

COMPUTING: CURRICULUM CONTENT AND PROGRESSION FRAMEWORK

FOUNDATION

The key things we want children to know/be able to do	Cycle A	Cycle B
Computer Science - To make a floor robot move. e.g. Beebot, Bluebot, Code-a-pillar, Code & Go Mouse, Cubetto - To complete a simple program on a computer. e.g. 2Go, MiniMash activity, online counting game - To make choices about the buttons and icons pressed, touched or clicked on.		
E-Safety - To ask an adult when you want to use the Internet. - To explain to an adult when something worrying or unexpected happens while using the Internet. - To be kind to friends. - To talk about the amount of time spent using a computer / tablet / game device. - To be careful with technology devices.		
Handling Data To explain different kinds of information such as pictures, video, text and sound.		
Creative Use Of Media - To move objects on a screen. - To create shapes and text on a screen. - To use technology to show learning. e.g. Take photos, videos, use voice recording devices - To select and use technology for particular purposes.		
Technology In Our Lives - To talk about technology that is used at home and in school. - To operate simple equipment. e.g. music players, toys with knobs and pulleys - To use a safe part of the Internet to play and learn.		

YEAR 1 & 2

The key things we want children to know/be able to do	Cycle A	Cycle B
Computer Science 1) To give instructions to others and follow their instructions to move around. 2) To describe what happens when a button is pressed on a robot. e.g. Beebot, Bluebot, Code-a-pillar, Code & Go Mouse, Cubetto 3) To press buttons in the correct order to make a robot do what you want. 4) To describe what actions are needed to make something happen and begin to use the word algorithm. 5) To begin to predict what will happen for a short sequence of instructions. 6) To begin to use software/apps to create movement and patterns on a screen. e.g. 2Go, Lightbot 7) To use the word debug when correcting mistakes when programming.		
E-Safety 1) To keep a password private. 2) To explain what personal information is. 3) To tell an adult when unexpected or worrying content is found online. 4) To talk about why it's important to be kind and polite. 5) To recognise age appropriate websites & games. 6) To agree and follow sensible e-Safety rules.		
Handling Data 1) To explain the different ways in which information can be shown. 2) To use technology to collect information for a purpose, including photos, video and sound. 3) To sort different kinds of information and present it to others. e.g. Venn Diagram, 2Count 4) To add information to a pictograph and talk about what is found out.		
Creative Use Of Media 1) To be creative with different technology tools. e.g. 2Paint, take digital photos and use in a collage 2) To use technology to create and present ideas. e.g. poster, e-book 3) To use the keyboard or a word bank on a device to enter text. 4) To save information in a special place and retrieve it again.		
Technology in Our Lives 1) To recognise the ways we use technology in our classroom, home and community. 2) To use links to websites/bookmarks to find information. 3) To begin to identify some of the benefits of using technology.		

YEAR 3 & 4

The key things we want children to know/be able to do	Cycle A	Cycle B
Computer Science - To break an open-ended problem up into smaller parts. - To put programming commands into a sequence to achieve a specific outcome. - To keep testing a program and recognise when it needs debugging. - To use repeat commands. - To describe the algorithm that is needed for a simple task. - To detect a problem in an algorithm which could result in unsuccessful programming.		
E-Safety - To talk about what makes a secure password and why they are important. - To protect personal information when doing different things online. - To use the safety features of websites as well as reporting concerns to an adult. - To recognise websites and games appropriate for my age. - To make good choices about how long is spent online. - To ask an adult before downloading files and games from the Internet. - To post positive comments online.		
Handling Data - To talk about the different ways data can be organised. - To search a ready-made database to answer questions. - To collect data help me answer a question. - To add to a database. - To make a branching database. - To use a data logger to monitor changes and can talk about the information collected.		
Creative Use Of Media - To create different effects with different technology tools. - To combine a mixture of text, graphics and sound to share ideas and learning. - To use appropriate keyboard commands to amend text on a device, including making use of a spellchecker. - To evaluate work and improve its effectiveness. - To use an appropriate tool to share work online.		
Technology in Our Lives - To independently save and retrieve work on the Internet, the school network or a personal device. - To talk about the parts of a computer. - To discuss ways to communicate with others online. - To describe the World Wide Web as the part of the Internet that contains websites. - To use search tools to find and use an appropriate website. - To think about whether I can reuse online content (movies, text, images) from the WWW.		

YEAR 5 & 6

In Upper Key Stage 2, all projects should, where possible, have a brief to be creatively met and evaluated against by pupils (audience, purpose criteria, composition).

The key things we want children to know/be able to do	Cycle A	Cycle B
Computer Science - To decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. - To refine a procedure using repeat commands to improve a program. - To use a variable effectively. e.g. Scores, Timers - To change an input to a program to achieve a different output. - To use 'if' and 'then' commands to select an action. - To talk about how a computer model can provide information about a physical system. - To use logical reasoning to detect and debug mistakes in a program. - To use logical thinking, imagination and creativity to extend a program.		
E-Safety - To protect my password and other personal information. - To explain the need to protect oneself and friends and the best ways to do this, including reporting concerns to an adult. - To know that anything I post online can be seen, used and may affect others. - To talk about the dangers of spending too long online or playing a game. - To explain the importance of communicating kindly and respectfully. - To discuss the importance of choosing an age-appropriate website or game. - To explain why I need to protect my computer or device from harm. - To know which resources on the Internet I can download and use.		
Handling Data - To use a spreadsheet and database to collect and record data. - To choose an appropriate tool to help collect data. - To present data in an appropriate way. - To search a database using different operators to refine my search. - To talk about mistakes in data and suggest how it could be checked.		
Creative Use Of Media - To use text, photo, sound and video editing tools to refine work. - To use the skills already developed to create content using unfamiliar technology. e.g. across chromebook to laptop technology/ software. - To select, use and combine the appropriate technology tools to create effects that will have an impact on others. - To select an appropriate online or offline tool to create and share ideas. - To review and improve my own work and support others to improve their work.		
Technology in Our Lives - To describe different parts of the Internet. - To use different online communication tools for different purposes. - To use a search engine to find and evaluate appropriate information on the WWW and check its reliability. - To describe the different parts of a webpage. - To find out who the information on a webpage belongs to.		

