Computing

Year A	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Apple YR/Y1	**1.1 Online safety and exploring Purple Mash** **Digital literacy** To keep my login safe To save my work in a safe place such as 'My Work' folder	**1.9 Technology outside school** **Digital Literacy** To say what technology is To say what examples of technology are in school To say what examples of technology are at home To know that a chair uses old technology and a smart phone uses new technology	**1.2 Grouping and sorting** **Information Technology** To sort sound, pictures and text To name my work To save my work To find my work	**1.3 Pictograms** **Information Technology** To change content on a file such as text, sound and images To name my work To save my work To find my work	**1.4 Lego builders** **Computer Science** To explain that an algorithm is a set of instructions To know that an algorithm written for a computer is called a program. To work out what is wrong when the steps are out of order in instructions	**1.7 Coding** **Computer Science** To know that an algorithm written for a computer is called a program. To say that if something does not work how it should it is because the code is incorrect To try and fix the code if it is not working properly To make good guesses of what is going to happen in a program eg where the turtle may go
Palm Y2/3	**2.2 Online safety** **Digital Literacy** To know the consequences of not searching online safely To share work and communicate electronically – for example using 2Email or the display boards To report unkind behaviour and things that upset people online, to a trusted adult To see where technology is used at school such as in the office or canteen	**2.5 Effective searching** **3.4 Typing** **2.5 Effective Searching** **Information Technology** To find data using specific searches eg 2investigate **Digital Literacy** To find information I need using a search engine To know the consequences of not searching online safely **3.4 Typing** **Information Technology** To carry out searches to find digital content on a range of online systems To consider the most appropriate software to use when given a task	**3.5 Email** **Computer Science** To identify different ways that the internet can be used for communication To use email to respond to others appropriately and attach files **Information Technology** To create purposeful content to attach to emails **Digital Literacy** To explain the importance of having a secure password and not sharing with others To explain the negative consequences of not keeping passwords safe and secure To use communication tools respectfully	**2.8 Presenting ideas** **Information Technology** To use several programs to organise information To name, save and find my work To include photos, text and sound in my creations	**2.1 Coding** **Computer Science** To explain an algorithm is a set of instructions to complete a task To know I need to carefully plan my algorithm so it will work when I make it into code To design a simple program using 2Code that achieves a purpose To find and correct some errors in a program To say what will happen in a program To spot something in a program that has an action or effect (does something). **Digital Literacy** To understand that my creations need similar skills to the adult world	**2.3 Spreadsheets** **Information Technology** To organise data To name, save and find my work
Oak Y4/5	**4.2 Online safety** **Computer Science** To understand the	**4.4 Writing for different audiences**	**4.6 Animation** **5.6 3D modelling** **4.6 Animation**	**4.3 Spreadsheets** **Information**	**4.1 Coding** **Computer Science** To turn a real-life	**4.5 Logo** **Computer Science** To turn a real-life

	network and communication components can be found in many different devices which allow them to join the internet **Digital literacy** To have a good understanding of the online safety rules learnt at school To demonstrate how to use different online technologies safely To demonstrate how to use a few different online services safely To know I have a right to privacy both on and offline To recognise that wellbeing can be affected by how technology is used To report with ease any concerns with content and contact online and know immediate strategies to keep safe	**Information Technology** To work collaboratively to create content and solutions To share digital content using a variety of applications	**Information Technology** To share digital content using a variety of applications **5.6 3D Modelling** **Information Technology** To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with others creating solutions to problems using appropriate software such as 2Code.	**Technology** To work collaboratively to create content and solutions To share digital content using a variety of applications	situation to solve into an algorithm, using a design that shows how I can accomplish this in code To use repetition in code. For example, using a loop that continues until a condition is met such as the correct answer being entered To use timers within program designs more accurately to create repetition effects. For example, to create a counting machine To use selection (decision) in my programming. For example, using an 'if statement' for a question being asked and the program takes one of two paths To use variables within programs and know how to change the value of variables To use the user inputs and output features within a program, such as 'Print to screen' To identify errors in my code by using different methods, such as steeping through lines of code and fixing them To read programs that contain several steps and predict the outcomes with increasing accuracy To recognise the main component parts of hardware which allow computers to join and form a network	situation to solve into an algorithm, using a design that shows how I can accomplish this in code To read programs that contain several steps and predict the outcomes with increasing accuracy
Willow Y6	**6.2 Online safety** **Computer Science** To explain the difference between the internet and the world wide web To explain what a WAN and LAN is and describe the	**Film/Animation (Non Purple Mash Unit – using iMovie and Lego Film Maker)** **Information Technology** To share digital content using a	**6.4 Blogging** **Computer Science** To explain the difference between the internet and the world wide web **Information Technology**	**6.3 Spreadsheets** **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy	**6.1 Coding (Plus Scratch and NCEE)** **Computer Science** To turn a complex programming task into an algorithm To identify the important aspects of a programming	**6.7 Quizzing** **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the

process of how access to the internet in school is possible **Information Technology** To use filters when searching for digital content To explain in detail how accurate and reliable a webpage and its content is **Digital Literacy** To demonstrate safe and respectful use of a range of different technologies and online services To identify more discrete inappropriate behaviours online. For example, someone who may be trying to groom me or someone else To use critical thinking to help me stay safe online To know the value of protecting my privacy and others online.	variety of applications	To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the intended audience carefully when I design and make digital content To design and create online blogs To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. **Digital Literacy** To demonstrate safe and respectful use of a range of different technologies and online services To know the value of protecting my privacy and others online	To consider the intended audience carefully when I design and make digital content To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.	task (abstraction) To decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work To test and debug my program as I work on it and use logical methods to identify a cause of a bug To identify a specific line of code that is causing a problem in my program and attempt a fix To translate algorithms that include sequence, selection and repetition into code and nest these structures within each other To use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object To interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole. **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the intended audience carefully when I design and make digital content To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.	intended audience carefully when I design and make digital content To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.

Year B	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Apple YR/Y1	**1.1 Online safety and exploring Purple Mash** **Digital literacy** To keep my login safe To save my work in a safe place such as 'My Work' folder	**1.9 Technology outside school** **Digital Literacy** To say what technology is To say what examples of technology are in school To say what examples of technology are at home To know that a chair uses old technology and a smart phone uses new technology	**1.4 Lego builders** **1.5 Maze explorers** **1.4 Lego Builders** **Computer Science** To explain that an algorithm is a set of instructions To know that an algorithm written for a computer is called a program. To work out what is wrong when the steps are out of order in instructions **1.5 Maze Explorers** **Computer Science** To explain that an algorithm is a set of instructions To work out what is wrong when the steps are out of order in instructions To make good guesses of what is going to happen in a program eg where the turtle may go	**1.6 Animated stories** **Information Technology** To add sound, pictures and text to a program To change content on a file such as text, sound and images To name my work To save my work To find my work	**1.7 Coding** **Computer Science** To know that an algorithm written for a computer is called a program. To say that if something does not work how it should it is because the code is incorrect To try and fix the code if it is not working properly To make good guesses of what is going to happen in a program eg where the turtle may go	**1.8 Spreadsheets** **Information Technology** To change content on a file such as text, sound and images To name my work To save my work To find my work
Palm Y2/Y3	**3.2 Online safety** **Digital Literacy** To create a secure password To explain the importance of having a secure password and not sharing it with others To explain the negative consequences of not keeping passwords safe and secure To understand the importance of keeping safe online and behaving respectfully To use communication tools such as 2Email respectfully and use good etiquette To report unacceptable content and contact online in more than one way	**2.6 Creating pictures** **Information Technology** To name, save and find my work To include photos, text and sound in my creations	**2.7 Making music** **Information Technology** To edit digital data such as data in music composition software like 2sequence To name, save and find my work	**3.6 Branching databases** **Information Technology** To carry out searches to find digital content on a range of online systems, such as within Purple Mash or on an internet search engine To collect data and input it into software To analyse data using features within software to help such as, formula in 2Calculate (spreadsheets) To present data and information using different software such as 2Question (branching database) or 2Graph (graphing tool) To consider what	**3.1 Coding** **Computer Science** To make a real-life situation into an algorithm for a program To design an algorithm carefully, thinking about what I want it to do and how to turn it into code To identify an error in a program and fix it To experiment with timers in my programs To identify the difference in using between the effect of a timer or repeat command in a code To know that a variable stores information while a program is running (executing) To identify 'If' statements, repetition and	**3.3 Spreadsheets** **Information Technology** To carry out searches to find digital content on a range of online systems, such as within Purple Mash or on an internet search engine To collect data and input it into software To analyse data using features within software to help such as, formula in 2Calculate (spreadsheets) To present data and information using different software such as 2Question (branching database) or 2Graph (graphing tool) To consider what the most

				the most appropriate software to use when given a task by my teacher To create purposeful (appropriate) content and attach this to emails.	variables To read programs with several steps and predict what it will do.	appropriate software to use when given a task by the teacher To create purposeful (appropriate) content and attach this to emails.
Oak Y4/Y5	**5.2 Online safety** **Computer Science** To know the importance of computer networks and how they help solve problems and enhance communication To recognise the main dangers that can be perpetuated via computer networks To explain what personal information is and know strategies for keeping this safe To use the most appropriate form of online communication according to the digital content. For example, use 2Email, 2Blog and Display Boards. **Information technology** To search precisely when using a search engine. For example, to add additional words or removes words to help find better results To explain in detail how accurate, safe and reliable the content is on a webpage To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with	**5.7 Concept maps** **Information Technology** To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with others creating solutions to problems using appropriate software such as 2Code. To use collaborative modes	**5.5 Game creator** **Computer Science** To test and debug programs To use the most appropriate form of online communication according to digital content **Information Technology** To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with others creating solutions to problems using appropriate software such as 2Code.	**5.3 Spreadsheets** **Information Technology** To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with others creating solutions to problems using appropriate software such as 2Code.	**5.1 Coding** **Computer Science** To make more complex real-life problems into algorithms for a program To test and debug my programs To convert (translate) algorithms that contain sequence, selection and repetition into code that works To use sequence, selection, repetition, and some other coding structures in my code To organise code carefully for example, naming variables and using tabs. I know this will help me debug more efficiently To use logical methods to identify the cause of any bug with support to identify the specific line of code. **Information Technology** To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with others creating solutions to problems using appropriate software such as	**5.4 Databases** **Information Technology** To make appropriate improvements to digital work that has been created To comment on how successful a digital solution is that has been created. For example, a program built in 2Code that sorts decimals numbers To work collaboratively with others creating solutions to problems using appropriate software such as 2Code.

	others creating solutions to problems using appropriate software such as 2Code **Digital Literacy** To have a secure knowledge of online safety rules taught at school To demonstrate the safe and respectful use of different online technologies and online services To relate appropriate online behaviour to my right to have personal privacy To know how to not let my mental wellbeing or others be affected by use of online technologies and services				2Code.	
Willow Y6	**6.2 Online safety** **Computer Science** To explain the difference between the internet and the world wide web To explain what a WAN and LAN is and describe the process of how access to the internet in school is possible **Information Technology** To use filters when searching for digital content To explain in detail how accurate and reliable a webpage and its content is **Digital Literacy** To demonstrate safe and respectful use of a range of different technologies and online services To identify more discrete inappropriate behaviours online. For example, someone who may be trying to groom me or someone else	**Film/Animation (Non Purple Mash Unit - using iMovie and Lego Film Maker)** **Information Technology** To share digital content using a variety of applications	**6.4 Blogging** **Computer Science** To explain the difference between the internet and the world wide web **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the intended audience carefully when I design and make digital content To design and create online blogs To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. **Digital Literacy** To demonstrate safe and respectful use of a range of different technologies and online services To know the value of protecting my	**6.3 Spreadsheets** **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the intended audience carefully when I design and make digital content To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.	**6.1 Coding (Plus Scratch and NCEE)** **Computer Science** To turn a complex programming task into an algorithm To identify the important aspects of a programming task (abstraction) To decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work To test and debug my program as I work on it and use logical methods to identify a cause of a bug To identify a specific line of code that is causing a problem in my program and attempt a fix To translate algorithms that include sequence, selection and repetition into code and nest these structures within each other To use inputs and	**6.7 Quizzing** **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the intended audience carefully when I design and make digital content To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.

To use critical thinking to help me stay safe online To know the value of protecting my privacy and others online.		privacy and others online		outputs within my coded programs such as sound, movement and buttons and represent the state of an object To interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole. **Information Technology** To compare a range of digital content sources and rate them in terms of content quality and accuracy To consider the intended audience carefully when I design and make digital content To use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.	