Thurnham Whole School Computing Progression 2020 – 2021 (Covid – 19 adapted for Recovery curriculum)

Progression in Computing through our Empowering Curriculum

"At Thurnham our Empowering Curriculum will give pupils the key skills that they need to flourish; Brain Power, Resilience, Independence, Investigating and Creativity"

The Computing Curriculum covers three strands: Computer Science, Information Technology and Digital Literacy. This document covers the objectives within each strand.

In Year R, only 3 / 90 children have come into school working below the Expected level for Technology. We need to be mindful to ensure the gap doesn't widen throughout the year. We will be teaching children to use iPads this year, as they are new to our school. Our main consideration with Technology this year is able to access / provision outside of school. We are expecting children to be able to complete homework on home technology, and therefore we need to monitor who is able to complete this, who has access to the Technology and how we can support families with Seesaw.

In Year 1 and 2, the children will be using devices to access online home learning, so in both year groups they will be starting their Computing lessons with e-safety lessons. Year 1 and 2 teachers are to ascertain which children are unable to access home learning so that we can support with this.

Year R	Year 1	Year 2
Computer Science		
Understanding the World: Technology: They select and use technology for particular purposes.	Pupils should be taught to: • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs	
➢ I can use remote control cars and small programmable toys. ➢ I can *tinker* with beebots.	Year R do not teach formal Computing lessons, so the children have not missed out on specific lessons in Year R. We will incorporate opportunities to *tinker* with Beebots as part of their Computer Science lessons. ➢ I can use BeeBots in a specific way, moving	Year 2 were given the Espresso coding lessons during their period of absence from school, so some children did not complete them. They will go back over some of the concepts during the review session before starting new learning for Year 2. ➢ I can use BeeBots in a specific way, moving

	around obstacles or to specific places. ➢ Espresso Coding Activities: Each lesson will build upon the last, building up to the final lesson: ✓ ALL: I can design and program an app in which an object moves around the screen at the start ✓ MOST: I can design and program an app in which objects move in different directions and disappear when they are clicked on ✓ SOME: I can design and program an app and explain how I programmed the objects to do different actions	around obstacles or to specific places. ➢ Espresso Coding Activities: Each lesson will build upon the last, building up to the final lesson: ✓ ALL: I can make an app in which a princess can escape from a wizard when she is clicked on ✓ MOST: I can make an app in which a wizard chases a prince, and the prince disappears when he is clicked on ✓ SOME: I can design a scene for my app and use the 'share' button to save and share it with other people
Information Technology		
Understanding the World: Technology: They select and use technology for particular purposes. Children recognise that a range of technology is used in places such as homes and schools.	Pupils should be taught to: • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school	
➢ I can use a variety of programs including online activities to develop mouse control, decision making tasks and basic picture creating. ➢ I can select and use technology for a purpose. ➢ I can recognise a range of technology used in places such as homes and schools.	Computing is not taught as a formal subject in Year R, so the children have not missed out on targeted learning. First term, Child Initiated Learning to be used for children to have an opportunity to explore technology as they would have done in Year R ➢ I can use digital cameras and video to create content and store on device. ➢ I can create pictures and text files and store on a device. Reopen files to continue creating at a later stage. ➢ I can create audio files as interactive books. ➢ I can think about my own use of ICT beyond	Teachers to ensure the children understand any learning missed in Year 1 before moving on. ➢ I can use digital cameras and videos to create content and retrieve it to show others. ➢ I can create pictures and text including interactive content and store, retrieve and print work independently. ➢ I can create content for public audience and edit by manipulation and retrieve and save safely. ➢ I can look at how the school system works,

	school, as well as ICT within my home. ➢ I can identify a problem, plan, create, collect, present and analyse data using pictograms and bar charts. ➢ I can upload my learning to an online learning platform (Seesaw) with adult support. ➢ I can use book creator/Popplet lite. ➢ *Cross-curricular use of iPads to research and present learning.*	when we log on what happens. ➢ I can think about uses of ICT in my home. ➢ I can say how parents use ICT in their jobs, from visits from parents. ➢ I can identify a problem, plan, create, collect, present and analyse data using branching data bases. ➢ I can independently upload my learning to an online learning platform (Seesaw). ➢ *Cross-curricular use of iPads to research and present learning.*
Digital Literacy		
Health and self-care: Talk about ways to stay healthy and safe.	Pupils should be taught to: • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	
THIS UNIT NEEDS TO BE INCLUDED IN ALL SUBJECTS WHEN THE INTERNET IS BEING USED AS A SAFE USAGE REMINDER NEEDS TO BE INCLUDED IN SUBJECT PLANS FOR THIS. In term 1, Year 1 and 2 are to cover e-safety, in order that the children are digitally literate to prepare them for online Home Learning, as well as if they have to work from home for any reason due to Covid-19.		

➢ I can talk about ways to keep safe online.	➢ I can log on to Seesaw using my own login. ➢ I can communicate online with people I know. ➢ E-safety taught in the first term through 'Hector's World' ➢ *Whole school Safer Internet Day.* ➢ *E-safety taught through PSHE sessions.*	➢ I can log on to Seesaw using my own login and talk about why it is important to have a safe secure login. ➢ I can communicate online with people I do not know well. ➢ E-safety taught in the first term through 'Hector's World' ➢ *Whole school Safer Internet Day.* ➢ *E-safety taught through PSHE sessions.*