Computing Policy

Aims: To instil a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offers to, create, manage, organise, and collaborate.

Computer Science:

• To enable children to become confident coders on a range of devices.
• To create opportunities for collaborative and independent learning.
• To develop children's understanding of technology and how it is constantly evolving.

Digital Literacy:

• To enable a safe computing environment through appropriate computing behaviours.
• To allow children to explore a range of digital devices.
• To promote pupils' spiritual, moral, social and cultural development.

Information Technology:

• To develop computing as a cross-curricular tool for learning and progression.
• To promote learning through the development of thinking skills.
• To enable children to understand and appreciate their place in the modern world.

Teaching Approaches: The Purple Mash Computing Scheme of Work is a comprehensive set of resources aligned to the National Curriculum for Computing, Technology and Digital Competence. The Scheme of Work is intended to facilitate teachers in achieving the very best outcomes for children. It exposes children to a wide variety of digital tools, technological skills, and innovations.

Approaches and strategies used may include:

• an 'unplugged' approach in order to develop their understanding of some of the underlying concepts of Computer Science
• 'plugged' activities which allow pupils to practise and demonstrate their levels of understanding.
• using presentation technology to demonstrate something to a group of pupils or the whole class
• leading a group or class discussion about the benefits and risks of technology
• individual or paired work
• collaborative group work
• pupil led demonstrations / peer mentoring.

Differentiation and Challenge: Children will be supported through appropriate and flexible challenge within the classroom:

• differentiated activities planned to allow different levels of achievement by pupils or to incorporate possibilities for extension work.
• teacher intervention where appropriate to support a pupil, reinforce an idea, teach a new point or challenge pupils' thinking.

Growth Mindset: Computing is an ideal subject to be supported by a growth mindset. If all coding was perfect straight away, we'd never need updates or new versions. Because of the way computers work, this is an excellent opportunity for children to 'debug' what they've been doing and explain how to improve and change the outcome.

Computing Curriculum: The Primary National Curriculum for Computing at Key Stage 1 and Key Stage 2 is split into three strands: information technology, digital literacy, and computer science. In information technology children learn to use technology to create programs, systems and a range of

content. In digital literacy children learn to use technology to express themselves and develop their ideas. In computer science children are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming.

Inclusion and Equal Opportunities: All children can and will succeed in computing at Fellgate Primary School. Our curriculum is fully inclusive and supports ranging needs. Pupils with SEN are able to access all parts of the computing curriculum and are exposed to computing skills from reception. These skills are revisited and built upon gradually throughout each year, ensuring understanding and progression in order for all children to be secondary ready in computing by the end of year 6.

In addition to discrete Computing sessions, opportunities to develop and extend computing capability are provided in other curriculum areas and technology is used to support most other subject areas.

Children with access to technology at home are encouraged to use it for educational benefits and online safety guidance is offered to both pupils and parents where appropriate. The school has identified those pupils who had limited or no access to appropriate technology outside of school and provided laptops to use at home.

Intervention: Teachers use formative assessment throughout lessons and units of work, reacting and intervening based on the needs of the children. Questioning techniques and scaffolding of tasks are used skilfully to ensure children's success.

Planning in Computing: Computing is taught as a weekly stand-alone lesson following the purple mash scheme of work. Previous knowledge and skills are built upon in every lesson. Computing skills are also embedded into other subjects to ensure these skills are being developed throughout to enhance learning. Teachers find opportunities to further develop children's understanding through workshops with experts and trips to ICT in Schools at the Word.

Timetabling of Computing: Computing lessons are taught through weekly discrete sessions with additional cross curricular opportunities to enhance and embed learning.

How do we assess computing? Computing assessment is on-going and formative. It happens in the classroom as part of the normal teaching process and informs lesson pitch, differentiated intervention and future planning. At the end of each unit the children are assessed by a summative test which is then used to inform a uniformed assessment sheet of foundation subjects (completed at the end of each term).

Homework in Computing: Teachers occasionally set computing home learning tasks that link to cross curricular classwork.

Extra Curricula Computing: After school KS1 & 2 computing clubs are provided throughout the year. In school we also have ten digital leaders. Digital Leaders are children with a passion for technology who want to share their knowledge with others and promote the use of all things digital throughout the school.

Resources in Computing: All equipment is supported and maintained through a weekly visit from an ICT technician who works under the direction of 'ICT in schools' and the computing subject lead.

CPD in Computing: Delivered by computing lead, external advisors, such as ICT in Schools and Purple Mash as well as independent reading and accessing virtual training. The computing lead accesses termly network meetings for computing and shares updates with staff.

Evaluation and Monitoring: Teachers ensure good coverage of computing through observations. pupil voice, collecting and analysing planning, work scrutinies and staff feedback. When formal observations take place, they are conducted alongside a member of SLT with a key focus.

School Governor Role in Computing: There is a link governor allocated for the oversight of computing. Key documents/action plans are shared when updated and regular meetings are held with the link governor.