Clapham Manor Primary School & Nursery
Growing Brighter Futures

Computing Core Purpose Statement

Intent: (what is the purpose of this subject)

In computing we aim is to enthuse, prepare and equip our children to participate in a rapidly changing world, where work and leisure activities are increasingly transformed by technology. It is our intention to enable children to find, explore, analyse, exchange and present information in a variety of creative ways, opening doors and broadening horizons. Our pupils must be prepared for the ever-evolving technological world and we have designed our computing curriculum with this in mind.

As stated in the National Curriculum aims - the core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. With this in mind our curriculum aims to provide a wealth of experiences for pupils to develop their coding and computer science skills. Perhaps as important is the notion of ensuring our pupils become 'digitally literate' and are able to creatively express themselves through developing and presenting their ideas. This is vital to ensure readiness for not only their next stage of education but also the world of work. It is our intention that over the course of the coming years we aim to put 'technology in the hands of children' by equipping each class with age-appropriate technology that moves from touch to type.

Despite being a subject specific curriculum we ensure meaningful connections are made – in particular between computing and subjects such a science and mathematics. These explicit links aim to ensure our computing curriculum is as relevant and meaningful for our context, acting as an inspiration and motivation for pupils to develop their skills in real life, practical contexts. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this across subjects and contexts, including their ability to troubleshoot and problem solve.

Implementation: (how is this structured/sequenced)

Computing is taught weekly in discreet computing lessons. The computing curriculum is delivered through a newly developed scheme of work: based initially on Cocoon Education scheme of work and Lambeth Connected Learning Centre's (CLC) Mile Stones documents. Every lesson has been individually planned so that it can be effectively taught using the infrastructure we have in place at school and so that it can meet the needs of all our pupils. Our computing curriculum has been closely referenced against the National Curriculum attainment targets in order to ensure progression and coverage. This ensures that we have effectively sequenced skills, knowledge and context, resulting in pupils receiving a wide range of opportunities during their time at Clapham Manor.

Having discreet lessons means that the children are able to develop depth in their knowledge and skills over the duration of each of their computing units of work, which is carefully planned using our scheme of work by the computing leader. In computing lessons, the children will use either the iPads or Surface Pros in order to access a range of apps and software. Discreet computing lessons will focus on the curriculum skills of information technology, digital literacy and computer science.

In line with our ASPIRE curriculum we ensure subjects are inter-connected through meaningful links. According to a study from Cambridge University, digital storytelling (fiction and non-fiction) reduces

student reluctance to write, increases motivation to write, and improves performance on tests. The ability to write for an animation or documentary, or instructions for an instruction video where they take the role of teacher, inspires children to write. Technology makes this possible.

Pedagogy: (what is the approach taken)

What will you see in a lesson?
Every computing lesson will be centred around the whole school approach for teaching and learning (see Curriculum Statement) in the following phases:

1. **Memory platform –** Children will revisit material from the previous lesson(s) with a focus on the sticky knowledge points. Examples of memory platforms in computing could include: Completing a short task that involves steps previously learned, various vocabulary games that require children to describe the chosen word or to identify it based on clues, activities that help children identify, unpick, and correct errors.
2. **Connect –** Review the learning of the previous lesson and how it will help children in the next lesson or the final task at the end of the topic.
3. **Keywords –** The introduction of new vocabulary with associated visuals using engaging vocabulary games.
4. **Modelling –** A step-by-step demonstration using a range of different software and annotated images.
5. **Independent practice –** Children will practise the steps they have been taught along with opportunities to challenge themselves with extended activities.

Evaluation: (how will outcomes be measures for your subject)

Outcomes in Computing are measured through a combination of children's practical work and knowledge retained through end of unit 'big question' and 4 sticky knowledge points, this will be assessed at the end of each unit of work which concludes with a 'big question' in the form of a project that requires the application of all the skills the children have learnt. This is to enable teachers to identify what children have learnt and retained across a sequence of lessons. Each 'big question' will be assessed by the teacher to identify whether a child has met or exceeded the expected standard, these assessments will be used to inform the teacher's end of year summative assessment.

Next steps: (what are the key priorities for development in this subject)

1. To continue to develop the 'Big Question' approach to assessment in computing.
2. To continue to develop a whole school IT infrastructure to ensure readiness for the implementation for increased end user devices.
3.