# Computing
# Statement of Intent

At Ralph Butterfield Primary School, we understand the evolving nature of technology and the immense value that it plays in day-to-day life.  Technology is an ever-changing and continually progressing presence in all of our lives and affects the way in which we work, communicate, create and share.  Therefore, a life-long engagement with technology and fluency with its application is becoming increasingly vital in the modern world.  Such engagement and confidence starts at the primary education phase and at Ralph Butterfield Primary School, we deliver a computing curriculum that equips our children with the knowledge and competence to be confident lifelong users of a wide variety of technology.

Our computing curriculum intends to develop every child so that they see the importance and relevance of computing to everyday life.  We support children to be able to use a variety of technological devices confidently and have substantive knowledge of the basic principles of how these devices work.  Through practical experience utilising a wide variety of applications, our children gain the disciplinary knowledge that enables them to use information technology to enhance their lives and equip them for work in an ever-changing world.  Through teaching a thorough understanding of the way that computers work and 'think', we build resilient, determined and ambitious children who will easily adapt to new and future technology as it develops.

Our children understand that an increasingly technological world has not only great benefits but also creates unique challenges.  Our children learn the threats and opportunities that an online world presents.  Online safety is a continuous thread running through the computing curriculum and teaches children about the importance of integrity and respect when conducting themselves online as well as how to protect themselves from online threats.

The aims of our Computing curriculum are to develop pupils who:
- Are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.
- Become responsible, respectful and competent users of data, information and communication technology.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Can analyse problems in computational terms, and have repeated practical experience writing computer programs in order to solve such problems.
- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Become digitally literate and are active participants in a digital world.
- Are equipped with the capability to use technology throughout their lives.
- Understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Have a 'can do' attitude when engaging with technology and its associated resources.
- Utilise computational thinking beyond the Computing curriculum.
- Understand and follow the SMART E-Safety rules.
- Understand the E-Safety messages can keep them safe online.
- Know who to contact if they have concerns.
- Apply their learning in a range of contexts, e.g. at school and at home.
- Know where to locate the CEOP button and how to use it.

# What this looks like for children at Ralph Butterfield Primary School

There is a real buzz around computing at Ralph Butterfield Primary School!  Children of all ages are excited by the opportunity to learn about and use technology in school.  We have fantastic provision of devices, with three trolleys of up-to-date laptops so that every child has their own computer to use.  From Reception, each child has their own personal Purple Mash login and is taught to access and log into the website, access the creative tools and to save and retrieve work.  They have access to this out of school hours and are able to show their work to their families and have fun with applying what they learned at home.

The Purple Mash scheme has been adapted to fit our school to ensure a clear and accurate progression of learning as children move through school.  Lessons are practical, with children able to experiment with the interactive tools and apply their substantive knowledge.  Work is saved in a way that makes it easy for class teachers and school leaders to ensure the best possible outcomes for learners.  The school has rigorous monitoring procedures in place which means that children can explore and learn online in a safe environment.  Online safety is a continuous running thread throughout the school's curriculum, with links made to other subject areas as well.  This knowledge is age-appropriate and linked to the experiences of the children, including interactions in online games, social media and being aware of phishing scams.

The use of technology is embraced at Ralph Butterfield Primary School thanks to the wonderful ways that it can enhance our learning.  It is fully embedded across the curriculum, with interactive white boards providing exciting opportunities to engage learners in all subjects.  Websites such as YouTube, Charanga and Times Table Rockstars are regular features of learning and deliver content in an exciting and engaging way.  We confidently apply the technology to use videos and photos, visualisers, online tools, search engines and music as tools to enhance our children's learning.  There was the opportunity for some of the Year 5 and 6 children to get hands on and creative at our Virtual Coding Club, in which they used Scratch to design and create their own video games, whilst learning about how to adapt coding to bring their ideas to life.

The school embraces the power of technology as a way of sharing information and each class creates a buzz around their learning by sharing what they are up to on the school's Twitter account.  Parents, carers and family members love having the opportunity to see what the children in school have been up to and it gives us the opportunity to really shout about the amazing things that happen here!