

Whipton Barton Federation Computing Long Term Curriculum Map

At Whipton Barton Federation, we believe that technology plays a significant role in society today. Children are taught the skills and the correct morals, values and ethics to participate effectively and safely in this digital world which can only be achieved through a broad and diverse Computing curriculum.

Children in our EYFS classes learn to use technology in a responsible, competent and confident manner on a day-to-day basis during their independent learning through the use of Ipads, Beebots and Microsoft Surfaces. Throughout their Reception year, children will begin to understand the scope of technology; using Google Earth to look at their local area and other countries around the world; using Purple Mash to design and

create art work; and using Ipads to record their learning with photos and videos. The planned experiences and opportunities that the children encounter provided with them with firm foundations to build upon their knowledge and develop digital literacy for future learning.

At the core of our Key Stage One and Key Stage Two Computing curriculum, children are introduced to a wide range of technology, including PCs, iPads and interactive whiteboards, allowing them to continually practice and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology.





Our Computing curriculum enables children to become effective users of technology who can:

- Sunderstand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- Sector 2 Evaluate and apply information technology analytically to solve problems;
- Sommunicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

Internet Safety

At Whipton Barton Federation, we take internet safety extremely seriously. We have an Internet Policy that provides guidance for teachers and children about how to use the internet safely. The first term of each academic year all children participates in e-safety lessons so that children understand how to stay safe online and report any concern they may have when using technology.



| Year | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 | |
|-----------|---|--------|--|--------|--|--------|--|
| Reception | Children in our EYFS classes learn to use technology in a responsible, competent and confident manner on a day-to-day basis during their independent learning through the use of Ipads, Beebots and Microsoft Surfaces. Throughout their Reception year, children will begin to understand the scope of technology; using Google Earth to look at their local area and other countries around the world; using Purple Mash to design and create art work; and using Ipads to record their learning with photos and videos. The planned experiences and opportunities that the children encounter provided with them with firm foundations to build upon their knowledge and develop digital literacy for future learning. | | | | | | |
| Year | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 | |
| Year 1 | Rising Star - Switched on Online Safety Unit 1.5 We are good Digital Citizens. I know to tell an adult if I see anything worrying online (e-Safety) I can recognise how I use technology in my home and at school (Computers) I can use a program to create a simple document. (Using Computers) | | Rising Stars - We are Treasure Hunters 1.1 I can recognise how I use technology in my home and at school (Computers) I can predict the behaviour of a programmed toy (Coding) I can explain that an algorithm is a step by step set of instructions (Coding) | | Rising Stars – We are Collectors 1.4 I can recognise how I use technology in my home and at school (Computers) I can use a program to create a simple document. (Using Computers) | | |





| | | | Rising Stars – We are | |
|--------|---------------------------|------------------------------|---------------------------|--|
| | | | Games Testers 2.2 | |
| | Rising Star - Switched on | | | |
| | - | | I can predict the | |
| | Online Safety Unit 2.5 We | | • | |
| | are Online Behaviour | Rising Stars - We are | behaviour of a | |
| | experts | - | programmed toy, clearly | |
| | • | Photographers 2.3 | relating each action to | |
| | I know I need to keep my | | part of an algorithm | |
| | personal information | I can use different software | (Coding) | |
| | | programs and discuss the | (Coung) | |
| | private | benefits of their usage | 1 | |
| | | 0 | l can create a simple | |
| | (e-Safety) | (Using Computers) | program to perform a task | |
| | | (osing component) | | |
| Year 2 | l can recognise how | I can find, open, edit and | (Coding) | |
| | others use technology | | | |
| | outside of school | save files I am working on | I can create and debug | |
| | 0013100 01 3011001 | | simple programs (Coding) | |
| | (Computers) | (Using Computers) | simple programs (coung) | |
| | (Computers) | | I can find and fix simple | |
| | | | | |
| | | | bugs in programs | |
| | | | | |
| | | | (Coding) | |
| | | | | |
| | | | I can understand that | |
| | | | programs run by following | |
| | | | clear instructions | |
| | | | | |
| | | | (Coding) | |
| | | | (Coung) | |
| | | | Dising Charge Mission | |
| | Rising Star - Switched on | | Rising Stars - We are | |
| X | Online Safety Unit 3.5 We | Rising Stars - We are | Vloggers 3.4 | |
| Year 3 | are Netiquette Experts. | Communicators 3.5 | | |
| | | | I can use a search engine | |
| | | | to find web pages | |
| | | | (Net Searching) | |





| | | | 3 | |
|--------|---|--|---|--|
| | l know I need to keep my password and personal information secure (e-Safety) I can recognise acceptable and unacceptable behaviour online (e-Safety) I can make choices on which program is best for a given task (Using Computers) | understand that computer networks allow data to be transferred and shared (Networks) I understand that the internet is a large network that enables computers to share information (Networks) I can explain how simple algorithms solve a given problem (Coding) I can produce a simple program that completes a given task (Coding) | I understand that not all websites are as reliable as others (Net Searching) I know what input and output devices are and how they are used (Computers) I can use a range of input and output devices efficiently (Computers) | |
| Year 4 | Rising Star - Switched on Online Safety Unit 4.3 We are Aware that our Online Content Last Forever. I understand that what I say or post on the internet might be copied, shared and stored by others (e-Safety) | Rising Stars - We are Toy Designers 4.2 can use other programs as I code (Coding) I can break programs up into smaller parts (Coding) | Rising Stars - We are HTML Editors 4.4 I can use a range of programs to complete a task (Using Computers) | |





| | I know what to do if I see anything worrying online (e-Safety) I understand how search engines order their search results (Net Searching) | I can use logical thinking to identify and solve potential bugs during coding (Coding) I can use more complicated input devices (Computers) | I can use different software programs and different types of hardware (Using Computers) I understand that some computers on a network serve particular functions, such as controlling printers or sharing files (Networks) | |
|--------|--|--|--|--|
| Year 5 | Rising Star - Switched on Online Safety Unit 5.2 We are Responsible for our Online Actions. I understand how to choose online content for my age group (e-Safety) I can select appropriate software to use for a given task (Using Computers) | Rising Stars - We are Game Developers 5.1 I can write increasingly complex programs (Coding) I can control external hardware from within my programs (Coding) I can use loops to repeat tasks within a program (Coding) | Rising Stars - We are Bloggers I can use the internet to allow me to share data with another person (Networks) I can select appropriate software to use for a given task (Using Computers) I can confidently use a range of software tools (Using Computers) | |





| | | I can use IF sto | itements to | I can use more advanced | |
|--------|--------------------------------|------------------|-------------|------------------------------|---|
| | | alter the way n | ny programs | features when searching | |
| | | run | | online | |
| | | | | | |
| | | (Codi | ng) | (Net Searching) | |
| | | | | | |
| | | l can explo | | l can use a range of | |
| | | increasingly | | search tools to find exactly | |
| | | algorithms sol | ve a given | what I'm looking for | |
| | | proble | em | | |
| | | | | (Net Searching) | |
| | | (Codi | ng) | | |
| | | | | | |
| | | Rising Stars - W | | Dising Stars We are | |
| | Dising Change Coultack and any | Writers | 6.5 | Rising Stars - We are | |
| | Rising Star - Switched on | | | Computational Thinkers | |
| | Online Safety Unit 6.3 We | I can use softw | | 6.2 | |
| | are Safe Social Networkers | me analyse a | | I can use logical thinking | |
| | l understand how to | data and int | ormation | to identify and solve | |
| | | /Using Con | an utora) | | |
| | protect my computer or | (Using Con | ipoleis) | potential bugs during | |
| | device from harm on the | I can design a | program for | coding | |
| Year 6 | internet | a given au | · – | (Coding) | |
| Teur o | (e-Safety) | a given ac | | (Coung) | |
| | (e-sulery) | (Using Con | nputers) | l can use loops, variables | |
| | I understand how to report | | | and IF statements to alter | |
| | concerns about content | l can use mor | e than one | the way my programs run | |
| | and contact in and out of | piece of sol | tware to | (Coding) | |
| | school | complete | | (Coung) | |
| | 3011001 | | | I can store and retrieve | |
| | (e-Safety) | (Using Con | nputers) | variables in a program | |
| | (0 00.0.)) | | | (Coding) | |
| | | l understa | nd how | | |
| | | computers a | re able to | | |
| | • | | | • | • |



| l can recognise | communicate and share | l can break code up into | |
|-----------------------------|-----------------------------|-----------------------------|--|
| trustworthy sources of | information | related instructions, | |
| information on the internet | | making debugging easier | |
| | (Networks) | and quicker (Coding) | |
| (Net Searching) | I can use and combine | | |
| | | l can combine software | |
| l can use a broad range | services on the internet to | and hardware to solve | |
| of resources online to find | share information | real life problems (Coding) | |
| exactly what I'm looking | (Networks) | | |
| for | | | |
| (Net Searching) | | | |
| (| | | |
| | | | |
| | | | |