Curriculum Map: **Computing** **Reception**

Below outlines the learning focus for each term

Information Technology
- To use ICT hardware to interact with age-appropriate computer software

Computer Science
- To show interest in cause and effect equipment by: pushing buttons/ screens, turning knobs, lifting flaps, using remote controls
- To program toys by giving them a set of instructions

E-safety
- Discuss and ask questions about how technology works and how to use it safely

Term	Learning Focus		Cross-Curricular Links
		Knowledge & Skills	
Autumn Term	**Understanding the World: Technology** • Shows an interest in cause and effect equipment such as: IWB, remote control cars, battery operated toys, programmable equipment • To know how to use ICT equipment carefully and safely	• To use ICT hardware to interact with age-appropriate computer software. • To show interest in cause and effect equipment by : pushing buttons/ screens, turning knobs, lifting flaps, using remote controls • I can recognise that there is a problem and say what problem is (for example: batteries not working, it needs to be plugged in etc) • Know the they need to stay safe when using technology • Discuss and ask questions about how technology works and how to use it safely.	Maths (directions) UTW (how things works)
Spring Term	**Understanding the World: Technology** • Completes a simple program on electronic devices. (educational games, paint) • Uses ICT hardware to interact with age- appropriate computer software (e.g. paint, click and drag games)	• To show interest in cause and effect equipment by : pushing buttons/ screens, turning knobs, lifting flaps, using remote controls • Programme a Bee-bot or similar, one instruction at a time and clear it at the end. • To program toys by giving them a set of instructions • I can use a keyboard and mouse and use a mouse with developing control. • I can access and use simple activities using touch technology with increasing control. • To use ICT hardware to interact with age-appropriate computer software • I can select and use technology for a particular purpose (use IWB to play interactive games, use Ipad /cameras for taking photos/ videos). • I know how to log off the computer. • I know that I need to stay safe when using technology. • I know what to do if I see things that upset me online at school or at home.	Maths (games on IWB) Phonics (games on IWB) EAD (drawing on paint)

		• Discuss and ask questions about how technology works and how to use it safely. • To complete a simple program on electronic devices (digital games, painting, etc.)	
Summer Term	**Understanding the World: Technology** • Develops digital literacy skills by being able to access, understand and interact with a range of technologies	• Programme a Bee-bot or similar, one instruction at a time and clear it at the end. • To program toys by giving them a set of instructions • I can select and use technology for a particular purpose (use IWB to play interactive games, use Ipad /cameras for taking photos/ videos). • I can use a keyboard and mouse and use with developing control. • I can name some uses of IT beyond school e.g. e- books, listening to music, watching films, creating paintings, send messages. • I know that I need to stay safe when using technology. • I know what to do if I see things that upset me online at school/at home. • **To use ICT hardware to interact with age-appropriate computer software** • To complete a simple program on electronic devices eg: Explore ways of making, recording and playing back sounds using simple devices (recordable pegs) • I know how to log on and log off the computer. • To complete a simple program on electronic devices (digital games, painting, etc.)	PSED EAD

Intent

We know that computing and digital technology is going to play a pivotal role in our children's lives and as a result we aim to develop 'thinkers of the future'. We aim for our children to be digital creators rather than just consumers when using technology and to equip them to navigate the rapid and extraordinary changes taking place in digital technology effectively and safely.

Our curriculum, encompassing computer science, information technology, digital literacy and online safety, is progressive, ambitious and carefully sequenced. Children know that they need to face and overcome challenge in computing lessons; they accept that they will fail, will need to persevere and develop skills as logical, computational thinkers. We offer children access to a wide range of software, platforms and devices to help them, using technology as a tool for both creativity and learning. We want our children to be active participants in the digital world, whilst ensuring they are respectful, responsible and confident users; children will constantly be made aware of measures they can take to keep themselves, and others, safe online.

Implementation

Our children follow a carefully structured Computing curriculum which has been designed to ensure children know more, do more and remember more as they progress through our school. Our content is supported by advice, requirements and guidelines presented in the National Curriculum.

Computing is taught weekly. Detailed medium-term planning supports teaching, ensures continuity and carefully plans for progression and depth. Children have opportunities to use high

quality resources and materials to support their learning. Wider Curriculum links and opportunities for the safe use of digital systems are considered in wider curriculum planning.

Our computing curriculum is inclusive for all children; each lesson is sequenced so that it builds on the learning from the previous session. Where appropriate, activities are scaffolded so that all children can succeed, children may be provided with extra resources and support, such as visual prompts, so that they can reach the same learning points as the rest of the class.

Impact

A high quality computing education aims to develop a range of programming and technological skills that are transferable to other curriculum areas, including Science, Mathematics, English and History. As pupils progress through KS1 and KS2 children will become increasingly confident in:

- The application of their digital skills,
- Becoming increasingly efficient and effective communicators, collaborators and analysts,
- Showing imagination and creativity in their use of ICT in different aspects of their learning and life beyond school.
- E-safety and the risks involved when using the internet.

The impact of the computing curriculum is assessed continuously against the age-related expectations in computing for each year group. In doing so, we are ensuring that the necessary support is provided for all children to have a good understanding of the primary computing curriculum whilst allowing us to effectively differentiate tasks for students.

Other methods of judging the impact of the computing curriculum offered are through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Monitoring planning of lessons by the subject lead and providing feedback.
- Photo evidence and images of the pupils' practical learning.
- Monitoring of children's work.