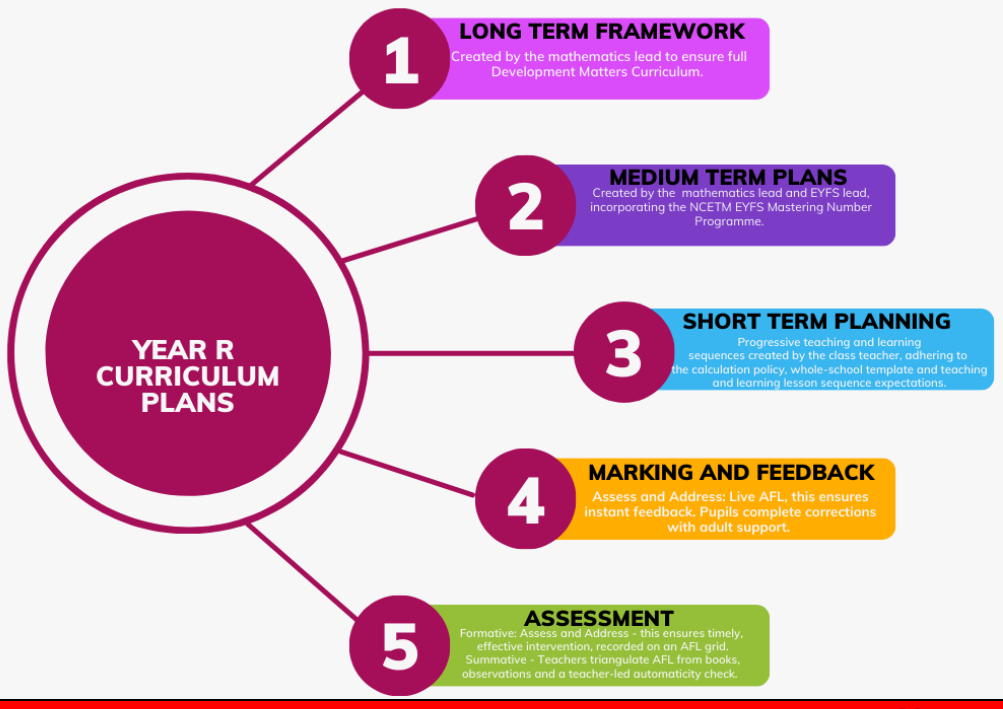
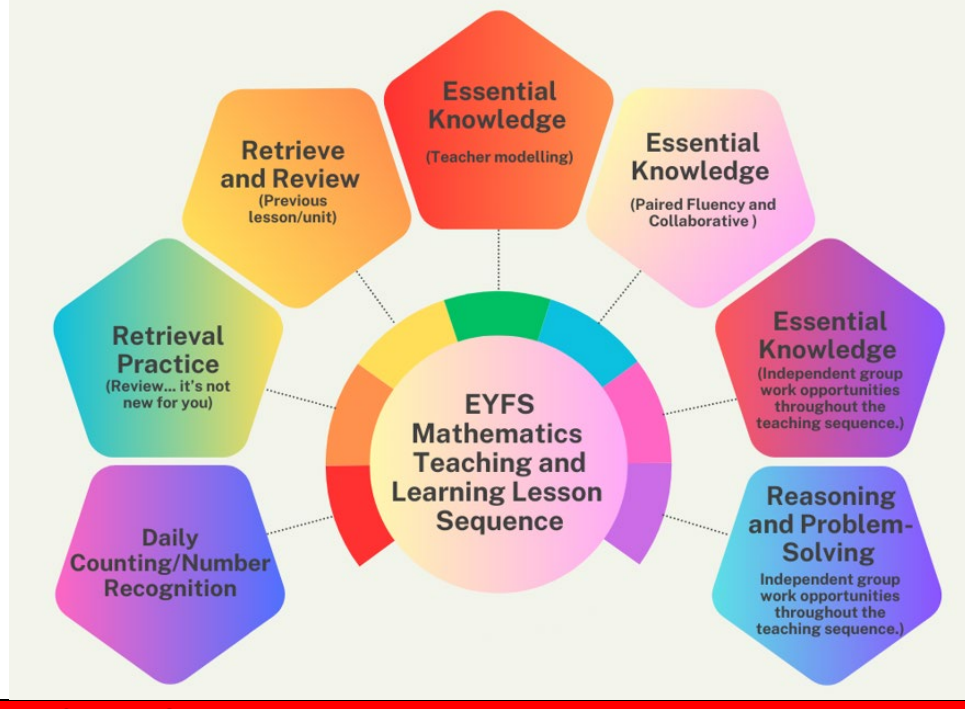
Brougham Primary School
Year R Mathematics

INTENT

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding – such as using manipulatives, including small pebbles and tens frames for organising counting – children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes (Development Matters 2023).

IMPLEMENTATION





YEAR R ESSENTIAL KNOWLEDGE

YEAR R NATIONAL CURRICULUM COVERAGE LONG TERM FRAMEWORK

Brougham Primary School

Year R

Long Term Framework

Brougham Primary School

Autumn	14 Week Term	Mastering Number Programme (Weekly Number blocks and number formation lesson)
Spring	11 Week Term	Mastering Number Programme (Weekly Numberblocks and number formation lesson)
Summer	12 Week Term	Mastering Number Programme (Weekly Numberblocks and number formation lesson) / Shape, Space and Measure (Weekly Mastering Number Programme Consolidation)

*SSM in integrated throughout the year into the enhanced provision as an additionality to the teach unit in the Summer term.

YEAR R FLUENCY TRAINING

Pupils access short, daily EYFS NCETM Mastering Number sessions, in which they are taught to develop and demonstrate fluent number sense.

Lessons seek to build firm mathematical foundations, through the use of intentional teaching strategies focused on developing fluency in calculation and number sense for all children; they use of appropriate manipulatives to support your teaching of mathematical structures.

Once the 30 week programme has been completed, pupils receive a weekly fluency training lesson focussed upon the remaining steps of the ladder. This is followed by 15 minutes daily independent fluency training each day.

YEAR R FLUENCY LADDER

39	Mastering Number Consolidation
38	Mastering Number Consolidation
37	Mastering Number Consolidation
36	Mastering Number Consolidation
35	Mastering Number Consolidation
34	Mastering Number Consolidation
33	Mastering Number Consolidation
32	Mastering Number Consolidation
31	Understanding of numbers to 10
30	Automatic recall of bonds to 5 (and some to 10)
29	Patterns within numbers to 10
28	Counting beyond 20
27	Comparison: Compare quantities to 10
26	Subitising: Subitising using a Rekenrek
25	Counting, cardinality and ordinality: Ordinality
24	Composition: Composition of numbers to 10
23	Composition: Composition of 5
22	Subitising: Doubles
21	Counting, cardinality and ordinality: Counting on from different starting numbers
20	Composition: Odd and Even numbers
19	Subitising: Doubles to 10 (5+5)
18	Composition: Partitioning 7
17	Comparison: Using language of 'more than', 'less than' and 'equal to' to describe the relationships between numbers
16	Counting, cardinality and ordinality: Counting out a set of objects from a larger set
15	Comparison: Comparing groups of objects – equal and unequal
14	Composition: Using Hungarian number frames for the numbers 5, 6 and 7
13	Composition: Part-Whole of 5
12	Counting, cardinality and ordinality: Counting groups and emphasising how many are altogether
11	Subitising (Perceptual subitising): Subitising in increasingly complex arrangements
10	Counting, cardinality and ordinality: Recalling counting rules
9	Composition: Composition and de-composition of 3, 4, 5 (part-part-whole models)
8	Composition: Exploring wholes and parts
7	Comparison: Comparing groups using vocabulary: more than, fewer than, an equal number
6	Counting, cardinality and ordinality: Exploring 5
5	Comparison: Exploring vocabulary – more than, fewer than
4	Subitising: Further consolidation of subitising up to 4 objects and partitioning 4 into different groups including sounds heard
3	Composition: Composition of 3 and 4. Looking at part-whole models and how they can be partitioned in different ways.
2	Counting, cardinality and ordinality: Developing 1:1 correspondence skill and learning the rules of counting
1	Subitising (Perceptual subitising): Quantifying sets of objects by subitising rather than counting (up to 3)

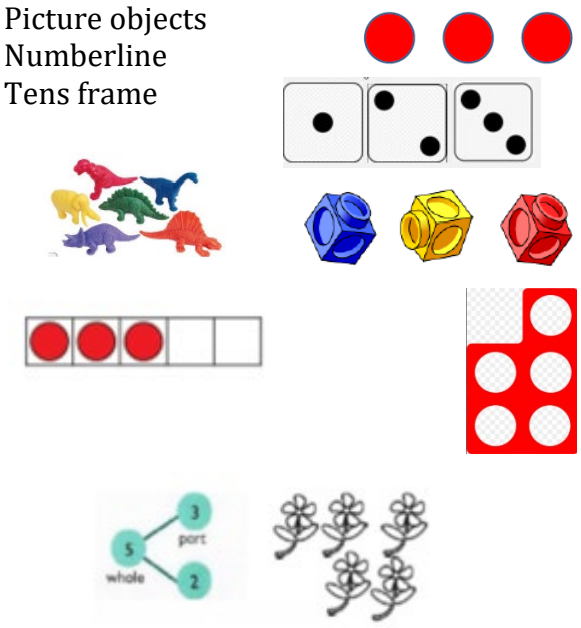
YEAR R KEY INSTANT RECALL FACTS

Recognise	0	1	2	3	4	5	6	7	8	9	10
Count (write the number the pupil stops at)	Autumn Term			Spring Term				Summer Term			
+	0	1	2	3	4	5	6	7	8	9	10
0	0+0=0	1+0=1	2+0=2	3+0=3	4+0=4	5+0=5	6+0=6	7+0=7	8+0=8	9+0=9	10+0=10
1	0+1=1	1+1=2	2+1=3	3+1=4	4+1=5	5+1=6	6+1=7	7+1=8	8+1=9	1+9=10	
2	0+2=2	1+2=3	2+2=4	3+2=5	4+2=6	5+2=7	6+2=8	7+2=9	2+8=10		
3	0+3=3	1+3=4	2+3=5	3+3=6	4+3=7	5+3=8	6+3=9	3+7=0			
4	0+4=4	1+4=5	2+4=6	3+4=7	4+4=8	5+4=9	6+4=10				
5	0+5=5	1+5=6	2+5=7	3+5=8	4+5=9	5+5=10					
6	0+6=6	1+6=7	2+6=8	3+6=9	4+6=10						
7	0+7=7	1+7=8	2+7=9	3+7=10							
8	0+8=8	1+8=9	2+8=10								
9	0+9=9	1+9=10									
10	0+10=10										

KIRF Benchmarks for Automaticity are used as part of the termly assessment process for mathematics. The aim is that by the end of the year, the pupil is able to fluently and accurately recall the facts for their year group benchmark – this will aid their mental maths fluency, agility and application when faced with a range of mathematical concepts.

PROGRESSION IN CALCULATION

	Year R	Year 1
Addition	Counting a set of objects. Knowing 1 more or 1 less Place numbers in order of size	Combining two parts to make a whole: part- whole model Starting at the bigger number and counting on Regrouping to make 10.
Subtraction	One less than / Taking away ones	Taking away ones Counting back Find the difference Part Part Whole Model Part whole model Make 10
Multiplication	Doubling	Make, find and see equal groups. Doubling Counting in multiples Repeated addition Arrays- showing commutative multiplication
Division	Halving	Sharing objects equally Division as grouping

YEAR R CONCRETE RESOURCES	YEAR R PICTORIAL REPRESENTATIONS	YEAR R ABSTRACT CALCULATION REPRESENTATIONS
Multilink Rekenrek (Summer term) Ten Frame Numicon Compare bears Natural themed objects Dice	Part -part whole model Picture objects Numberline Tens frame 	Horizontal number sentences.

PUPILS WITH SEND

For pupils who are working significantly below age-related expectations, Pivats assessment is used. Provision for number and place value is provision is put in place for the child to access the wave 3 intervention required.

CELEBRATING SUCCESS

- Weekly Maths Star of the Week is nominated by the class teacher and awarded by the class Maths Ambassador
- Maths Star of the Week is awarded a certificate and the maths bag of activities to take home and share with their family for one week.
- YR Parent/Pupil Maths Workshop in the Spring term.

HOME LEARNING

- Low stakes home learning is set weekly. Pupils are provided with a fundamental number facts-based activity, which links to Mastering Number and Numberblocks, and encourages them to practise their fluency skills or number concepts. Weekly Numberblocks episodes are shared with parents.
- Key Instant Recall Facts are shared with parents in order for them to support their children with learning these facts at home.