*'The future is so much bigger than the past'*

(Tim Berners Lee)

Computing is integral to living and working in our world, and the understanding of how data, information and communication can be used and developed within the framework of everyday life is essential. However, as the Covid 19 Lockdown in 2020 showed us, many in our community do not have access to the technology or computing knowledge needed to reap the benefits of the online world. When children do have access, it is often to gaming programs where children see themselves as future gaming champions without the aspirations or skills to write and develop their own programs or source online information.

At Woodhall we are beginning the change that will ensure that children will leave primary school with the computing skills needed to access the online world safely and the capability to use technology throughout their lives. We are also aiming to ensure that every child has access to suitable hardware and software to work at home and school.

We provide carefully-chosen online tools to support learning and to help children practise skills at home, e.g. 'Times Table Rockstars', 'Bug Club' online books, and 'Teach your Monsters to Read' phonics app. However, we also recognise that South Oxhey is an area of significant socio-economic deprivation and consequently, our children do not always have access to the hardware to use these tools at home.

### *INTENT*

At Woodhall, we provide an exciting, rich, relevant and challenging Computing curriculum for all pupils that will not only provide them with the skills they will need for their future careers but which will also provide them with independent access to information, knowledge and skills that they can use in their learning today. To do this we give children access to a variety of high-quality hardware and software resources that will enthuse and equip Woodhall pupils with the capability to use technology throughout their lives.

We equip our pupils with the skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others. To do this we teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated as well as develop the awareness of how, when, why and what to share with others when online.

As pupils' skills develop, we begin to utilise computational thinking beyond the Computing curriculum and aim to exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety) providing a high-quality computing environment.

We widen the aspiration of our children to think beyond being professional gamers to becoming the developers of world leading games and platforms, to go beyond interrogating data bases to creating relevant, functional databases. Computing is practical and embedded in the wider curriculum and life of the school.

We provide technology solutions for forging better home and school links that will enable pupils to complete homework and access information from school at home. We continue to seek funding and or support from local business to help compensate for a tight school budget.

**By the time our children leave Woodhall, we aim**

*For Key Stage 1 Children to:*
- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.

- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

### For Key Stage 2 Children to:
- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.


### IMPLEMENTATION

EYFS will continue to focus on the Early Years outcomes (Early Years Framework) which provide the prerequisite skills for Computing within the National Curriculum. Learning will develop from children's interests and needs and the teaching is through context-based and role play experiences. I Pads, walkie talkies and programmable toys are introduced into the environment at appropriate times during the year.

The most relevant Early Years outcomes for Computing are taken from and assessed through the 'Understanding the World' area of learning, but also from other areas such as 'Expressive Arts and Design'.

To provide the exciting, rich, relevant and challenging Computing curriculum our pupils need in KS1 and KS2, we have bought into the Purple Mash curriculum. It addresses the statutory aspects of the National Curriculum and gives support where areas of the Computing have been missed in previous years and allows quick catch up. It gives good support to teachers who are not yet up to speed in the area of Computing.

It is intended to be a stand-alone curriculum. It is be taught for 1 hour a week. Skills learnt are used in the wider curriculum where appropriate. For example, constructing data bases in science to store and interrogate data collected in experiments.

All children, including those with SEND and vulnerable groups such as PPG/EAL, have access to the curriculum. Teachers apply thoughtful differentiation in each lesson, whether that be by activity, support or outcome; and provide scaffolding and challenge for all levels of learners.

To supplement the curriculum every opportunity will be explored to ensure children are exposed to the full use of Computing in the wider world and opportunities will be explored to bring in people from local businesses (Hertfordshire and London) to show how Computing affects their work with a broader aim of widening the aspirations of our children.

### IMPACT

Pupil attainment is assessed using the Purple Mash Computing Assessment Tool for Years 1 to 6. In Early Years, children are assessed against the Early Learning Goals. The Purple Mash tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention. Teachers keep accurate records of pupil attainment by entering data using the Purple Mash Computing Assessment Tool. Tracking of attainment is used to inform future planning using the catch up resources where necessary.

The Computing lead also monitors work samples, observations, pupil voice to assess the effectiveness of provision and identify strengths and next steps across the school.

Formative assessment is undertaken each session/interaction in Computing and pupils are increasingly encouraged to be involved in that process. Summative assessment is undertaken in line with the assessment cycle using the

Woodhall Assessment Tracker. Using electronic work samples from children's portfolios on Purple Mash, teachers make judgements about the samples. If the child has not achieved the majority of the objectives in a particular strand of learning, a score of 0 is given, if the majority have been met a 1 and if all have been achieved or excellent subject knowledge of skill has been displayed in a particular area, the child may be awarded a 2. The teacher updates each strand as it has been taught and the Tool collates achievement across each strand for each year group and helps the teacher record and analyse achievement for each child and their class as a whole.

Following this assessment, the Computing Leader summarises the strengths and weaknesses of the subject and puts actions in place to move the provision on; that could be through staff training, team teaching or planning, use of specific resources or even through whole school events. The achievement of vulnerable groups such as SEND, PPG or EAL children are monitored closely to ensure their progress is in line with their peers.

We are hoping to use the flexibility that technology brings to allowing pupils to access learning opportunities, particularly pupils with SEND. With this in mind, we ensure additional access to technology is provided throughout the school day and in some cases beyond the school day as and when this is available.

**Relevant Website Links:**

*School Development Plan (parents/carers' version):* https://woodhall.herts.sch.uk/wp-content/uploads/2022/09/Woodhall-School-Development-Plan-2022-2023-Parents-Version-1.pdf

*Curriculum (subject ladders/curriculum overviews):* https://woodhall.herts.sch.uk/curriculum

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| **Subject Leader:** J Rubeck |
| **Reviewed:** July 2022 |