Curriculum Rationale

COMPUTING

INTENT

Through our curriculum, we aim for children to:

- Become digitally literate, confidently and independently using a range of technologies to support learning, communication, creativity and everyday life.
- Develop secure computing knowledge and skills, including programming, computational thinking, problem-solving and understanding digital systems.
- Use technology purposefully, recognising how digital tools can enhance learning, increase independence and remove barriers through accessibility features.
- Become responsible digital citizens, demonstrating respect, kindness and good judgement when communicating and interacting online.
- Recognise and manage online risks, making informed decisions, protecting personal information and understanding the importance of their digital footprint and reputation.
- Understand emerging technologies, including Artificial Intelligence, recognising both the opportunities they offer and the risks they present.
- Demonstrate creativity, resilience and adaptability, confidently exploring new technologies and applying their skills across the wider curriculum.
- Be prepared for their next stage of education and future lives, with the confidence, curiosity and digital competence to embrace new opportunities.

IMPLEMENTATION

- Progressive planning: Our KS1 and KS2 long-term plans are based on the Knowsley CLC Computing Scheme of Work, ensuring National Curriculum coverage and clear progression in knowledge and skills.
- Technology-rich learning: As an Apple Distinguished School, we embrace technology to enhance teaching, promote creativity and develop independence across the curriculum.
- Specialist enrichment: Annual workshops delivered by IT experts bring computing to life through exciting experiences with emerging technologies, including virtual reality (VR) and augmented reality (AR).
- Cross-curricular opportunities: Computing skills are applied purposefully across subjects, including creating interactive timelines in history and exploring locations using Google Maps in geography.
- 1:1 iPad provision: All KS2 children have individual iPads, enabling regular opportunities to develop digital skills, collaborate and take ownership of their learning. They develop digital responsibility and become aware of their digital reputations.
- Online safety: Embedded in daily KS2 practice and explored in greater depth through our annual KS2 PSHE Conferences, developing responsible, safe and confident digital citizens.
- Inclusion and accessibility: Children explore how digital tools and accessibility features can remove barriers, support independence and ensure equitable access to learning.
- Emerging technologies: Children develop an age-appropriate understanding of Artificial Intelligence, recognising its opportunities, limitations and potential risks.
- Developing oracy: Computing provides purposeful opportunities to develop speaking, listening and communication skills through podcasting and video creation, encouraging children to articulate ideas, present confidently and communicate effectively with different audiences.
- Assessment: Ongoing assessment, practical outcomes and pupil voice inform teaching and ensure progression in digital knowledge, skills and confidence.

IMPACT

At Prescot Primary School and Nursery, the intended impact of our computing curriculum is for all children to become confident, creative, capable and responsible digital citizens, equipped with the knowledge, skills and understanding to thrive in an ever-changing technological world.

Ultimately, our children will leave us empowered by technology rather than dependent upon it, understanding how to use it safely, critically, creatively and responsibly to positively influence their own lives and the world around them. They will be prepared for their tomorrows, their future lives and careers which will be driven by the ever-changing power of technology.

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COMPUTING

EYFS

In EYFS, we introduce children to technology through purposeful, playful and practical experiences that build the foundations for future digital learning. Children use iPads to capture, record and share their learning, developing independence, creativity and confidence in using digital tools. Through programming simple robots, such as Bee-Bots, children begin to develop computational thinking, sequencing, positional language and problem-solving skills. We introduce early online safety concepts, helping children understand the importance of keeping personal information private, seeking help from trusted adults and using technology safely and responsibly. Technology is woven into the wider EYFS curriculum, supporting communication and language, early mathematics, expressive arts and understanding the world. Children also begin to recognise how technology supports everyday life and how accessibility features can help people with different needs. Through these experiences, we aim to develop curious, confident and responsible young learners who are beginning their journey as digital citizens.

As children progress into Key Stage 1, these early experiences provide the foundations for more structured computing lessons, aligned with the National Curriculum. Throughout Key Stage 1, children continue to develop confidence, creativity and independence, preparing them for the increasingly sophisticated digital learning opportunities of Key Stage 2.

KS1 & 2 COMPUTING

All key skills and concepts are mapped in line with the Knowsley CLC Long Term Plan.

YEAR	DIGITAL LITERACY (DL)	COMPUTER SCIENCE (CS)	INFORMATION TECHNOLOGY (IT)	ADDITIONAL UNIT (ENRICHMENT) CLC DELIVERY
1	My Online Life	What is a computer?	Drawing with Shapes	CS - My Friend Robot IT - Minibeasts
2	My Online Life	Story Land	Making Games	CS -Code a Story IT - Presentation & Typing
3	My Online Life	Dancing Robot	T-Shirt Designer	CS - Programming with Robots IT - Rainforests
4	My Online Life	Hour of Code	Endangered Animals	CS - Games Designer IT - Minecraft Challenges
5	My Online Life	Lost in Space	Making AR Games	CS - Web Designer IT - Podcasts
6	My Online Life	Crossy Roads	VR Worlds	CS - Coding Playground IT - Money

LINKS

DfE National Curriculum for Computing

Knowsley CLC Schemes of Work

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COMPUTING

ASSESSMENT CRITERIA

We implement an inclusive curriculum so that all children, including those with SEND, can make progress and demonstrate success in a range of ways.

Teachers assess pupils' existing knowledge and skills and regularly revisit prior learning to check retention and build connections with new concepts. Assessment is ongoing and takes place through observation, questioning, discussions and practical activities. Planned assessment points within the Knowsley CLC Computing Scheme of Work allow teachers to monitor progress, identify misconceptions and provide feedback.

Children demonstrate their learning through programming, problem-solving and digital content creation. Digital learning journals, created using Book Creator, Keynote or PowerPoint, provide a portfolio of evidence through photographs, screenshots and screencasts. Digital work is organised using the school's network, cloud storage and Google Classroom where appropriate.

Children are encouraged to reflect on their learning, evaluate their work, respond to feedback and identify next steps. Teachers also recognise independence, collaboration, resilience and creativity as important aspects of successful learning in Computing.

Assessment covers Computer Science, Information Technology and Digital Literacy, including programming, digital content creation and online safety. It informs future planning, identifies gaps in knowledge and supports appropriate intervention and challenge, ensuring that children develop the skills and confidence to use technology safely, creatively and responsibly.

At Prescot Primary School and Nursery, we aim to:
Empower Today, Prepare for Tomorrow.