

In Computing, a Roundwood leaver will know:

...technology continually develops and impacts and influences all areas of our lives. Through exploring the process of programming and coding they will recognise how software can be adapted to meet the needs of users, developing their thinking and problem-solving skills through creative projects. Recognising the importance of online safety and their rights and responsibilities as competent and competent users of technology, pupils will understand how to apply computing skills across the curriculum and make informed choices when using technology.



Computing is a FUNdamental ingredient of life at Roundwood Primary. With the technology our children are exposed to constantly evolving, we have created a progression of skills as part of our long term computing plan which we aspire all pupils to be able to master before moving on to secondary school. This has been created in collaboration with Roundwood Park to facilitate a smooth transition between the primary and secondary school computing curriculum.

Computing at Roundwood has been broken down into these seven key themes:

Online Safety - Being safe online is something that we feel is of the utmost importance. We strive to provide all learners with an awareness of situations that may occur whilst using technology as well as providing strategies to help children effectively manage the time they spend online. In Foundation Stage, learners should be able to identify examples of personal information and adults that they trust to help them, whilst examples of online safety objectives in UKS2 include explaining the differences between misinformation and disinformation as well as how to report problems online.

General skills - These have been devised to ensure children build and retain fundamental skills essential to the use of technology with a focus on using computing hardware. In Foundation Stage this means teaching children how to sit at a computer correctly, use a mouse and to be able to print their creations whereas in Lower Key Stage 2, skills covered include saving and locating work on the school's network as well as being able to create new folders to organise their work.

Computer science - Statements for this theme require pupils to develop their computational thinking through a variety of 'plugged' and 'unplugged' computing activities. In KS1 this might look like children verbally giving commands before moving a programmable robot and debugging their work, whilst in Year 6, pupils are asked to demonstrate a knowledge of coding through programming micro:bits to solve different challenges.

Data Handling - Within this strand, children develop their existing knowledge and understanding of data handling from mathematics to that within a computing context. In Foundation Stage pupils use

unplugged sorting activities to group and classify data, whilst in Lower Key Stage 2, children use an online pre-prepared database to input, sort and organise data in a range of ways.

Word processing - This is a fundamental skill, which at Roundwood Primary, we strongly feel all children should master before they move on to secondary school: this area of computing is one with practical implications for every subject area as well as for life. In KSI, with support, children learn to word process short text demonstrating their ability to import graphics and edit their text. In Upper Key Stage 2, learners should be able to word process longer documents, ensuring that the layout suits the document's purpose and that they are able to justify their design choices.

Publisher, Graphics and Multimedia - Pupils are taught how to use different multimedia software in order to present information to others. Children in Foundation Stage are encouraged to use technology to create art work which they can edit using tools such as brushes, pens and stamps. In Key Stage 1 and Lower Key Stage 2, children are taught to use publisher in order to create appealing documents, which features text, images from clipart and imported photographs. Further up the school in Upper Key Stage 2, children are introduced to multimedia presentation where they plan, develop and edit presentations that include hyperlinks, backgrounds and a range of effects before presenting to an audience.

Filming and Animations - In this strand, learners are exposed to how technology can be used in different ways as they use different hardware creatively. In Key Stage 1, children capture photos and video clips in order to make a short film whilst in Upper Key Stage 2 they are expected to plan a multi-scene stop-go animation and use an editing package to edit, refine and add titles.

Online - With the internet playing an ever-increasing role in everyday life, it is important for children to know what it is, how it works and how to use it efficiently as well as safely. In Foundation Stage, children are taught that the internet is made up of computers connected together and, with support, use the internet to find pictures for appropriate topics. In Lower Key Stage 2, not only do children discuss the reliability of information, but are taught how to navigate the internet safely and the tools internet browsers offer them.

During their time at Roundwood, all pupils will have access to a variety of hardware that is used to enhance lessons across the curriculum. Every classroom is equipped with a Promethean smartboard and every class has weekly timetabled sessions with the class set of Dell laptops and access to a class set of Apple iPads. In addition, pupils have access to beebots and micro:bits for programming, headsets for class computers and in Key Stage 2, children have the opportunity to attend a Technology Club run by external providers, where they are encouraged to test and use the latest equipment and gadgets on the market.