Computing

Intent, implement and impact statement

Intent:

Our computing curriculum 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. Tinkering with software and programs holds an important place in our learning as we aim to develop pupil’s confidence when encountering new technology, which is a vital skill in the ever evolving and changing landscape of technology. We intend for pupils not only to be digitally competent and have a range of transferable skills at a suitable level for the future workplace, but also to be responsible online citizens.

In our teaching we incorporate resources created by Kapow Primary. This curriculum is designed to enable pupils to meet the end of Key Stage Attainment targets outlined in the National curriculum and the aims align with those in the national curriculum. We use this curriculum in conjunction with Kapow’s RSE and PSHE scheme which satisfies all the objectives of the Department for Education’s [*Education for a Connected World framework*](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/896323/UKCIS_Education_for_a_Connected_World_.pdf)*.* This guidance was created to help equip children for life in the digital world, including developing their understanding of appropriate online behaviour, copyright issues, being discerning consumers of online information and healthy use of technology.

Implementation:

The national curriculum purpose of study states:

*‘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. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems, and a range of content. Computing also ensures that pupils become digitally literate- able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.’*

The Kapow Primary scheme of work is designed with three strands which run throughout:

* Computer science
* Information technology
* Digital literacy

The Kapow National curriculum mapping document shows which units cover each of the national curriculum attainment targets as well as each of these three strands.

The Kapow Progression of skills shows the skills that are taught within each year group and how these skills develop year on year to ensure attainment targets are securely met by the end of each key stage.

The scheme is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning:

* Computer systems and networks
* Programming
* Creating media
* Data handling
* Online safety

The implementation of Kapow Primary Computing ensures a broad and balanced coverage of the National curriculum requirements, and the ‘skills showcase’ units provide pupils with the opportunity to learn and apply transferable skills. Where meaningful, units have been created to link to other subjects such as science, art and music to enable the development of further transferable skills and genuine cross curricular learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils’ learning are available when required.

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust computing curriculum. Each Kapow unit of lessons includes teacher videos to develop subject knowledge and support ongoing CPD. Further CPD opportunities for staff can be found in the Kapow webinars with computing subject specialists. Kapow has been created with the understanding that many teachers do not feel confident delivering the computing curriculum and every effort has been made to ensure that teachers feel supported to deliver lessons of a high standard that ensure pupil progression.

Specific computing lessons are timetabled weekly across KS1 and KS2. These lessons are generally 40 to 50 minutes but, as should be expected in our ever technology focussed world, computing skills and use of computing technology is present across nearly all other subjects throughout the school week in particular PSHE which focusses upon learning around online safety including the growth, uses and dangers of AI use in the online world.

Each classroom is equipped with modern smart whiteboard technology and a selection of devices for pupils to use.

Impact:

The impact of this learning can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives and each unit has a unit quiz and knowledge catcher which can be used at the start or end of the unit.

Pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be active participants in the ever-increasing digital world.

The expected impact on our pupils is that children will:

* Be critical thinkers and able to understand how to make informed and appropriate digital choices in the future.
* Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
* Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
* Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
* Show a clear progression of technical skills across all areas of the national curriculum- computer science, information technology and digital literacy.
* Be able to use technology both individually and as part of a collaborative team.
* Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner.
* Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.
* Meet the end of key stage expectations outlined in the national curriculum for computing.