

COMPUTIN



SPRING 2022



Dear Parents and Carers,

Welcome to our first ever Warden Hill Computing Newsletter!

The purpose of this newsletter is to share some of the amazing projects our children have been working on in their computing lessons and keep you up to date with any other computing news and developments. Our pupils have all enjoyed completing a wide range of activities, including programming, creating music, writing a blog, taking and editing photographs, completing research and presentations, using green screen technology, making interactive games and using CAD software. All this has been achieved by using a wide range of technology including iPads, Nexus tablets, laptops, BeeBots, a green screen, data loggers and micro:bits.

Alongside the Computing National Curriculum, we have also been working on developing the children's key 'digital literacy skills'. This includes the use of Microsoft programmes such as Word, Excel, PowerPoint and Publisher.

As you can see, it certainly has been a busy 'computing' year so far! We hope you enjoy the following snapshot of what our pupils have achieved.

Thank you for your support

Mr Bailey and Mrs Bloomfield Computing Team



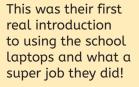
The children used a program called 2paint a Picture to produce their own firework pictures.











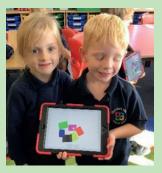






They also took their first steps into learning about programming when using Bee-Bots (programmable floor robots) to navigate a around the floor.

The children began the year by being 'digital artists'. They used Brushes Redux on the iPads to create their own artwork, inspired by the work of famous artists such as Matisse, Kandinsky and Opie.









They then continued their programming journey, using Scratch Junior and learnt how to program sprites (characters) to play sounds.

The children then further developed their programming skills, using Bee-Bots to write programs to reach a given destination. They tested and corrected their instructions to achieve their goal.



The children began by taking, selecting and editing digital images on the iPads. The focus was 'art in nature' and they were challenged to use editing tools such as cropping, changing the focus and background colours of their images. The end results were guite stunning!



The children really enjoyed working as 'safe researchers' in their next unit. They researched an animal of their choice and used this information to create a PowerPoint presentation, which they delivered to their class. Throughout the unit, they discussed and reviewed key online safety messages.

They showed amazing progression in their digital literacy skills and were able to include and manipulate images and slide transitions!

Last term, Year 2 continued to develop their programming skills and worked on Scratch Junior to recreate the Apollo Space launch! They developed a space themed project and programmed a rocket to land on the moon and return to earth. The children included sounds and repetition and 'debugged' their algorithms.



Having started programming with Scratch Junior in KS1, Year 3 were introduced to the full version of Scratch on the laptops.

They created their own stone age animation and programmed movement and dialogue between their characters. They added sound to their animations, before reviewing, debugging and improving them. The algorithms were quite challenging and they did a fantastic job!





The children then moved on to being 'presenters' and learnt about how green screen technology works. They spent time researching volcanoes, Ancient Egypt or forces and used their research to compose a 2 minute presentation. They also searched for and saved relevant images on the iPads and rehearsed their group presentations. Their next step is to record these against the green screen and then use the software on the iPads to add images to their backgrounds.

Year 4 had a musical start to the year and were introduced to an APP called GarageBand, which they used to create their own piece of music. They had great fun creating composing and editing tunes, thinking about pitch and duration and using different virtual instruments. They were challenged to create familiar tunes and we had many successful renditions of Twinkle, Twinkle Little Star and Three Blind Mice!

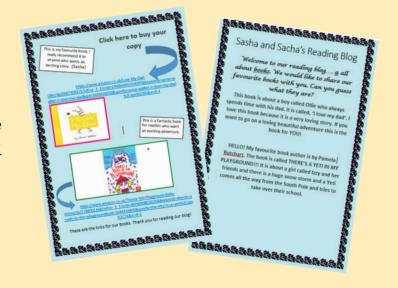


In their next programming unit, the children used Scratch to make a maths game, with a times table focus. They used some advanced programming skills, such as using repetition and variables, to make an effective and challenging game. They were also able to debug their own algorithm. At the end of the unit, they all enjoyed playing each other's games and giving feedback.

Last term, the children used their digital literacy skills to produce book reviews in the style of a 'blog'.

They learnt some advanced formatting skills, such as inserting images and wrapping text around them, adding page borders and backgrounds, using different fonts and even adding hyperlinks to their pages.

The blogs have been printed and made into a class folder so the whole class can see their recommendations.



Year 5 continued to develop their programming skills, using Scratch, to develop an interactive game.

They built on the skills from previous years and learnt how to create original artwork and sound for their game, as well as using sequence, selection, repetition and variables. They programmed multiple characters and also detected and corrected errors in their programming, using trial and improvement techniques. The final outcomes were very impressive and they enjoyed playing each other's games!





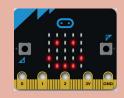


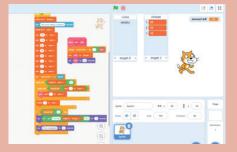
The next unit was a real favourite with the children, as they became 'adventure gamers'. They created an interactive game, which took their audience on a journey of choices and surprise destinations! The children learnt some advanced features of PowerPoint, including hyperlinks, adding sound effects to slides, picture backgrounds and manipulating images. The finished games really were super and showcased their newly-found skills.

In their latest work, the children have been introduced to a CAD program called SketchUp, which they have been using to design a virtual art gallery.

They have certainly developed their spatial awareness by exploring and experimenting with a 3D environment!

Programming became pretty tricky for Year 6 as they were challenged to write the code to control a micro:bit mini computer, in order to make a toy interactive. They certainly rose to the challenge and were able to successfully program the micro:bits to become step counters. Some children went one 'step' further and programmed inputs on one micro:bit in order to create an output on another one.





In their following unit, the children were 'computational thinkers' which involved mastering the use of algorithms. They were tasked with recording an algorithm for finding the smallest number of coins to make a given amount of change. They then wrote a Scratch program to implement their algorithm. This was a really challenging unit and involved a lot of trial and improvement and head scratching! Super end results though - well done Year 6!

The children really enjoyed being 'publishers' where they had the opportunity to publish a year book.

They worked in groups, using Microsoft Publisher, to produce a book about their time at Warden Hill. They had to consider all they had been taught about formatting, use of cohesive font styles and sizes, taking information from a variety of sources and most of all, work collaboratively in groups!



SAFER INTERNET DAY

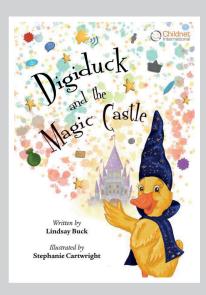
Safer Internet Day was on 8th February and the theme this year was:

All fun and games? Exploring respect and relationships online

All the children watched assemblies on this theme and had really valuable discussions about this important topic.



The Key Stage 2 assembly focussed on the type of messages that may be sent in a game setting. The children discussed whether they thought messages were appropriate or not. They also talked about how to send sensible and thoughtful messages in a game 'chat' and the impact these can have.



In Key Stage 1 the children watched an assembly which used the book Digiduck and the Magic Castle as a means of discussing the importance of secure passwords. It also covered the issue of clicking on in-game purchasing and how we must be careful what we click on when playing games.

COMPUTING BOOKS

As a new initiative, we have introduced computing books for the children this year. The children are using these to keep their knowledge organisers for each topic, key vocabulary, notes and reminders and, where possible, a print out of the work they have completed.

They also have a copy of our Computing Golden Rules in the front, so they can refer to these during computing lessons.



PUPIL SURVEY

With the help of our School Council Representatives, we completed a pupil survey last term, with questions related to enjoyment of computing, level of challenge and online safety. All children in the school were surveyed from Year 1 to Year 6.

It was particularly pleasing to see that when given the statement:

"I enjoy my computing lessons and look forward to them"

an overwhelming 96% of children agreed or strongly agreed!

