MATHS

Intent:

Maths at Sennen School focuses on ensuring every child develops a deep understanding of mathematics, in particular number and the four operations. Our aim is to enable every child to leave our school confident in all maths skills to thrive later in life.

Our children need to develop the necessary skills to make them “deep thinkers”, acquiring maths skills that can be recalled quickly and transferred and applied in different contexts, They need to be able to make rich connections across areas of maths and use their knowledge in other subjects.

By embedding the Mastery approach into the curriculum, we ensure calculation is secure by including reasoning and problem-solving opportunities across a series of lessons. Secure links are made and prior knowledge is continually tested and challenged throughout.

Our aspiration is for every child to see themselves as a Mathematician – demonstrating resilience and a confident attitude towards tackling problems both in and out of the classroom and understanding the impact of maths in the wider world.

Implementation:

Teachers follow the White Rose scheme for coverage and sequencing.

Teachers use White Rose, Power Maths, Testbase and NCETM mastery to aid their planning.

Teachers then decide on the steps to success in order to achieve the end learning outcome (these are reflected in the clear success criteria) from these, children have a secure understanding of what they need to do in order to succeed and learn.

A high importance is placed on the use of correct mathematical vocabulary. These are introduced as part of the lesson and are referred to throughout. They are also on display in the classroom so that the children can refer to them in their maths sessions.

Teachers initiate learning with practical fluency activities. This is then followed by pictorial representations leading to the abstract concept (CPA approach). Once children have a secure understanding of fluency, teachers challenge their learning by setting a variety of clear questions involving reasoning and problem solving. These are taken from the WR, Power Maths, I see Reasoning, NCETM and Testbase.

Children are encouraged to verbalise their understanding b through the use of stem sentences. These encourage children to speak in full sentences and clarify their understanding. These stem sentences for part of lessons and class displays.

Teachers monitor and assess throughout the lessons, addressing misconceptions early through verbal feedback and focus groups. If a child still faces barriers a highly skilled TA will follow up with the child as soon as possible; preferably the same day.

Teachers use their assessments to identify ways children can be stretched. This could be done through stretch activities such as verbal or written explanations, error spotting or other mastery activities.

If necessary, teachers adapt their planning to the children’s needs in order to develop a greater depth of knowledge in the mathematic skill being taught.

Support/Interventions: All children have the same learning outcomes. They have learnt to be resourceful and can readily use manipulatives and the 5 B’s when required. They receive verbal feedback during the

lesson and have same day catch up/follow up with a highly skilled TA to break barriers and pinpoint specific need.

Impact:

Summary Data 2017 – 2019:

KS1	(Nat Exp+)	All	PP
2017	(75%)	77%	100%
2018		50%	20%
2019	(76%)	83%	75%

KS2	(Nat Exp+)	All	PP
2017	(75%)	71%	40%
2018	(76%)	80%	60%
2019	(79%)	77%	100%

KS2 Progress	All	PP
2017	0.0	-0.5
2018	+0.8	+0.59
2019	-1.66	+5.31

Our aim is that the impact of our maths curriculum will be:

- Children will make at least good progress in Mathematics from their last point of statutory assessment of from their starting point in reception.
- Children will use their Mathematics knowledge and skills, in all curriculum areas, to enable them to know more, remember more and understand more.
- Children will recognise the importance of Mathematics as a facilitating subject to enable them to access other areas of learning and operate successfully is everyday life both now and in the future.
- Every child (boys/girls/SEND/PP) will have a confident attitude towards mathematics. They will use arithmetic and timetables fluently and make connections in order to solve real life problems.
- Teaching Assistants have developed skills and are able to implement and support same day catch up/follow up interventions.
- Parents are supported by staff to ensure they have the correct knowledge base to support their child at home and continue positive aspirations.