

Maths Information Meeting



Aims

- Share the key changes in the new curriculum
- Share the new progressive calculation policy
- Share how mathematics is assessed
- Share some mental maths strategies to use at home



New National Curriculum

- More challenging
- Back to basics
- Focused on arithmetic skills and applying these skills to solve problems



High Profile Subject

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

National Curriculum 2014, page 99.



What this really means..

- Children should be <u>fluent</u> in the basics e.g. know number facts and be confident in using a range of calculation methods
- Children should be able to <u>reason mathematically</u> e.g. follow a line of enquiry using their deepened knowledge and understanding
- Children should be able to <u>solve problems</u> e.g. choose and use known strategies to approach a wide range of problems



In order to achieve this, we are..

- Continuing with the mental maths programme
- Using a new progressive calculation policy
- Teaching must have key skills in each year group
- Building in daily opportunities to rehearse key number facts
- Planning more opportunities to solve problems e.g. at the end of lessons
- Posing more open-ended questions



ECS Curriculum

- Linked with Big Enquiry where possible e.g. in a Science focused big enquiry, measuring may be appropriate
- Planned across a half term
- Moving towards Child Initiated approach across the Juniors as well as the Infants
- Focused on end of year key skills



MATHS				
YEAR 1				
ATTITUDES We want to develop	KEY SKILLS We want all children to be able to:		STRATEGIES How we will teach it	EVIDENCE FOR ASSESSMENT How we will decide they've achieved the skills
Enthusiasm for number Confidence and fluency in counting Resilience for solving simple problems Familiarity with shapes and measures they find in their own environments Articulate and confident users of vocabulary	NUMBER & PLACE VALUE ADDITION & SUBTRACTION MULTIPLICATION & DIVISION	 Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens Given a number, identify one more and one less Represent and use number bonds and related subtraction facts within 20 	Singing songs/rhymes Repetition of skills through varied activities within child initiated learning Daily 5 minute numeracy activity outside of the maths lesson	Teacher and TA observational assessment from focused teaching groups and carpet sessions Recording children's progress on ipads against KPIs and year objectives using O-Track
	FRACTIONS	 Recognise, find and name a half as one of two equal parts of an object, shape or quantity Compare, describe and solve practical problems for: * lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]; * mass/weight [for example, heavy/light, heavier than, lighter than]; * capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]; * time [for example, quicker, slower, earlier, later] Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times 	Using real life examples Using manipulatives (concrete representations of number, resources) Presenting a range of problems so children can apply their skills in a range of contexts e.g. Talk it; solve it, Testbase, word problems	Marking independent work from child initiated learning activities Observing children working in pairs discussing their learning with each other Tracking children's achievement towards Mental Maths stickers and
	GEOMETRY: PROPERTIES OF SHAPES GEOMETRY: POSITION & DIRECTION STATISTICS	 Recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [for example, rectangles (including squares), circles and triangles]; *3-D shapes [for example, cuboids (including cubes), pyramids and spheres] 	e.t.c. Using the calculation methods set out in the calculation policy	badges Use of Mymaths to set home learning activities
				ES

Calculation Policy

- progressive develops year on year
- works from concrete to abstract concepts with use of resources to support and deepen understanding
- underpinned with a firm understanding of place value
- focuses on applying calculation skills within the context of problem solving



Assessment

- Formatively in every lesson against the learning intention this is then used to inform our future planning
- Half termly & end of year checking progress against the end of year expectations
- At the end of each Key Stage we assess children's progress formally and this feeds into local and national data
 - EYFS against the Early Years Goals
 - Key Stage 1 Paper 1 arithmetic test, Paper 2 reasoning
 - Key Stage 2 Paper 1 arithmetic test, Paper 2 & 3 reasoning



Mental Maths

- Mental Maths badge programme constantly evolving as it is a new programme
- The Year 4 expectation is that every child has rapid recall of multiplication and division facts
- Not just times tables and division number bonds, key mathematical facts, numeracy (e.g. using understanding of place value), solve problems
- Repetition and making it fun is the answer!



Six key areas

- Counting
- Number bonds
- Addition and subtraction
- Place value
- Multiplication and division
- Fractions, decimals and percentages

