Intent

Aims
The National Curriculum ensures all pupils:
 can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems   are responsible, competent, confident and creative users of information and communication technology.

We aim for all pupils to understand how technology can enhance life and can be used in the wider world, including enabling children to understand careers in ICT. We ensure that children are exposed to a range of technology, that they may or may not be at home and that they understand how to use this safely and responsible. We aim to develop digitally responsible members of society.

Progressive Curriculum
We follow the National Curriculum which ensures that the learning is progressive between key stage 1 and key stage 2. We have also planned our curriculum in more detail and separated the National Curriculum in to 4 areas: Technology in our Lives, Programming, E-Safety and Multi-Media/Handing Data. Within each of these areas, clear objectives have been planned out that sets age-related expectations for each year group.

Vocabulary
To meet the needs of our pupils, we plan the vocabulary that we expect pupils to understand and be able to use in context, during the unit of teaching. This vocabulary is put in to three different areas: tier 1, tier 2 and tier 3.

Beyond the National Curriculum

A computing club is ran weekly after school for children of all ages and abilities.

Implementation

Sequence of Learning
The National Curriculum and our progression document is progressive and therefore prepares children successfully for their next phase in education. The EYFS framework has been mapped to the KS1 objectives to enable staff to be aware of what a child at GLD (Good Level of Development) should be at the beginning of their KS1 learning.
Revisiting Core Skills
The topic booklets outline what 'Forever Firs Pupils at Age Expected' should already be able to achieve, enabling teachers to target questions to assess retention. These skills then may be retaught/readdressed at the beginning of the unit.
Opportunities for revisiting elements of computing, such as 'Technology in our Lives' can be provided through other curriculum subjects such as researching an event in history or 'Multi-Media' can be revisited to test for retention when making a presentation on a famous person is History.
Timetabling
Staff have the option to teach computing explicitly once a week (this isn't non-negotiable as can be adapted for the topic such as in a block), although this may also be supplemented with computing across the curriculum. Where possible curriculum is linked to the topic but it may also be taught discretely. E-Safety is taught for the first half term in every year group.
Staff Knowledge
For each objective, staff have been given guidelines and ideas of how they may teach the subject. Expectations of what needs to be taught is also clearly outlined in the topic booklets which staff have to hand in advance of teaching a unit of work. This enables staff to do any self-study or seek for support from members of the STEM team for CPD.

Adapt and Tailor for Different Starting Points, SEND and Disadvantaged

Due to the flexibility within the computing curriculum, children from many different starting points will be able to access the same lesson. They may require additional support from their peers, and this may be used as a way of developing the mastery vocabulary in high attaining pupils.

All children (unless stated on their IPM/MEP) will take place in whole class learning for computing and be exposed to age-related objectives. To support children, they may work as part of a group or in partners or have adult support.

Recording Learning
Learning is either recorded in the topic books, in the whole class topic book or on the netbooks. AFL is carried out within the lesson to inform future planning.

Monitor Progress and Attainment
End of unit assessment (attainment) is monitored across the school using the assessment sheets provided within the topic booklets.

Impact

Monitoring
Work scrutinies (topic books, whole class books, digital work), lesson walk throughs and data analysis of the topic books.

Retention
Pupil voice, opportunities to write or share with others what they have learnt (such as parental engagement opportunities)