

MATHS POLICY CRINS 2016-17

Purpose of study

Mathematics is a creative and highly inter-connected 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.

Aims

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

Essential characteristics of mathematicians

- An understanding of the important concepts and an ability to make connections within mathematics.
- A broad range of skills in using and applying mathematics.
- Fluent knowledge and recall of number facts and the number system.
- The ability to show initiative in solving problems in a wide range of contexts, including the new or unusual.
- The ability to think independently and to persevere when faced with challenges, showing a confidence of success.
- The ability to embrace the value of learning from mistakes and false starts.
- The ability to reason, generalise and make sense of solutions.

- Fluency in performing written and mental calculations and mathematical techniques.
- A wide range of mathematical vocabulary.
- A commitment to and passion for the subject.

Teaching & Learning

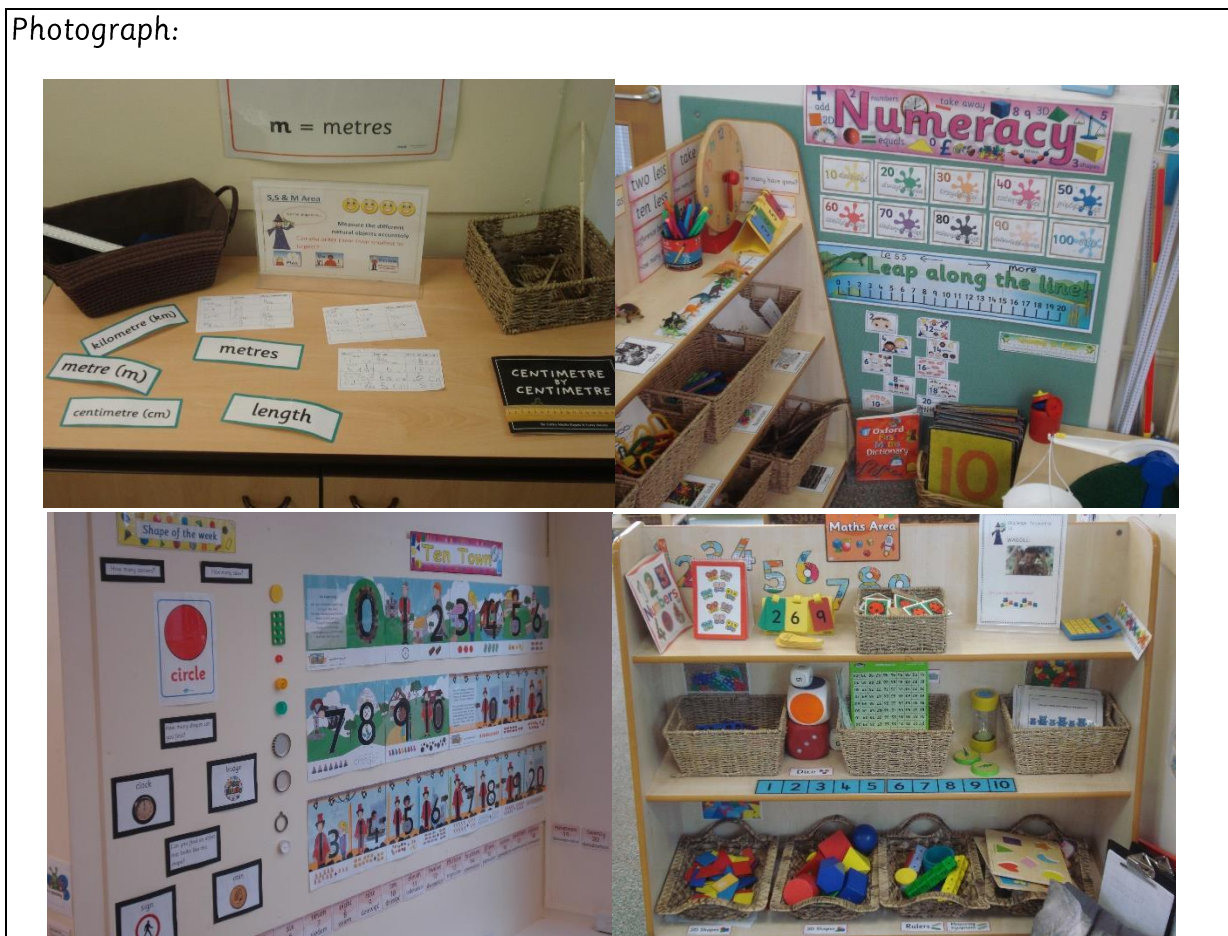
We use the Creative Curriculum topics from Chris Quigley over a 2 year long term plan and the new Essentials Curriculum in KS1. In EYFS we use the Development Matters. These documents facilitate a focus on stages of development as opposed to ages of development and we organise our children into 'Learning Zones' to support this approach.

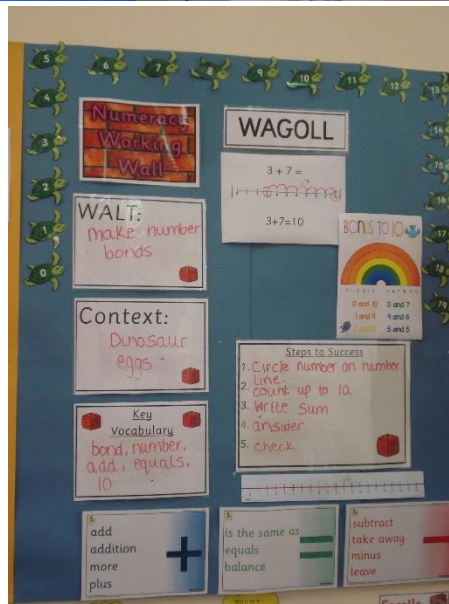
Year A Whole School Topics – Jurassic Forest, Dungeons & Dragons, Seaside Rescue

Year B Whole School Topics – Treasure, Megastructures, World Kitchen

Refer to Teaching & Learning Policy for specific details related to AFL, Behaviour for Learning, Non-Negotiables; which include detailed information about areas of continuous provision – photograph & planning

Photograph:





Monitoring & Assessment

KS1 -The assessment and recording of pupils' development is documented the Chris Quigley Depth of Learning: Reading, Writing, Communication, Letters & Sounds, BFL (Readiness to Learn audit) & Maths will be presented at half termly pupil progress meetings where the progress of all groups/individuals are measured against school targets (KPI's) and National Averages. Provision Maps will then be produced to support next steps in learning (which include interventions/SEN considerations. (EYFS also). Records should be stored in the class assessment folder.

EYFS – We use the observation, assessment and planning cycle (see EYFS Assessment Policy).

The EYFSP is a summative assessment tool for end of KS, this is reported to parents.

On a daily basis staff will make informal assessments by reading what pupils have written; listening to what pupils say about their work; watching pupils at work, individually and in groups; looking at what pupils have made.

The progress of each pupil will be reported to parents annually, comparing their progress to the national expectations for history; this will be couched in terms of **BASIC**, **ADVANCING** and **DEEP** learning across Milestones 1 and 2, where appropriate individual targets will be given to parents/carers.

The whole school development of mathematics will be monitored by the subject leader using the school's self-review framework. This may include: planning, tracking and work scrutiny, learning walks, observations, purchase of further resources.

The Senior Leadership Team, staff and governors will be consulted over any proposals before a plan is implemented.

Equal Opportunitites

All children should be entitled to opportunities to develop their understanding of mathematics, regardless of gender, age and faith.

Resources

A detailed resource inventory for all history resources within school is kept by the subject leader. Any further purchase of resources must be submitted to the SLT.

Role of Subject Leader

The whole school development of history will be monitored by the history subject leader using the school's self-review framework. This may include: planning, tracking and work scrutiny, learning walks, observations, purchase of further resources.

The Senior Leadership Team, staff and governors will be consulted over any proposals before a plan is implemented.

Refer to above document saved on Staff Shared Drive under SUBJECT LEADERSHIP. Hard copy stored in SL file.

Policy written September 2014

Reviewed bi-annually

<p><u>Day 1</u></p>	<p>Written numbers to numerals</p>	<p>WALT: recognise place value Context: partition 2 and 3 digit numbers Key Vocab:</p>	<p>What do we mean by partitioning? Look at the number in the HTU grid and say the value of each digit. Split the number up into each column like below: TU T U $149 = 100 + 40 + 9$</p>	<p>Give children a variety of numbers to write the partition on their whiteboards. (differentiated)</p>	<p>Read the number Hundreds Tens Units Write the calculation.</p>	<p>Green and Blue - 3 digit numbers Yellow - 3 digit numbers less than 200 Red - 2 digit numbers Seahorses Support - Numbers to 50</p>	<p>Put these numbers back together now they have been partitioned: $10 + 5$ $40 + 3$ $50 + 8$ $100 + 60 + 4$</p>	
<p><u>Day 2</u></p>	<p>Written numerals to numbers</p>	<p>WALT: recognise place value Context: Order 2-3 digit numbers.</p>	<p>Look at the 3 numbers on the washing line. We are going to order them from smallest to largest. Look at the highest value column first. 126 162 261 216 Use S2S to model ordering with tabbards/whiteboards.</p>	<p>Give children a variety of numbers to write the order from largest to smallest on their whiteboards. (differentiated)</p>	<p>Highest value digit. Largest number. Next value Digit Largest number. Repeat.</p>	<p>Green and Blue - 3 digit numbers Yellow - 3 digit numbers less than 200 Red - 2 digit numbers Seahorses Support - Numbers to 50</p>	<p>Show a set of incorrectly ordered numbers. Your task is to spot the mistakes. Explain to your partner the mistake.</p>	