# Computing Curriculum 2023 – 2024

## Key Threads

Online safety Computer science	Information technology	Digital literacy
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## Intent Computing

At Reedswood, we aim to deliver a progressive and engaging curriculum in computing, which ensures the National Curriculum objectives are covered. The sequence of lessons will develop from Key Stage I to Key Stage 2, where the same National Curriculum objectives will be explored in each year group but different activities and programmes will be used which will require a various levels of understanding and skill. This will become more progressively challenging as the children move through the curriculum. Furthermore, there are opportunities for Early Years to develop their understanding of computing and to support children when working towards early learning goals. Across the key stages, Purple Mash will be used to deliver the curriculum, which provides children with a wide range of technological experiences using a variety of tools.

#### Online Safety

The intention of our Online Safety curriculum is to ensure that all children have the tools and methods they need to use computer technology and the internet safely. Online Safety is an imperative part of our curriculum at Reedswood and we aim to ensure that each and every lesson of Computing features some element of E-Safety. We will link our lessons to important strategies and topics, which are prevalent within our school. Our curriculum follows the key internet safety pillars within the Google Be Internet Legends scheme of work. We aim to 'Think Before You Share (Be Internet Sharp), Check it's For Real (Be Internet Alert), Protect Your Stuff (Be Internet Secure), Respect Each Other (Be Internet Kind) and When in Doubt, Discuss (Be Internet Brave). Along with this, we will implement lessons from Common Sense Education and Purple Mash, which will cover and reinforce strategies.

## Implementation Computing

Our Computing curriculum is taught weekly and the children receive a 45-minute lesson. We will be implementing the scheme from Purple Mash to fulfil the National Curriculum Computing objectives. We will also use Common Sense Education and Google Be Internet Legends to extend the children's knowledge about online safety. The Purple Mash scheme provides children with a wide range of technological experiences using a variety of tools. Throughout the units, there will be some overlaps in the content taught but this will only provide a deeper understanding of the computational concepts and provides children with opportunities to apply and extend their understanding and make links in their knowledge and capabilities. During each unit, the three strands of Computing content will be explored, which will ensure appropriate coverage. These are Computer Science, Information Technology and Digital Literacy. An example of the Year 4 curriculum is provided below to illustrate the coverage and revisits of content to ensure knowledge is retained.

Year 4

	Unit 4.1	Unit 4.2	Unit 4.3	Unit 4.4	Unit 4.5	Unit 4.6	Unit 4.7	Unit 4.8	Unit 4.9
	Coding	Online Safety	Spreadsheets	Writing for Different Audiences	Logo	Animation	Effective Searching	Hardware Investigators	Making Music
Number of lessons	6	4	6	5	4	3	3	2	4
Main tool	2 Code		2Calculate		2Logo	2Animate			Busy Beats

Some units can provide useful links to other curriculum areas, such as maths and English. As well as this, the online safety units provide

understanding towards the PSHE objectives and music topics can be covered in Year 2 and 4. All the tools required to teach this scheme are provided through the Purple Mash subscription We teach in this way to ensure we have complete coverage and progression of the curriculum and there are opportunities to revisit, apply and enhance previous and new areas of the curriculum. Throughout the year, Computing workshops will also take place in each year group. This will include: Beebots. BBC Microbits, 2Code, 2DIY 3D, Scratch, Lego WeDo, TinkerCAD and SketchUp. These workshops will further enhance our curriculum and support both children and staff in their development of knowledge.

#### Online Safety

Each week the children should receive a 45-minute lesson. At the beginning of these Computing lessons, staff will revisit the common themes and pillars relating to the Google Be Internet Legends resource to reinforce the importance of Online Safety and what strategies the children can use to protect themselves online. Along with this, we will take these opportunities to further educate the children regarding current and relevant issues in the community or the academy. This will be achieved through providing a scenario for each lesson which relates the Internet Legends pillars. In doing this, we ensure that the teaching and discussion of E-Safety remains a key part of the children's education and that they are aware of what to do if they need help online. Along with these regular revisions, there will also be a dedicated lesson to E-Safety, where

staff will use curriculum resources from Common Sense Education, Google Be Internet Legends and Purple Mash. This will ensure the complete coverage of the curriculum. The activities that have been provided are engaging and informative and will allow the children to develop greater confidence to stay safe online. Furthermore, children should record their learning either in their PSHE books or on an online platform such as Purple Mash depending upon the task.

## Impact Computing

As we continue to implement this curriculum in this manner, the children will enhance their understanding of the skills involved in Computing year by year and will become confident and skilful. Children will be able to recall prior knowledge and will be able to apply their knowledge new programmes. Children will develop their logical thinking and will develop new skills, recall past skills and progress their knowledge to apply and tackle independent tasks. We will develop skills and use programmes which can be used across the curriculum. This curriculum will be successful as it has been developed is so the children current knowledge is being revisited,

reviewed and extended each year and new skills and programmes will be taught. Staff will ensure children use the correct vocabulary needed in each lesson and will assess understanding at the end and beginning of lessons and at the end of each unit. Knowledge organisers will be used for children to revisit their understanding. When using Purple Mash, children will be able to record and save their work and teachers will be able to assess their understanding of the task.

#### Online Safety

Throughout the year, as the curriculum is delivered, children will enhance their skills and understanding of how to be safe online. The children will be able to share the five safety pillars and how the messages within support them in real life situations. Children will explore age-appropriate issues as they progress through the curriculum and key topics will be regularly revisited. Ultimately, our goal is to ensure that children become safe, confident users of the internet and are able to see the many positive benefits of its use.





