## MATHEMATICS INTENT FOR OUR PROGRAMME OF STUDY: KNOWLEDGE, PROGRESSION, COVERAGE

(PRIOR, NOW, NEXT)

Our core school intent runs through every aspect of our teaching and learning. It is our philosophy and approach in every subject area. It is **how** we teach and learn. Every leader commits to this. But every subject must have its own Programme of Study - its own lines of progression for the knowledge and skills we plan to teach and therefore its own rationale/intent for **what** we teach and learn. This is ours for mathematics.

## The key principles of our 'pupil starting point' philosophy are:

- \* The use of pre-learning diagnostic assessments to determine starting children's points for every unit of work. No child is pre-set to a seat or group. We use our pre-learning judgements to personalise where our children begin. Nothing is assumed. Nothing is generic. Our mathematics teaching requires reflective and pro-active teaching.
- \* Children 'peel off' at relevant points within the lesson. Starting at either PURPLE 1, PURPLE 2 or GREEN based upon our pre-assessment and live marking during guided learning GREEN forms the expected standard for the year group. GOLD is the layer that follows which specifically focuses upon applied, extension problem solving.
- \* Guided learning gathers relevant groups together within lessons and targets just those children who require that input.

  Then at each level of guided learning our children then 'peel off' and apply their learning to the relevant level of fluency. It is personalised. It challenges but is never requires our children to repetitively complete endless questions. Let's make our children think, learn from mistakes and move them forward at the correct pace.
- \* Self marking and immediate live marking is applied throughout. 'Refine and Polish' is an immediate process at the point of learning considered whilst working. We embrace mistakes and corrections. Trial and error is encouraged.

  Less may be more! THIS IS OUR CORE SCHOOL INTENT IN ACTION.
- \* Our professional development work with our teaching assistant team is key in mathematics. Another adult is another teacher! Adults work together so that the teacher can lead learning, whilst the additional adult monitors, intervenes and offers live feedback. It becomes a 'team' philosophy that really works.
- \* FAST TRACK is a key strategy. This is deployed for those children who can immediately move to a higher starting point based upon pre-assessment. We don't waste time moving children through levels we move immediately to the correct stage. Our teaching assistant team are vital in enabling this dynamic starting point. Our horseshoe philosophy is so important to the successful teaching and learning approach in mathematics and is particularly the case when considering FAST TRACK.
- \* Groups within the room are dynamic. They can change from unit to unit and within lessons. Intervention is enabled within lessons as a way of brining children with common errors or misconceptions together in the maths working bay for additional input. Intervention is pro-active and live, rather than re-active and detached from the lesson.
- \* Each room now has a working Mathematics Bay with working wall. Built as a hub for practical resources and additional input. Double flip charts, pens and resources at the ready!
- \* Marking Bays have been established to increase independence and apply appropriate pace to learning. All layers of activity have limited questions meaning that progress, rather than quantity, is a measure of impact. Just doing 25 of the same questions is wasted time. Learning, building confidence and then moving on to the next challenge is our aim.
- \* As previously mentioned, a GOLD/PROBLEM SOLVING layer is on offer for our FAST TRACK children. An emphasis here upon demonstrating understanding and applying in different ways rather than simply making numbers bigger!
- \* This philosophy looks carefully at applying learning in different ways and encourages wider ways of showing understanding. It is not about making bigger numbers the depth of the challenge is key. We feel that this system teaches a little less but really embeds the key mathematical concepts.

THIS IS OUR CORE SCHOOL INTENT VERY MUCH ALIVE AND WELL IN OUR MATHEMATICS CLASSES. IT APPLIES EVERYTHING WE HAVE IDENTIFIED AND PRIORITISED TO MOVE OUR TEACHING AND LEARNING FORWARD.