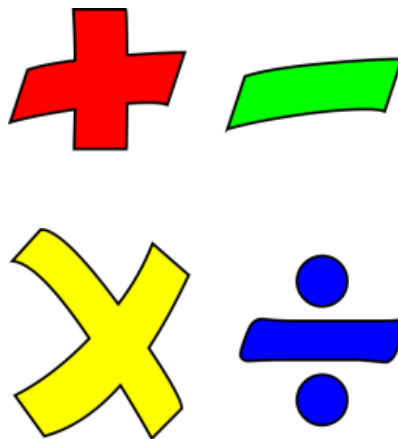# St Joseph's Primary

Parent Guide

Number Talks

What is a Number Talk?

A number talk is a strategy to build flexibility, accuracy and efficiency in mathematical thinking through the discussion and sharing of mental maths strategies. It is a short daily routine that allows pupils to contribute to meaningful dialogue, concentrating on how to answer Numeracy problems. A Number Talk is a powerful tool for helping students develop fluency when adding, subtracting, multiplying and dividing.

Key Features of a Number Talk

- It is a conversation that takes place around a Numeracy problem that the children should solve mentally
- The problems allow children to build on previous knowledge and use specific strategies
- Pupils are given a problem that they are expected to solve mentally, with accuracy and efficiency
- Pupils share how they have solved the problems and what strategies they have used
- 5-15 minutes at the beginning of a Numeracy lesson

<div align="center">

Question
Solve
Talk
Report Back

</div>

Benefits of a Number Talk

Through participating in Number Talks, the pupils have the opportunity to:

- Explain their own thinking;
- Consider other strategies suggested by their peers
- Learn about a range of efficient strategies
- Make decisions about choosing the best strategy for specific problems.

Number Talks in Primary 1, Primary 2 and Primary 3

In the infant stages children will be developing:
- Number sense - awareness of numbers and what they are, one-to one correspondence, estimation of numbers
- Fluency with small numbers - knowing how numbers can be composed and decomposed e.g. 8=4+4, or 7+1 or 10-2
- Subitizing - the ability to quickly identify the number of items in a small set without counting
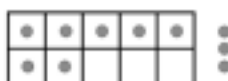- Ability to make tens

Resources used in P1-3 to support Number Talks:

You may hear your child talking about some of these resources that we use in school to support the teaching and learning of Number Talks:

· **Dot images:**

How many did you see? How did you see them?
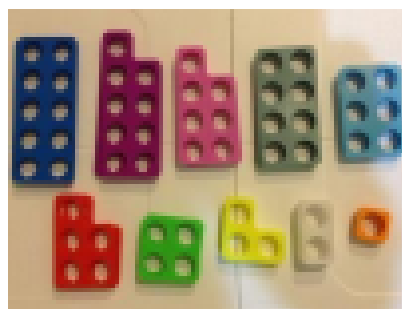
· **Ten Frame activities**

Rekenreks: Exploring numbers using 1-20 Counting Frames

· **Number lines activities**

· **'Making Tens' weekly activities**

· **Numicon**

Number Talks in Primary 4- 7

Students are encouraged to solve Numeracy word problems using efficient strategies they have been taught. They are encouraged to use as many different ways as they can to solve the Numeracy problem and then explain these to the rest of the class. Children are given time to think of the best way to solve the problem and use Number Talks hand signals to share their thinking throughout the process.
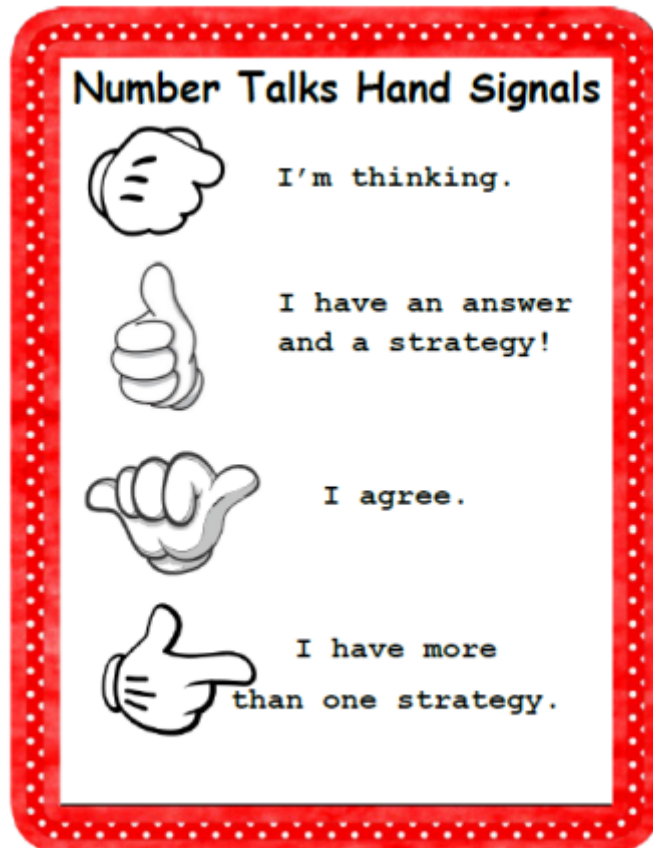
Children share their ideas as a class and discuss all the different strategies that they could use. These are displayed to the class and discussed.
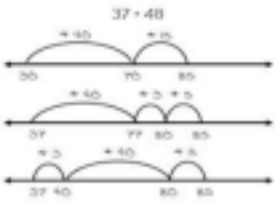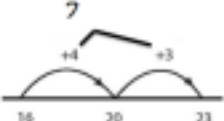
Below are a selection of strategies that your child will learn to help solve problems related to the 4 operations.

Addition Strategies

Adding Up in Chunks/Counting On	Reordering	Place Value - Partitioning	Making Tens/Bridging through 10
37 + 48	25 + 26 + 75 100 + 26 = 126	116 + 127 100 + 100= 200 10 + 20 = 30 6 + 7 = 13 200+30+13=293	49 + 38 1 7 50 + 37= 87
Compensation 67 + 28 +2 67 + 30 = 97 97-2 = 95	**Doubles/Near Doubles** 16 + 17 16 1 16 + 16= 32 32 + 1 = 33	**Friendly Numbers** 28+47 +2 -2 30 + 45= 75	**Bridging through 60** 10:36 How many minutes is it to the next hour?

Subtraction Strategies

Removal or Counting Back	Reordering	Place Value - Partitioning	Adding Up/Bridging through 10
123 - 69 123 - (20+40+3+6) 123 – 20 = 103 103 – 40 = 63 63 – 3 = 60 60 – 6 = 54	25 - 6 - 5 20 - 6 = 14	367 - 154 367 – 100 = 267 267 - 50 = 217 217 - 4 = 213 367 – 100 – 50 – 4 = 213	23 - 16 16 + 4 = 20 20 + 3 = 23 7
Place Value + Negative Numbers 399 - 254 (300+90+9) – (200+50+9) 300 + 90 + 9 - 200 + 50 + 4 100 + 40 + 5 = 145	**Adjusting for Easier Numbers** 123 - 59 +1 123 – 60 = 63 63 + 1 = 64	**Keep a Constant Difference** 151 – 98 (151 + 2) – (98+2) 153 – 100 = 53 151 – 98 = 53	

Multiplication and Division Strategies

Friendly Numbers	Repeated Addition	Partial Products	Doubling and Halving
9 X 15 10 X 15 = 150 150 – 15 = 135 Don't forget to 'undo' your change!	**6 X 15** 15+15+15+15+15+15 15 + 15 = 30 30 + 15 = 45 45 + 15 = 60 60 + 15 = 75 75 + 15 = 90	**6 X 125** 6 X (100 + 20 + 5) (6X100) + (6X20) + (6X5) 600 + 120 + 30 = 750	24 X 8 x2 ÷2 48 X 4 x2 ÷2 96 X 2 x2 ÷2 192

Breaking Factors into Smaller Factors	Grid Method	Partial Quotients	Multiplying Up

12 X 25
⌃
2 x 6
2 X 25 = 50
50 X 6 = 300
	35 X 7
	
	| X
		30	5 |
			| 7 | 210 | 35 |
			
			210 + 35 = 245
				36 R 10
				15 ⟌ 550
				 -150 (10 x 15)
				  400
				 -300 (20 x 15)
				  100
				  -30 (2 x 15)
				   70
				  -60 (4 x 15)
				   10
					72 ÷ 8 8 X
					
					5 = 40
					8 X 4 = 32
					(5 + 4) = (40 + 32)
					8 X 9 = 72

Repeated Subtraction
24 ÷ 6   24 – 6 – 6 – 6 – 6   6 X 4 = 24 SO 24 ÷ 6 = 4

We hope you find this parent leaflet helpful.
when supporting your child at home.