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| C:\Users\alison.kenney\Downloads\logo rainbow best.PNG **Mathematics Overview (Created 2020-21)** | | | | | | | | | | | | | | | | | | | | |
| **I**  **N**  **T**  **E**  **N**  **T** | **Intent**  **Overview** | **For our children to develop a positive attitude to the subject and to be taught key concepts, knowledge and skills in preparation for the next stage of their education.** | | | | | | | | | | | | | | | | | | |
| **Vision &**  **Values** | **Inspire**   * Teaching is inspiring | | | | | **Discover**   * Quality talk and questioning is at the   heart of all we do | | | | | | | **Succeed**   * We do all we can to prepare children for life | | | | | | |
| **The School**  **Rules** | **Be Ready** | | | | | **Be Respectful** | | | | | | | **Be Safe** | | | | | | |
| **Unique**  **Curriculum**  **Characteristics** | **Belonging**  is characterised by the children’s sense of belonging to a class ‘community’ of mathematicians! | | | **Nature**  is characterised by the children being exposed to the abundant and wonderous mathematics in the natural world | | | | | | | **Critical Thinking**  is characterised by the children having meaningful opportunities to practise critical thinking through problem solving | | | | | | **Apprenticeship**  is characterised by children developing their maths skills by learning from one another | | |
| **Life**  **Skills** | **Every Child Numerate** | | | | | | | | | | | | | | | | | | |
| **Aims** | **fluent in the fundamentals of mathematics** | | | | | | | **reason mathematically** | | | | | | **solve problems by applying their mathematics** | | | | | |
| **Subject**  **Domains** | **Number**  **Place Value** | **Number**  **Addition & Subtraction** | | | **Number**  **Multiplication & Division** | | | | **Fractions** | | | **Measurement &**  **Money** | | | **Geometry** | | | **Statistics** |
|  | | | | | | | | | | | | | | | | | | | | |
| **I**  **M**  **P**  **L**  **E**  **M**  **E**  **N**  **T**  **A**  **T**  **I**  **O**  **N** | **Implement**  **Overview** | **We use the Early Years Framework (2014 and 2021) and the National Curriculum (2014) to ensure that we meet our statutory obligations. We use Hamilton Trust maths to ensure continuity from the FS to Y2 and to provide cohesive sequences of learning. Education City provides us with an online practise tool that children can access at school and at home. In the EYFS practitioners use stories, rhymes and real-life opportunities/experience to provide a relevant and interesting contexts for learning mathematics. In KS1 Teachers take every opportunity to link mathematics to real life situations and to apply and practise key skills through project learning.** | | | | | | | | | | | | | | | | | | |
| **Curriculum**  **delivery**  **cycle** | **FASCINATE ~**  **A HOOK TO LAUNCH**  **NEW PROJECTS or KNOWLEDGE** | | **ELICTATE ~**  **WHAT DO CHILDREN**  **ALREADY KNOW?** | | | | | | | **EDUCATE ~**  **TEACH NEW CONCEPTS, KNOWLEDGE SKILLS & UNDERSTANDING** | | | | | | **CELEBRATE ~**  **SHARE**  **LEARNING OUTCOMES** | | | |
| **Lesson structure** | **Revise**  **Mental & Oral** | | **Teach**  **Main Input & Modelling** | | | | | | | **Apply**  **Independently, in Pairs/Small Groups** | | | | | | **Review**  **Plenary** | | | |
| **Learning**  **attitudes** | **Meta-cognition**  **Children ‘own’ their learning** | | | | | **Growth Mindset**  **Children have a ‘can do’ attitude** | | | | | | | **I’m Stuck!**  **Children are independent learners** | | | | | | |
| **Pedagogy**  **Practitioner**  **Environment** | **Pedagogy**  *The science of teaching*  **Good pedagogy is evidenced through:**   * **excellent subject knowledge** * **‘golden thread’ (one objective/one task)** * **planning for misconception** * **promoting mathematical conversation** * **use of ‘talk partners’** * **clear modelling** * **purposeful practice** * **retrieval practice** | | | | | | **Practitioner**  *Teachers and TAs*  **Practitioners work in these four ways to facilitate or provide:**   * **initial self-discovery learning** * **co-learning** * **scaffolded, self-directed learning** * **direct instruction, then applied learning** | | | | | | **Environment**  *The Third Teacher*  **Good maths in the environment is evidenced through:**   * **consistency of key images and resources** * **Working Walls/maths on display**   **Resources are:**   * **high quality and authentic** * **age and stage appropriate** * **kit based in each classroom** * **super-size for class modelling**   **Children record on paper, on wipe boards and in books.** | | | | | | |
| **Assessment** | **Daily/Weekly**  **Observation**  **See, Think, Wonder**  **Diagnostic Questioning & Discussion**  **Effective Oral and Written Feedback**  **Marking Code** | | | | | | **Half term/Termly**  **End of Unit Assessment Tasks**  **Moderation**  **Sandwell Mathematics Assessment Tool**  **Stoke Hill Graduated Response (SEND)**  **Personal Education Plan (PEP)**  **Tracking Progress Over Time** | | | | | | **Yearly**  **EYFS Baseline**  **FS Profile Good of Development( GLD)**  **Y2 Statutory Assessment** | | | | | | |
| **Ensuring**  **good**  **progress** | **Wave 1**  ***Universal***  **‘Quality First Teaching’** | | | | | | **Wave 2**  ***Targeted***   * **pre-teaching** * **targeted support in class by practitioners** * **individual remediation e.g. Precision Teaching** * **small group remediation e.g. Small Group Tutoring, Numbers Count** * **scaffolded resourcing** | | | | | | **Wave 3**  ***Specialist***   * **individual learning programmes** * **individual/small groups provision, with high adult to child ratio in designated spaces e.g. Starlight Daylight/Moonlight/Sunlight classrooms** | | | | | | |
| **Reporting**  **Arrangements** | **Daily/Weekly**  **This will not apply for most children but a teacher may be working with a parent/carer to address a gap where a weekly ‘catch up’ maybe be applicable.** | | | | | | **Half-term/Termly**  **Practitioners meet with parents/carers bi-annually to:**   * **share progress** * **celebrate achievement** * **set targets** | | | | | | **Yearly**  **Practitioners prepare/participate in:**   * **Annual Report to parents/carers** * **EHCP Annual Review (SEND)** | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | |
| **I**  **M**  **P**  **A**  **C**  **T** | **Impact**  **Overview** | **Children should enjoy maths learning and have acquired key concepts, knowledge, skills and understanding to be successful at the next phase.** | | | | | | | | | | | | | | | | | | |
|  | **Attainment and Progress**  **End Points** | | | | | | **Characteristics of Stoke Hill Learners**  **End Points** | | | | | | **Ready to Move On…**  **End Points** | | | | | | |
| **EYFS**  **&**  **KS1** | **Attainment by key group:**   * We expect most of our children to achieve ARE * We expect 20% of our children to be working beyond ARE * We expect no attainment gap because of disadvantage, EAL or gender * We expect many SEN&D children to achieve ARE and where this is not possible to make consistent progress | | | | | | **At the end of the EYFS children can:**   * have a conversation with their friends or a practitioner about number. * talk about numbers up to 10/20, in particular numbers on their own bodies e.g. hands and toes or in the natural world; legs on a spider * suggest ways to solve practical number problems e.g. how to share toys/food * show interest and excitement when learning from practitioners or one another. | | | | | | **At the end of the EYFS children:**   * say ‘I like numbers’ * are able to talk about their number learning, using Tier 1 or 2 vocabulary * can use toys and equipment to illustrate their number thinking * can use numbers and drawings to explain their number   thinking | | | | | | |
| **At the end of KS1 children can:**   * engage in class conversations about number, including challenging their friends ideas * talk about numbers up to 100, in particular number patterns and sequences, or what they notice about numbers * suggest different ways to solve the same calculation * show interest and excitement when learning from their teachers and from one another and are confident enough to teach their peers | | | | | | **At the end of KS1 children:**   * say ‘I am good at maths’ * are able to talk in full sentences about their mathematics, using Tier 2 or 3 vocabulary * can use resources and images to explain their mathematical thinking * can use informal standard written methods or jottings to support/explain calculations (See Hamilton Calculation Policy) * can demonstrate fluency by using mathematical knowledge flexibly | | | | | | |