

## St. Teresa's Catholic Primary School: Key Instant Recall Facts (KIRFS) 2024\_2025

	Reception	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
Autumn 1	Say number names in order to 5 and begin to form them.	Tell the time to the hour and half past the hour.	Know number bonds to 10.	Tell the time to quarter past/to the hour.	Count in steps of 2 from a given number up to 100.	Tell the time to the nearest 5 minutes.	Know all addition and subtraction facts for multiples of 10 to 100.	Know multiplication and division facts for 7 x tables.	Consolidate multiplication and division facts for all times tables up to 12 x12.	Derive multiplication and division facts using multiples of 10 and decimal numbers e.g. $50 \times 7 = 350$ ; $8 \times 0.7 = 5.6$			
Autumn 2	Say number names in order to 10 and begin to form them.		Know number bonds to 20.		Count in steps of 5 (from a given multiple of 5) up to 100.		Know multiplication and division facts for 4 x table.	Know multiplication and division facts for the 12 x times table.	Recognise square and cube numbers within 100.	Recall equivalences between simple fractions, decimals and percentages.			
Spring 1	Know one more/one less than number to 5.		Know one more or one less of numbers up to 20.		Recall doubles of even numbers up to 20.		Know multiplication and division facts for 6 x tables.	Know multiplication and division facts for all times tables up to 12 x 12.	Multiply and divide whole numbers by 10, 100 and 1000.	Multiply and divide decimal numbers by 10, 100 and 1000.			
Spring 2	Know one more/one less than number to 10.		Know one more or one less of numbers up to 50.		Recall halves of even numbers up to 20.		Know multiplication and division facts for 9 x tables.				Recall decimal and percentage equivalents of the fractions $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{3}{4}$ , tenths and fifths.	Identify common factors of a pair of numbers.	
Summer 1	Know number bonds to 5.		Count in steps of 2 to 24 from zero.		Recall 2s and 5s multiplication and division facts.		Know multiplication and division facts for 8 x tables.	Find 10, 100 and 1000 more or less than a given number.	Convert between different units of metric measure (e.g. km/m; cm/m; cm and mm; g/kg; l/ml).	Know all previous number bonds including decimals that total 1 or 10 (two decimal places).			
Summer 2	Begin to explore counting in 2, 5 and 10s.		Count in steps of 10 to 120 from zero.		Recall 10s and 3s multiplication and division facts.		Know number bonds to 100 (any given number).	Know decimal number bonds to 1; e.g. $0.3 + 0.7 = 1$	Recall prime numbers up to 19.	Double or halve any number with up to 2-decimal places.			

## St. Teresa's Catholic Primary School: Key Instant Recall Facts (KIRFS) 2024\_2025

KIRFS are becoming more common place in maths long-term planning. Academic research supports the use of KIRFS, and research suggests significant impact upon pupil progress.

The expectation is that all children will access overlearning of these facts/derived facts and will readily recall these. Progress against the current KIRF will be recorded – I will create a document for this. Evidence of this overlearning will be evidenced in basic skills books, but verbal practice of these is equally important – daily rehearsal to secure these facts is expected.

### ACADEMIC READING TO JUSTIFY INTRODUCTION OF KIRFS.

#### Automaticity: Number Sense Maths 2020.

One of the strengths of setting out KIRFs is, in our minds, an acknowledgement that children benefit from having a bank of 'basics' that they have learnt to automaticity and can use in solving other mathematical problems. When children have quick access to a bank of facts which incur little cost to working memory, they will have more capacity to think about more complex problems that draw on these facts.

#### Derived Facts Approach: Number Sense Maths 2020.

It is important to remember though that, although having a bank of facts ready to use allows for quicker and effective access to more complex reasoning and/or problem-solving activities, teaching to automaticity through a derived fact approach – using what you know to work out what you don't know – must be part of teaching and learning practices.

Over time, with frequent application of these strategies, some facts (particularly those within 10) become known facts that are truly recalled. But for other facts this just doesn't seem to happen – particularly facts which bridge 10.  $8 + 9$  is a fact that, in training sessions over the years, I have asked probably a couple of thousand teachers to think about how they 'recall' it. In fact, only about 5% of primary teachers find they do recall it (in the way they would recall  $5 + 5 = 10$  by 'just knowing it'). The other 95% of teachers find they are very quickly using a strategy: most commonly near doubles, followed by 'make 10 and then', followed by adjusting (adding 10 and subtracting 1).

St. Teresa's Catholic Primary School: Key Instant Recall Facts (KIRFS) 2024\_2025

Proposed Times Table Progression – this was discussed as a staff and it was agreed to be implemented from September 2023.

- This is based on an academic document 'order of teaching times tables'.

Year 2	Year 3	Year 4	Year 5/6
2s, 5s, 10s, 3s, then introduce 4s	Secure 4s then 6s, 9s, 8s then introduce 7s	Secure 7s then 11s, 12s. Then recall all facts up to 12 x 12 in preparation for MTC.	Revision and application