



Number Talks

Flash Through Ten

$$7 + 6 = 13$$

$$7 + 3 + 3 = 13$$

$6 + 7 = 6 + 4 + 3$
 $23 - 8 = 23 - 3 - 5$

Flash knows when a number is close to ten or is a multiple of ten. This makes it easy for him to add and take-away.

POW! Bridging Through Ten

Hulk Breaks Apart

$$20 + 38 = 20 + 30 + 8 = 50 + 8 = 58$$

$$68 - 30 = 60 - 30 + 8$$

$$35 + 14 = 30 + 5 + 10 + 4 = 30 + 10 + 5 + 4 = 49$$

The Hulk can break numbers into tens and ones. This helps him to add and take-away.

POW! Partitioning Strategy

Spider-Man Shuffle

$$5 + 8 + 5 = 18$$

$$10 + 8 = 18$$

$3 + 6 = 6 + 3$
 $2 + 5 + 8 = 2 + 8 + 5$
 $13 - 6 - 3 = 13 - 3 - 6$
 $16 + 9 - 6 = 16 - 6 + 9$
 $7 + 2 + 3 + 5 + 8 = 10 + 10 + 5 = 25$

Spider-Man shuffles the numbers around to make it easier to add and take-away.

POW! Reordering Strategy

Wonder Doubles

Double 5 and add one more or double 6 and take-away one
 $5 + 5 + 1 = 11$
 $6 + 6 - 1 = 11$

★ $14 + 15 =$ double 14 and add 1 or double 15 and take-away 1
 ★ $30 + 29 =$ double 30 and take-away 1
 ★ $18 + 16 =$ double 18 and take-away 2 or double 16 and add 2.

Wonder Woman knows her doubles and this helps her to add and take-away quickly.

POW! Doubles/Near Doubles Strategy

Captain Count On or Back

$$4 + 8$$

$$16 - 3$$

● $4 + 7$ count on in ones from 4 or count on in ones from 7
 ● $18 - 3$ count back in ones from 18
 ● $18 - 6$ count back in twos from 18
 ● $40 + 3$ count on in ones from 40

Captain America can count on to add and count back to take-away.

POW! Counting On or Back Strategy



Article 29 - You have the right to education which develops your personality, respect for other's rights and the environment.

What is Number Talks?

Number Talks is a pedagogical strategy to strengthen pupils' accuracy, efficiency and flexibility in mental maths.

It is a 5 – 15 minute daily session with the whole class to develop number sense. Each session involves the children being shown only a few purposefully created calculations which they have to solve using a range of different strategies. Most of the session is based around discussion led by the children sharing and explaining the strategies they have used and learning from each other.

The strategies

The strategies are progressive and taught discretely in class. There are strategies for addition, subtraction, multiplication and division. The table on the opposite page shows the progression between Nursery and Primary 1. See the Cuffnock Primary School Core Skills Progression Framework for a detailed explanation of each strategy. Strategies are taught and displayed in a variety of ways including superhero posters which can be found on the back on this booklet.

How you can help at home

- Share a calculation with your child
- Give time for child to calculate an answer and to consider and use a range of strategies.
- Encourage child to explain the strategies they used to arrive at the answer and to share the answer with you
- Place emphasis and importance on how your child arrived at the answer rather than the answer itself
- Encourage (and even celebrate) learning through mistakes and problem solving... these are all stepping stones on the way to success

Stage	Strategies (See Core Numeracy Skills Progression Framework for a detailed explanation of each strategy)		
Nursery (Early Level)	Counting On	Counting Back	
Primary 1 (End of Early Level)	Counting On Reordering Doubles	Counting Back	
Primary 2 (First Level)	Counting On Reordering Doubles/Near Doubles	Counting Back	Repeated Addition
Primary 3 (First Level)	Adding up in chunks/Counting on Reordering Doubles/Near Doubles Place Value – Partitioning Making tens/Bridging through 10	Counting Back Reordering Place Value – Partitioning	Repeated Addition
Primary 4 (End of First Level)	Adding up in chunks/Counting on Reordering Doubles/Near Doubles Place Value – Partitioning Making tens/Bridging through 10 Friendly Numbers Compensation	Counting Back Reordering Place Value – Partitioning Place Value and Negative Numbers Adding Up/Bridging through 10	Repeated Addition Doubling and Halving Repeated Subtraction
Primary 5-7 (Second Level)	Adding up in chunks/Counting on Reordering Doubles/Near Doubles Place Value – Partitioning Making tens/Bridging through 10 Friendly Numbers Compensation At Second Level the children should be able to apply and use a variety of strategies. They should have developed an awareness of which strategies are more effective for a particular problem. The strategies should be revisited throughout the level through increasing complex calculations.	Counting Back Reordering Place Value – Partitioning Place Value and Negative Numbers Adding Up/Bridging through 10 Adjusting for Easier Numbers Keep a Constant Difference	Repeated Addition Doubling and Halving Repeated Subtraction Friendly Numbers Partial Products Breaking Factors into Smaller Factors Grid Method Partial Quotients Multiplying Up