SARRATT CHURCH OF ENGLAND PRIMARY SCHOOL

Fluency Policy

Laying the foundations for our children to be confident, respectful and to achieve their full potential.

Aims of this policy:

We believe children learn better when they are encouraged to engage in meaningful repetition of key mathematical skills that have been taught in whole class maths lessons. Our fluency curriculum enables quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics.

We aim to provide lots of learning challenges throughout the year which will require our children to develop strategies, reason and become fluent mathematicians who can confidently apply their understanding to a variety of problems and contexts .

Our policy enables our children to benefit from both guided and independent practise and our adults to check for pupil understanding whilst engaging pupils in weekly / monthly reviews of concepts previously taught. (Rosenshine's Principles of Instruction -2021)

The National Curriculum recognises the importance of maths fluency: one of the three aims of the new curriculum states that pupils (of all ages, not just primary children) will: *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.*

Curriculum:

In EYFS / KS1-Classes follow the daily NCETM Mastering Number programme using manipulatives including Rekenrek and tens frames.

In KS2 - each class teaches fluency daily and follows a set timetable:

- Monday- arithmetic
- Tuesday- review of prior learning
- Wednesday- times tables
- Thursday- take one number
- Friday- review of prior learning

These sessions are 10-15 minutes maximum.

Teaching and Learning Styles:

As with much of mathematics, the key to fluency is in making connections, and making them at the right time in a child's learning.

Manipulatives

We learn by moving from the concrete to the abstract and structured apparatus such as Base 10 can be helpful for learning about place value or number bonds. We recognise the value in children 'playing' with the manipulatives to consolidate their learning.

Speaking frames / Stem sentences

At Sarratt we believe that maths discussion is fundamental to the development and understanding of all aspects of the subject. Children are encouraged to use mathematical language and processes to explain their reasoning. This is achieved by using 'speaking frames' within whole class maths lessons to demonstrate an in depth understanding of a concept. Stem sentences are particularly useful in EYFS / KS1 to chorally 'rehearse' a step or fact. This aids the transition from working memory to long-term memory.

Consolidation in meaningful contexts

By offering children practise in context we help them to make links between the types of situations that a particular strategy might suit. This is called mathematical memory, which is different from just memorising. This aims to embed important mathematical procedures as they cannot be "forgotten over the holidays" because they are based in a web of connected ideas about fundamental mathematical relationships.

As with much of mathematics, the key to fluency is making connections between learning at the right time.

Home Learning Opportunities / Parental Involvement:

Homework should be set and sent home at the end of each week. Year 3 and 4 send home a "take one number" slide through Google Classroom for the children to complete to further establish understanding of number. In addition to this, children are set times tables recall activities and practical activities to support their mathematical development.

UKS2 classes build fluency through arithmetic and reasoning homework set weekly during the Autumn term.

Assessment and Record Keeping:

Ongoing assessment includes: AFL using whiteboards, targeted questioning, opportunities for further practice / challenge depending on understanding.

Teachers should use the following three areas to identify fluent learners:

- **Efficiency**: learners choose efficient strategies and don't get bogged down in too many steps
- **Accuracy**: learners are accurate in their workings, have great recall of facts and double check their answers
- **Flexibility**: learners understand that there are many ways to solve a problem

Fluency means that learners can do more than just memorise procedures. To be truly fluent, a child understands the meaning of the operations and their relationships to each other, they have a large knowledge bank of number facts, and a deep understanding of the base ten system.

Roles and Responsibilities:

It is the responsibility of all staff to ensure that they are following the policy. The subject leader and SLT will monitor and evaluate the application of the policy.

Initial training was delivered in September 2020 with relevant maths updates in April 2021, September 2021 and September 2022 in line with the curriculum prioritisation documents.

Other references:

Where relevant, this policy should be considered alongside and in accordance with the Marking and Feedback policy, Presentation policy, SEN policy, Inclusion policy, Assessment policy, Teaching and Learning Policy, Homework policy, Planning policy, Handwriting policy.

Signed (Subject Leader): .....

Signed (Head Teacher): .....

Date approved: ....

Date for review: ....