 2, 2 do 100 Count in halves eg ½; 1, 1 1/2 , 2, aldd, more, altogether, total, double, count yon, and make, part, whole by, thou many thes, sone count in, thou many of fewer is thow many of fewer is thow many of fewer is thow many times, lots of, groups of, once, twice, the same as, minus, subtract, how much less inverse inver	20 fluently	number (tens,	vocabulary:	leave, how many	odd, even,	, ,
Derive and use related facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70= 100 Derive all bonds to 100. Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100. To know what to add to a number to reach the next multiple of 10 (e.g.) Double facts up to 100 eg-pairs of multiple of 10 (e.g.) Doubles of multiple of 10 (e.g.) Doubles of multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) Double facts up to 100 eg-pairs of multiple of 10 (e.g.) Count in halves eg ½ 1, 11/2, 2, 2 ½ add, more, altogether, total, double, count up/on, and, make, part, whole model, egigether, total, double, count up/on, and, make, part, whole model, eg ½ 1. 11/2, 2, 2 ½ Add, more, altogether, total, double, count up/on, and, make, part, whole model, eg ½ 1. 11/2, 2, 2 ½ Add, more, altogether, total, double, count up/on, and, make, part, whole many have gone? one less, two less, ten less, one hundred less, how many or fewer is (forwards from), how many times, lots of, groups of, once, twos, have gone? one less, two less, ten less, one hundred less,		ones)		are left/left	double, groups	
facts up to 100 eg-Pairs of multiples of 10 eg. 30 + 70 = 100 60 + 2 = 100 Derive all bonds to 100. Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60 = 30, 90 = 45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) Account in halves eg ½ 1, 1 11/2, 2, 2 2½ altogether, total, double, count up/on, and, make, part, whole, plus, equal to, number line, digit, tens, ones, greater than, less than, operation, partition, recombine, inverse altogether, total, double, count up/on, and, make, part, whole mless, thon wany or from/backwards from), how many times, lots of, groups of, once, between, is the same as, minus, subtract, how much less is? half, halve, equals, tens boundary, regroup, exchange, inverse To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the number to reach the number to reach the number whole model, same, part-whole model, altogether, total, double, count up/on, and, make, part, whole plus, equal to, number line, digit, tens, total, double, count up/on, and, make, part, whole plus, equal to, number line, digit, tens, to so of groups of, once, between, is the same as, minus, subtract, how much less from), how many times, lots of, groups of, once, between, is the same as, multiple/s of justice, count, number line, digit, whole, plus, equal to, number line, digit, whole, plus, equal to, number line, digit, whole, plus, equal to, number line, digit, tens, bow many or times, lots of, yearly line, partition	Derive and use related		add more	over? how many		,
eg-Pairs of multiples of 10 eg. 30 + 70 = 100 Derive all bonds to 100. Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 23 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 24 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 24 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 24 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 24 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 24 and 0). To know what to add to a number to reach the next multiple of 10 (e.g. 24 and 0). To know what to add to a number to reach the number to reac	•			•		•
30 + 70= 100 60 + 2 = 100 Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the next multiple of 10 (e.g. 2) To know what to add to a number to reach the near the next multiple of 10 (e.g. 2		eg ½,1,11/2,2,	=		•	•
Round to nearest 10 Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of 10 (e.g. 20) To know what to add to a number to reach the next multiple of		2 ½				divided by,
Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 20 to 20 t				<u>-</u>	· ·	dividing, divided
Derive all bonds to 100. Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 32) and 100 Doubles of all numbers to 20 Nocabulary: Vocabulary: Subitise, count, number digit, tens, ones, greater than, less than, operation, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, same, part-whole model, subitise, count, number line, digit, tens, out than? difference between, is the same as, minus, subtract, how much less is? half, halve, equals, tens boundary, represents, inverse form), how many times, lots of, groups of, once, twice, — times, multiple/s of	60 + ? = 100		•		,	into,
Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 32. 240) To know what to add to a number to reach the next multiple of 10 (e.g. 32. 240) Doubles of all numbers to 20 number line, digit, than? difference between, is the same as, minus, subtract, how much less is2 half, halve, equals, tens boundary, regroup, inverse times, lots of, groups of, once, twice, times, multiple/s of in, groups of, once, twice, times, lots of, groups of, once, twice,		nearest 10	whole, plus,	•	from/backwards	left (over),
Doubles of all numbers to 20 Doubles of multiples of 10 and 5 eg 40+40 or 35+35 Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. Doubles of multiples of 20 Subitise, count, number line, digit, tens, odifference between, is the same as, ones, greater than, bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, same,	Derive all bonds to 100.		equals, equal to,	fewer is	from), how many	array
boubles of multiples of 10 and 5 eg 40+40 or 35+35	North and all months are	vocabulary:	number line,	than?	times, lots of,	,
Doubles of multiples of 10 and 5 eg 40+40 or 35+35 order, compare bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, to 100 To know what to add to a number to reach the next multiple of 10 (e.g. 10 and 5 eg 40+40 or 35+35 order, compare bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, more or same as, minus, subtract, how much less is? half, halve, equals, tens boundary, represents, inverse inverse law, To know what to add to a number to reach the next multiple of 10 (e.g. part-whole model, part-whole model, part-whole model, same, part-whole model, same, part-whole model, same, part-whole model, same as, minus, subtract, how much less is? half, halve, equals, tens boundary, represents, inverse inverse law, of, times, multiple/s of, times, how much less sis? half, halve, equals, tens boundary, represents, inverse law.		cubitice count	digit,	difference	groups of, once,	
10 and 5 eg 40+40 or 35+35 Order, compare bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, number to reach the next multiple of 10 (e.g.) To know what to add to a number to reach the next multiple of 10 (e.g.) Order, compare bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, more model, and to a same as, minus, subtract, how much less is? half, halve, equals, tens boundary, represents, inverse Same as, minus, subtract, how much less is? half, halve, equals, tens boundary, regroup, exchange, inverse Itimes, multiple/s of			tens,	between, is the	twice,	
order, compare bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g.) Order, compare bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model,	·		ones.	same as,	times, multiple/s	
bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, number to reach the next multiple of 10 (e.g. bigger, larger biggest, smaller smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, partition, partition, recombine, recombine, represents, inverse how much less is? half, halve, equals, tens boundary, regroup, inverse addition, array, row, column, commutative law,	_		*		•	
Half of even numbers to 20 Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to ad	55.55					
Smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, next multiple of 10 (e.g. smallest, in the middle, forwards, backwards, first, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model,	Half of even numbers to		-			
Half of multiples of 10 eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g. To know what to add to a number to reach the next multiple of 10 (e.g.		1	•			
eg half of 60= 30, 90=45 Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. part-whole model, same, second, etc multiple, value, represents, second, etc multiples, value, represents, inverse second, etc multiples, value, represents, inverse second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, same, part-whole model, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model, second	Half of multiples of 10		•		•	
Second, etc multiples, value, numeral, more, greater, less, inequality sign, enext multiple of 10 (e.g. second, etc multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model,	•				•	
Odd and even numbers to 100 To know what to add to a number to reach the next multiple of 10 (e.g. multiples, value, numeral, more, greater, less, inequality sign, equal, same, part-whole model,			•			
to 100 numeral, more, greater, less, inequality sign, equal, same, next multiple of 10 (e.g. number to reach the next multiple of 10 (e.g.	Odd and even numbers		inverse	exchange,	commutative	
To know what to add to a number to reach the next multiple of 10 (e.g. part-whole model,	to 100			inverse	law,	
To know what to add to a number to reach the next multiple of 10 (e.g. part-whole model,						
number to reach the equal, same, next multiple of 10 (e.g. part-whole model,		_				
3240)						
32+=40) number line	,	part-whole model,				
number me,	32+=40)	number line,				

number track, bar		
model, 100-square,		
place value,		
column,		
digit		
round		
rounding		

Key Instant Recall	<u>Place Value</u>	Addition	Subtraction	Multiplication	Division
<u>Facts</u>					
	Count from 0 in	Add numbers	Subtract	Recall and use	Recall and use
Autumn 1:	multiples of 2, 3,	mentally,	numbers	multiplication	multiplication
Number bonds for each	<u>4</u> , 5, <u>8</u> , 10, <u>50</u>	including:	mentally,	facts for the 2,	and division
number to 20	and <u>100</u>	- a three-digit	including a 3-	3, 4, 5, 8 and 10	facts for the 2,
A.,.b., 2.		number and ones	digit number and	multiplication	3, 4, 5, 8 and 10
Autumn 2: 3x table (x and ÷)	Read and write numbers to 1000	eg 327 + 8	ones, e.g. 327 -	tables	and 10 multiplication
3x Table (x and +)	in numerals and		8	Multiple 2 digit	tables
Spring 1:	in words	- a three-digit		numbers	Tables
4x table (x and ÷)	III Wor d3	number and tens	Subtract a 3-	numbers by x10	Divide any
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Compare and	428 + 40	digit number and	and x100 using	multiple of 10 by
Spring 2:	order numbers	.1 1	tens 428 - 40	zero as a place	10 eg 30÷ 10
8x table (x and ÷)	up to 1000	- a three-digit	6.1.	holder	Divide any
	'	number and	Subtract a 3-		multiple of 100
Summer 1:	Find 10 or 100	hundreds 368	digit number and	Multiplying a	by 10 or 100 eg
Recall facts about	more or less	+200	hundreds 368 - 200	single digit	2400÷100
durations of time	than a given	Vocabulary:	200	number by a	
	number	vocabulary.	Vocabulary:	multiple of 10 eg	Give $\frac{1}{2}$, $\frac{1}{4}$, 1/5,
Summer 2:			v ocubulary.	7 × 30;	1/3 of any 2
Tell the time to the	Recognise the	add, more,	subtract,		digit number
nearest minute	place value of	altogether,	subtraction,	<u>Vocabulary:</u>	
Rapid Recall	each digit in a	total, double,	take (away),		<u>Vocabulary:</u>
	three-digit	count up/on,		odd, even,	
Recall of all bonds to	number	and, make, part,	leave, how many	double, groups	groups of,
100 (multiples of 5 and	(hundreds, tens,	whole, plus,	are left/left	of, ones, twos,	grouping,
10)	ones)	equals, equal to,	over? how many	threes,	sharing,
		number line,	have gone? one	fives, tens,	share, shared,
Double of all numbers to	Round to the	digit, tens, ones,	less, two less,	count in,	each, in
at least 20 and related	nearest 10, 100	greater than,	ten less, one	(forwards	pairs, ins,
halves. Eg half of 5 is 2.5	Count up and	less than, operation,	hundred less,	from/backwards	equal,
2.3	down in	partition,	how many or	from), how many	equally, same
	tenths;	recombine,	fewer is	times, lots of,	size, same
	recognise that	represents,	than?	groups of, once,	amount,
	tenths arise	inverse,	difference	twice,	division, divide,
	from dividing	hundreds,	between, is the	times, multiple/s	divided by,
	an object into 10	increase,	same as,	•	dividing, divided
	equal parts and	expanded,	minus, subtract,	of, times,	into, left (over),
	in dividing one-	digits, augend,	how much less	multiply,	
	digit numbers or	addend, sum		multiplied by,	array,
	quantities by 10		is? half, halve,	repeated	guess,
	Vacabularuu		equals, tens	addition, array,	estimate, remainder,
	Vocabulary:		boundary,	row, column,	approximate,
	subitise, count,		hundreds	commutative law,	approximately
	number		boundary,	multiplicand,	app. o. milarory
	(1, 2, 3, etc),		regroup,	multiplier,	
	order, compare		exchange,	product,	
	bigger, larger		inverse,	scale up,	
	biggest, smaller		minuend,	regroup,	
	smallest, in the		subtrahend,	exchange,	
	middle, forwards,		decrease,	o. toriurigo,	
	backwards, first,		inverse		
	second, etc				

multiples, value,		
numeral, more,		
greater, less,		
inequality sign,		
equal, same,		
part-whole model,		
number line,		
number track,		
bar model, 100-		
square, place		
value, column,		
digit, round,		
rounding.		
hundreds,		
partition,		
p a ,		

Key Instant Recall	Place Value	Addition	Subtraction	Multiplication	Division
<u>Facts</u>					
	Count in	Add and	Estimate and use	Recall	Recall division
Autumn 1:	multiples of 6, 7,	subtract	inverse	multiplication	facts for
Number bonds of 100	9, 25 and 1000	fractions with	operations to	facts for	multiplication
		the same	check answers	multiplication	tables up to 12 ×
Autumn 2:	Order and	denominator	to a calculation	tables up to 12 ×	12
6x and 9x tables (x and	compare			12	
÷)	numbers beyond	Know pairs of	<u>Vocabulary:</u>		Estimate and use
Construct 1.	1000	fractions that		Use place value,	inverse
Spring 1: 7x and 11x tables (x and	Fig. 1 1000	total 1.	subtract,	known and	operations to
+)	Find 1000 more or less than a		subtraction,	derived facts to multiply	check answers to a calculation
,	given number	Work out what	take (away),	mentally,	To a calculation
Spring 2:	given number	must be added	leave, how many	including:	Use place value,
All times tables up to	Recognise the	to any three	are left/left	multiplying by 0	known and
12×12 (x and ÷)	place value of	· ·	over? how many	and 1;	derived facts to
	each digit in a	digit number to	have gone? one	•	divide mentally,
Summer 1:	four-digit	make the next	less, two less,	Multiply	including:
Multiply and divide a	number	multiple of 100	ten less, one	multiples of 10	dividing by 1;
single digit by 10 and	(thousands,	(e.g. 521 + =	hundred less,	by multiples of	
100	hundreds, tens	600)	how many or	10 eg 60 × 20	Find the effect
	and ones)		fewer is		of dividing a
Summer 2:		Vocabulary:	,	Multiplying	one- or two-digit
Recognise simple	Round any		than?	together three	number by 10
equivalent fractions	number to the	add, more,	difference	numbers eg 3 x	and 100,
Rapid Recall	nearest 10, 100 or 1000	altogether,	between, is the	4 × 5	identifying the value of the
Recall of all bonds to	01, 1000	total, double,	same as,	Recognise and	digits in the
100 (multiples of 5 and	Count backwards	count up/on, and,	minus, subtract,	use factor pairs	answer as ones,
10)	through zero to	· ·	how much less	and	tenths and
•	include negative	make, part,	is? half, halve,	commutativity in	hundredths
Double of all numbers to	numbers	whole, plus,	equals, tens	mental '	
at least 20 and related		equals, equal to,	boundary,	calculations	<u>Vocabulary:</u>
halves. Eg half of 5 is	Count up and	number line,	hundreds		
2.5	down in	digit, tens, ones,	boundary,	Vocabulary:	
	hundredths;	greater than,	ones boundary,		groups of,
	recognise that	less than,	tenths boundary	odd, even,	grouping,
	hundredths arise	operation,	(etc), regroup,	double, groups	sharing,
	when dividing an	partition,		of, ones, twos,	share, shared,
	object by a	recombine,	exchange,	threes,	each, in
	hundred and dividing tenths	represents,	inverse,	fives, tens,	pairs, ins,
	by ten	inverse,	minuend,	count in,	equal,
	by len	hundreds,	subtrahend,	(forwards	equally, same
	Recognise and	increase,	decrease,	from/backwards	, ,
	write decimal	,	inverse	from), how many	size, same
	equivalents to $\frac{1}{4}$,	expanded, digits,		times, lots of,	amount,
	$\frac{1}{2}$, $\frac{3}{4}$	augend, addend,			division, divide,
		sum,		groups of, once,	divided by,
	Recognise and	thousands,		twice,	dividing, divided
	write decimal	decimal,		times, multiple/s	into, left (over),
	equivalents of	decimal place,		of, times,	array, guess,
	any number of tenths or	decimal point,		multiply,	estimate,
	hundredths	tenths		multiplied by,	remainder,
	nunarearns				

	repeated	approximate,
Round decimals	addition, array,	approximately,
with one decimal	row, column,	commutative
place to the	commutative law,	(law),
nearest whole number	multiplicand,	commutativity,
number	multiplier,	regroup,
Company	product, scale	exchange
Compare numbers with	,	
the same number	up, regroup,	
of decimal	exchange,	
places up to two	multiplication	
decimal places	facts,	
decimal places	division facts,	
Vocabulary:	inverse,	
· · · · · · · · · · · · · · · · · · ·	derive	
subitise, count,		
number		
(1, 2, 3, etc),		
order, compare		
bigger, larger		
biggest, smaller		
smallest, in the		
middle, forwards,		
backwards, first,		
second, etc,		
multiples, value,		
numeral, more,		
greater, less,		
inequality sign,		
equal, same,		
part-whole model,		
number line,		
number track, bar		
model, 100-square,		
place value,		
column, digit,		
round, rounding,		
hundreds,		
partition,		
thousands,		
positive,		
negative,		
hundredths,		
decimal,		
decimal point,		
decimal place,		

Key Instant Recall	Place Value	Addition	Subtraction	Multiplication	Division
<u>Facts</u>				<u> </u>	
	Count forwards	Add numbers	Subtract	Multiply	Divide numbers
Autumn 1:	or backwards in	mentally with	numbers	numbers	mentally drawing
Find factor pairs of a	steps of powers	increasingly	mentally with	mentally drawing	upon known
number	of 10 for any	large numbers	increasingly	upon known	facts
4	given number up		large numbers	facts	.
Autumn 2:	to 1000000	Add fractions	Culadorada	ما ممانی بایدنام	Divide whole
Recognise prime numbers up to 20	Read, write,	with the same denominator and	Subtract fractions with	Multiply whole numbers and	numbers and those involving
numbers up to 20	order and	denominators	the same	those involving	decimals by 10,
Spring 1:	compare	that are	denominator and	decimals by 10,	100 and 1000
Recognise equivalent	numbers to at	multiples of the	denominators	100 and 1000	100 4114 1000
fractions and decimals	least 1 000 000	same number	that are		Vocabulary:
			multiples of the	Vocabulary:	
Spring 2:	Determine the	Know what to	same number		groups of,
Decimal number bonds	value of each	add to a decimal		odd, even,	grouping,
to 1 and 10	digit in numbers	with units and	Know sums and	double, groups	sharing,
C	up to 1 000 000	tenths to make	differences of	of, ones, twos,	share, shared,
Summer 1:	David am.	the next whole	decimals (e.g.	threes,	each, in
Metric conversion	Round any number up to	number (e.g. 7.2	6.5 + 2.7)	fives, tens,	pairs, ins,
Summer 2:	1 000 000 to the	+ = 8)		count in,	equal,
Square numbers to 12	nearest 10, 100,	- - 6)	Vocabulary:	(forwards	equally, same
and their square roots	1000, 10 000	Know what to		from/backwards	size, same
·	and 100 000		subtract,	from), how many	amount,
Rapid Recall		add to a four	subtraction,	times, lots of,	division, divide,
	Interpret	digit number to	take (away),	groups of, once,	
Identify multiples and	negative	make the next	leave, how many	twice,	divided by,
factors, including	numbers in	multiple of 1000	are left/left	times, multiple/s	dividing, divided
finding all factor pairs of a number and common	context, count	(e.g. 4087 +	over? how many	of, times,	into, left (over),
factors of two numbers	forwards and backwards with	= 5000)	have gone? one		array, guess,
Tactors of two numbers	positive and		_	multiply,	estimate,
Establish whether a	negative whole	Know sums and	less, two less,	multiplied by,	remainder,
number up to 100 is	numbers,	differences of	ten less, one	repeated	approximate,
prime and recall prime	including	decimals (e.g.	hundred less,	addition, array,	approximately,
numbers up to 19	through zero	6.5 + 2.7)	how many or	row, column,	commutative
		ŕ	fewer is	commutative law,	(law),
Recall square numbers	Read and write	Vocabulary:	than?	multiplicand,	commutativity,
and cube numbers to 12	decimal numbers		difference	multiplier,	regroup,
	as fractions	add, more,	between, is the	product, scale	exchange,
Double and halve	[e.g.: 0.71 = 71/100]	altogether,	same as,	up, regroup,	factor,
numbers up to 1000	, 1, 100]	total, double,	minus, subtract,	exchange,	multiple,
	Recognise and	count up/on, and,	how much less	multiplication	square,
To know number bonds	use thousandths	make, part,	is? half, halve,	facts,	cube,
to 1000 in multiples of 5	and relate them	whole, plus,	equals, tens	division facts,	scale (by),
or 10.	to tenths,	equals, equal to,	boundary,	inverse,	scaling (by),
	hundredths and	number line, digit, tens, ones,	hundreds	derive,	simple fraction,
	decimal	greater than,	boundary,	most efficient	decimal
	equivalents	less than,	thousands	method	remainder,
	Round decimals	operation,	boundary (etc),		simple rate
	with two decimal	partition,	ones boundary,		simple rate
	places to the	recombine,	,		
	Piaces to the	represents,			

			T
nearest whole	inverse,	tenths boundary	
number and to	hundreds,	(etc), regroup,	
one decimal	increase,	exchange,	
place	expanded, digits,	inverse,	
	augend, addend,		
Read, write,	sum, thousands,	minuend,	
order and	decimal, decimal	subtrahend,	
compare	place, decimal	decrease,	
numbers with up	point, tenths	inverse, negative	
to three decimal	•		
places			
Use mental			
rounding to			
estimate and			
check answers			
Vocabulary:			
subitise, count,			
number			
(1, 2, 3, etc),			
order, compare			
bigger, larger			
biggest, smaller			
smallest, in the			
middle, forwards,			
backwards, first,			
second, etc,			
multiples, value,			
numeral, more,			
greater, less,			
inequality sign,			
equal, same,			
part-whole model,			
number line,			
number track, bar			
model, 100-square,			
place value,			
column, digit,			
round, rounding,			
hundreds,			
partition,			
thousands,			
positive, negative,			
hundredths,			
decimal,			
decimal point,			
decimal place,			
millions,			

Key Instant Recall	<u>Place Value</u>	<u>Addition</u>	Subtraction	Multiplication	<u>Division</u>
<u>Facts</u>					
	Read, write,	Perform mental	Perform mental	Perform mental	Perform mental
Autumn 1:	order and	calculations,	calculations,	calculations,	calculations,
Identify common	compare	including with	including with	including with	including with
factors of a pair of	numbers up to	mixed	mixed	mixed	mixed
numbers	10 000 000	operations and	operations and	operations and	operations and
		large numbers	large numbers	large numbers	large numbers
Autumn 2:	Determine the			AA 1.: 1	
Convert between fractions, decimals and	value of each	Add fractions with different	Subtract	Multiply	Divide numbers
percentages	digit in numbers up to 10 000	denominators	fractions with different	numbers by 10, 100 and 1000	by 10, 100 and 1000 giving
percentages	000 000	and mixed	denominators	giving answers	answers up to
Spring 1:	000	numbers, using	and mixed	up to three	three decimal
Find a fraction of an	Round any whole	the concept of	numbers, using	decimal places	places
amount	number to a	equivalent	the concept of	accimal places	piacos
	required degree	fractions	equivalent	Multiply one-	Divide proper
Spring 2:	of accuracy	-	fractions	digit numbers	fractions by
Find a percentage of an	•	Vocabulary:		with up to two	whole numbers
amount	Use negative		<u>Vocabulary:</u>	decimal places	[e.g.: 1/3 ÷ 2 =
	numbers in			by whole	1/6]
Summer 1:	context, and	add, more,	subtract,	numbers	
Individualised consolidation	calculate	altogether,	subtraction,		Divide integers
of skills to prepare for KS3	intervals across	total, double,	take (away),	Multiply integers	by 0.5 and 0.25,
Summer 2:	zero	count up/on, and,	leave, how many	by 0.5 and 0.25,	including mixed
Individualised consolidation		make, part,	are left/left	including mixed	numbers.
of skills to prepare for KS3	Compare and	whole, plus,	over? how many	numbers.	
	order fractions, including	equals, equal to, number line,	have gone? one	Vocabulary:	<u>Vocabulary:</u>
Rapid Recall	fractions >1	digit, tens, ones,	less, two less,	vocabulary.	_
	77 46 770713 7 1	greater than,	ten less, one	odd, even,	groups of,
Identify common	Associate a	less than,	·	double, groups	grouping,
factors, common	fraction with	operation,	hundred less,	of, ones, twos,	sharing,
multiples and prime	division to	partition,	how many or	threes,	share, shared,
numbers	calculate decimal	recombine,	fewer is		each, in
	fraction	represents,	than?	fives, tens,	pairs, ins,
Recall and use	equivalents (e.g.:	inverse,	difference	count in,	equal,
equivalences between	0.375) for a	hundreds,	between, is the	(forwards	equally, same
simple fractions, decimals and	simple fraction	increase,	same as,	from/backwards	size, same
percentages, including in	[e.g.: 3/8]	expanded, digits,	minus, subtract,	from), how many	amount, division,
different contexts	T.J.,	augend, addend,	how much less	times, lots of,	divide,
different contexts	Identify the value of each	sum, thousands, decimal, decimal	is? half, halve,	groups of, once,	divided by,
	digit to three	place, decimal	equals, tens	twice,	·
	decimal places	point, tenths	boundary,	times, multiple/s	dividing, divided
	and multiply and	F5, 10/1/10	hundreds	of, times,	into, left (over),
	divide numbers		boundary,	multiply,	array, guess,
	by 10, 100 and		•	multiplied by,	estimate,
	1000 giving		thousands	repeated	remainder,
	answers up to		boundary (etc),	•	approximate,
	three decimal		ones boundary,	addition, array,	approximately,
	places		tenths boundary	row, column,	commutative
			(etc), regroup,	commutative law,	(law),
	<u>Vocabulary:</u>		exchange,	multiplicand,	commutativity,
			inverse,	multiplier,	regroup,
			minuend,	product, scale	exchange,
		Page 14 of '			cheminge,

subitise, count,	subtrahend,	un recroun	factor, multiple,
number	decrease,	up, regroup,	•
(1, 2, 3, etc),	inverse, negative	exchange,	square, cube,
order, compare	inverse, negative	multiplication	scale (by),
bigger, larger		facts,	scaling (by),
		division facts,	simple fraction,
biggest, smaller		inverse,	decimal
smallest, in the		derive,	remainder,
middle, forwards,		•	
backwards, first,		most efficient	simple rate
second, etc,		method,	
multiples, value,		order of	
numeral, more,		operations	
greater, less,			
inequality sign,			
equal, same,			
part-whole model,			
number line,			
number track, bar			
model, 100-square,			
place value,			
column, digit,			
round, rounding,			
hundreds,			
partition,			
thousands,			
positive, negative,			
hundredths,			
decimal,			
decimal point,			
decimal place,			
millions,			
degree of			
accuracy			