Computing Curriculum Progression Map

School Purpose: To nurture curiosity every day, for every child, within a community acting as a beacon of the Catholic faith

Core Themes		
Computer Science	Information Technology	Digital Literacy
Topics		
Computer Systems and Networks	Digital media	Searching/selecting information
Algorithms and programming	Data handling	E-safety

Lesson resources are taken from NCCE Teaching Computing and Purple Mash.

Year-on-year overview

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Systems and Networks	• use a touchpad • role play including technology in play	• identify technology • identify a computer and its main parts • use a mouse in different ways • use a keyboard to type on a computer • use the keyboard to edit text • create rules for using technology responsibly	• recognise the uses and features of information technology • identify the uses of information technology in the school • identify information technology beyond school • explain how information technology helps us • explain how to use information technology safely • recognise that choices are made when using information technology	• explain how digital devices function • identify input and output devices • recognise how digital devices can change the way we work • explain how a computer network can be used to share information • explore how digital devices can be connected • recognise the physical components of a network	• describe how networks physically connect to other networks • recognise how networked devices make up the internet • outline how websites can be shared via the World Wide Web (WWW) • describe how content can be added and accessed on the WWW • recognise how the content of the WWW is created by people • evaluate the consequences of unreliable content	• describe that a computer system features inputs, processes, and outputs • explain that computer systems communicate with other devices • identify tasks that are managed by computer systems • identify the human elements of a computer system	• explain that data is transferred over networks in packets • explain that networked digital devices have unique addresses • recognise that data is transferred using agreed methods • recognise how to access shared files stored online • send information over the internet in different ways • explain how the internet enables effective collaboration
Algorithms and programming	• explore commands through floor robots	• explain what a given command will do • combine commands to make a sequence • plan a simple program • find more than one solution to a problem	• understand what an algorithm is. • understand that algorithms follow a sequence. • design an algorithm. • create a program using a given design. • predict and change the outcome of a sequence of commands • debug simple programs.	• use a flowchart to create a computer program. • use click events and timers • use the repeat command with an object. • run, test and debug their programs. • use the properties table to set the properties of objects. • confidently make several different things happen in a program. • build a sequence of commands using Scratch	• begin to understand selection in computer programming • understand how IF and IF/ELSE statements work • understand how to use coordinates in computer programming • understand the Repeat until command. • understand what a variable is in programming. • use a number variable. • create a playable game	• control a simple circuit connected to a computer • write a program that includes count-controlled loops • explain that a loop can stop when a condition is met • explain that a loop can be used to repeatedly check whether a condition has been met • design a physical project that includes selection	• define a ‘variable’ as something that is changeable • explain why a variable is used in a program • choose how to improve a game by using variables • create a program to run on a controllable device • explain that selection can control the flow of a program • update a variable with a user input

				• create a project from a task description	• use and build procedures in 2Logo.	• create a program that controls a physical computing project • explain how selection is used in computer programs • relate that a conditional statement connects a condition to an outcome • explain how selection directs the flow of a program • design a program which uses selection • create a program which uses selection	• use a conditional statement to compare a variable to a value • design a project that uses inputs and outputs on a controllable device • develop a program to use inputs and outputs on a controllable device
Digital media	• draw images using an iPad • explore digital media in picture, audio and video format	• understand the differences between traditional books and e-books. • add animation, sound effects and music to a picture. • use the copy and paste feature to create additional pages.	• use 2Paint a Picture to art based upon various styles. • use repeating patterns. • create a collage using software. • explore, edit and combine sounds using 2Sequence. • record and upload a sound.	• recognise how text and images convey information • edit text and layout • create a template • add content to a desktop publishing publication • consider how different layouts can suit different purposes • create a presentation • add text. media, shapes, lines and animations to a presentation	• use a digital device to record sound • explain that a digital recording is stored as a file • edit audio • combine audio • explain that digital images can be changed • change the composition of an image • describe how images can be changed for different uses • evaluate how changes can improve an image • understand animation frames • make a simple animation using 2Animate • use the Onion Skin tool to create an animated image. • Use 2Animate to create a stop-motion film	• identify and compare features in different videos • use different camera angles • identify and find features on a digital video recording device • use a microphone • suggest filming techniques for a given purpose • create and save video content • reshoot and edit video using the correct tools • store, retrieve, and export recordings to a computer • make edits to video and improve the final outcome • use the 2DIY 3D tool to design a game environment and quest	• use 2Quiz to create quizzes for various audiences • review an existing website and consider its structure, and plan a webpage • describe what is meant by the term 'fair use' • find copyright-free images • add content to a web page • evaluate what a web page looks like on different devices and suggest/make edits • preview what a web page looks like" • explain what a navigation path is and describe why navigation paths are useful • link webpages using hyperlinks • evaluate the user experience of a website
Data handling	• use pictograms to create a dataset and count items	• label objects • identify that objects can be counted • describe objects in different ways • count objects with the same properties • compare groups of objects • answer questions about groups of objects	• explain what rows and columns are in a spreadsheet. • open, save and edit a spreadsheet. • use the count tool to count items • use copying, cutting and pasting to help make spreadsheets. • use tools in a spreadsheet to	• create a table of data on a spreadsheet. • use a spreadsheet program to automatically create charts and graphs from data. • use tools to compare different numbers • use the 'spin' tool • describe a cell location in a spreadsheet using the notation of a letter for	• explore how the numbers entered into cells can be set to either currency or decimal. • explore the use of the display of decimal places. • add formulae to a cell. • use the line graphing tool in 2Calculate with appropriate data.	• use formulae within a spreadsheet to convert measurements • use the count tool • use a spreadsheet to model a real-life problem. • use formulae to calculate area and perimeter of shapes. • create formulae that use text variables.	In Sheets: • carry out basic calculations including addition, subtraction, multiplication and division formulae. • use the series fill function • model a real-life situation • manipulate the way data are presented • use formulae for percentages, averages,

			automatically total rows and columns. • use images in a spreadsheet • use a binary tree to sort	the column followed by a number for the row.	• interpret a line graph to estimate values between data readings • use 2Calculate to create a model of a real-life situation.	• learn how to search for information in a database • create and add records to a database	max and min into spreadsheets. • create a variety of charts and graphs to understand data.
Searching/selecting information			• identify the basic parts of a web search engine search page. • read a web search results page. • search the Internet for specific information.		• locate information on the search results page. • use search effectively to find out information. • assess whether an information source is true and reliable.	• identify how to use a search engine • describe how search engines select results • explain how search results are ranked • recognise why the order of results is important, and to whom	
E-safety (this is also taught through PSHE lessons – see PSHE Progression Map. Content reference here is taught discretely in the NCCE and Purple Mash units)		• understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons. • take ownership of their work and save this in their own private space		• open and respond to an email. • learn how to use email safely. • add an attachment to an email • Use the CC function	• recognise that not all images are real		• compare different methods of communicating on the internet • I can decide when I should and should not share information online • I can explain that communication on the internet may not be private

EYFS – No formal computing lessons are taught, but knowledge, skills and understanding are taught as in the Year-on-year overview

Year 1

Content	Knowledge, Skills and Understanding Built	Key vocabulary
Technology Around Us (NCCE) COMPUTER SCIENCE	• To identify technology • To identify a computer and its main parts • To use a mouse in different ways • To use a keyboard to type on a computer • To use the keyboard to edit text • To create rules for using technology responsibly	Technology Computer Mouse Trackpad Keyboard Screen Double-click Typing
Online Safety & Exploring Purple Mash (Purple Mash 1.1) DIGITAL LITERACY	• To log in safely. • To learn how to find saved work in the Online Work area and find teacher • comments. • To learn how to search Purple Mash to find resources. • To become familiar with the icons and types of resources available in the Topics section. • To start to add pictures and text to work. • To explore the Tools and Games section of Purple Mash. • To learn how to open, save and print. • To understand the importance of logging out.	Alert Avatar Button Device File Name Icon Log in Log out Menu My Work Area Private Password Purple Mash Tools Saving Search
Pictograms (Purple Mash 1.3) Data and information – Grouping data (NCCE) INFORMATION TECHNOLOGY	• To understand that data can be represented in picture format. • To contribute to a class pictogram. • To use a pictogram to record the results of an experiment.	Collect Data Compare Data Pictogram Record Results Title
Animated Story Books (Purple Mash 1.6) INFORMATION TECHNOLOGY	• To introduce e-books and the 2Create a Story tool. • To add animation to a story. • To add sound to a story, including voice recording and music the children have composed. • To work on a more complex story, including adding backgrounds and copying and pasting pages. • To share e-books on a class display board.	Animation Background Clip-art Gallery E-book Edit Font Sound Sound Effect Text
Programming A – Moving a robot (NCCE) COMPUTER SCIENCE	• To explain what a given command will do • To act out a given word • To combine forwards and backwards commands to make a sequence • To combine four direction commands to make sequences • To plan a simple program • To find more than one solution to a problem	Forwards Backwards Left Right Turn Clear Go Commands Instructions Directions Route Plan Algorithm Program
Coding (Purple Mash 1.7) COMPUTER SCIENCE	• To understand what instructions are and predict what might happen when they are followed. • To use code to make a computer program. • To understand what object and actions are. • To understand what an event is. • To use an event to control an object. • To begin to understand how code executes when a program is run. • To understand what backgrounds and objects are. • To plan and make a computer program.	Action Algorithm Background Code Coding Command Debug/ Debugging Event Execute Instruction Object Output Plan Programmer Properties Run

Year 2

Content	Knowledge, Skills and Understanding Built	Key vocabulary
Computing systems and networks – IT around us (NCCE) COMPUTER SCIENCE	• To recognise the uses and features of information technology • To identify the uses of information technology in the school • To identify information technology beyond school • To explain how information technology helps us • To explain how to use information technology safely • To recognise that choices are made when using information technology	Information technology (IT) Computer Barcode Scanner/scan
Coding (Purple Mash 2.1) COMPUTER SCIENCE	• To understand what an algorithm is. • To create a computer program using an algorithm. • To create a program using a given design. • To understand the collision detection event. • To understand that algorithms follow a sequence. • To design an algorithm that follows a timed sequence. • To understand that different objects have different properties. • To understand what different events do in code. • To understand the function of buttons in a program. • To understand and debug simple programs.	Action Algorithm Background Bug Button Click events Collision detection Command Debug / Debugging Event Execute Implement Instructions Interaction Interval Object Output Properties Run
Spreadsheets (Purple Mash 2.3) INFORMATION TECHNOLOGY	• To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine. • To learn how to copy and paste in 2Calculate. • To use the totalling tools. • To use a spreadsheet for money calculations. • To use the 2Calculate equals tool to check calculations. • To use 2Calculate to collect data and produce a graph.	Block Graph Cell Column Copy Count tool Data Drag Equals Equals tool Label Row Speak tool Table Total
Questioning (Purple Mash 2.4) INFORMATION TECHNOLOGY	• To learn about data handling tools that can give more information than pictograms. • To use yes/no questions to separate information. • To construct a binary tree to identify items. • To use 2Question (a binary tree database) to answer questions. • To use a database to answer more complex search questions. • To use the Search tool to find information.	Binary Tree Data Database Field Pictogram Question Record Search Sort
Effective Searching (Purple Mash 2.5) DIGITAL LITERACY	• To understand the terminology associated with searching. • To gain a better understanding of searching on the Internet. • To create a leaflet to help someone search for information on the Internet.	Digital Footprint Domain Internet Network Search Engine Web Address Web Page World Wide Web Web Site
Creating Pictures (Purple Mash 2.6) INFORMATION TECHNOLOGY	• To learn the functions of the 2Paint a Picture tool. • To learn about and recreate the Impressionist style of art (Monet, Degas, Renoir). • To recreate Pointillist art and look at the work of pointillist artists such as Seurat. • To learn about the work of Piet Mondrian and recreate the style using the lines template.	Art Fill Impressionism Palette Pointillism Style Surrealism

	• To learn about the work of William Morris and recreate the style using the patterns template. • To explore surrealism and eCollage.	
Making Music (Purple Mash 2.7) INFORMATION TECHNOLOGY	• To make music digitally using 2Sequence. • To explore, edit and combine sounds using 2Sequence. • To edit and refine composed music. • To think about how music can be used to express feelings and create tunes which depict feelings. • To upload a sound from a bank of sounds into the Sounds section. • To record and upload environmental sounds into Purple Mash. • To use these sounds to create tunes in 2Sequence.	Beat Compose Note Tune Sound Effect Soundtrack Speed Tempo Volume
Programming B – An introduction to quizzes (NCCE) COMPUTER SCIENCE	• To explain that a sequence of commands has a start • To explain that a sequence of commands has an outcome • To create a program using a given design • To change a given design • To create a program using my own design • To decide how my project can be improved	Sequence Command Program Run Start Outcome Predict Blocks Sprite Algorithm Design Actions Project Modify Change Compare Debug Features Evaluate

Year 3

Content	Knowledge, Skills and Understanding Built	Key vocabulary
Computing systems and networks – Connecting computers (NCCE) COMPUTER SCIENCE	• To explain how digital devices function • To identify input and output devices • To recognise how digital devices can change the way we work • To explain how a computer network can be used to share information • To explore how digital devices can be connected • To recognise the physical components of a network	Digital device Input Process Output Program Digital Non-digital Connection Network Network switch Server Wireless access point Network cables Network sockets
Coding (Purple Mash 3.1) COMPUTER SCIENCE	• To understand what a flowchart is and how flowcharts are used in computer programming. • To understand that there are different types of timers and select the right type for purpose. • To understand how to use the repeat command. • To understand the importance of nesting. • To design and create an interactive scene.	Action Alert Algorithm Background Bug Button Click Event Code Collision Detection Event Command Debug/Debugging Event Flowchart Implement Input Interval Nesting Object Predict Properties Repeat Run Scene Sequence Test Timer Turtle Object
Programming A – Sequence in music (NCCE) COMPUTER SCIENCE	• To explore a new programming environment • To identify that commands have an outcome • To explain that a program has a start • To recognise that a sequence of commands can have an order • To change the appearance of my project • To create a project from a task description	Scratch Programming Blocks Commands Code Sprite Costume Stage Backdrop Motion Turn Point in direction Go to Glide Sequence Order Event Task Design Code Run the code Algorithm Bug Debug
Spreadsheets (Purple Mash 3.3) INFORMATION TECHNOLOGY	• To use the symbols more than, less than and equal to, to compare values. • To use 2Calculate to collect data and produce a variety of graphs. • To use the advanced mode of 2Calculate to learn about cell references.	Advance mode Bar graph Cell Address Columns Data More than, Less than & Equal Tool Pie Chart Quiz Tool

		Equals Less Than More Than	Rows Spin Tool Spreadsheet Table
Email (Purple Mash 3.5) DIGITAL LITERACY	• To think about different methods of communication. • To open and respond to an email using an address book. • To learn how to use email safely. • To add an attachment to an email. • To explore a simulated email scenario.	Address book Attachment BCC CC Communication Compose	Email Inbox Password Personal Information Save to draft Trusted Contact
Creating media – Desktop publishing (NCCE) INFORMATION TECHNOLOGY	• To recognise how text and images convey information • To recognise that text and layout can be edited • To choose appropriate page settings • To add content to a desktop publishing publication • To consider how different layouts can suit different purposes • To consider the benefits of desktop publishing	Text Images Communicate Font Font style Template Landscape Portrait	Orientation Placeholder Layout Purpose Content Desktop publishing Copy Paste
Presenting (with Google Slides) (Purple Mash 3.9) INFORMATION TECHNOLOGY	• To understand the purpose of the Slides tool. • To add slides to presentations. • To add media to presentations. • To format text appropriately. • To add shapes and lines to enhance a presentation. • To use the skills learnt to design and create an engaging presentation.	Animation Border Properties Font formatting Layer Media Presentation	Slide Slideshow Text box Transition WordArt

Year 4

Content	Knowledge, Skills and Understanding Built	Key vocabulary
Computing systems and networks – The Internet (NCCE) COMPUTER SCIENCE	• To describe how networks physically connect to other networks • To recognise how networked devices make up the internet • To outline how websites can be shared via the World Wide Web (WWW) • To describe how content can be added and accessed on the World Wide Web (WWW) • To recognise how the content of the WWW is created by people • To evaluate the consequences of unreliable content	Internet Network Router Network security Network switch Server Wireless Access Point (WAP) Website Web page Web address Routing Web browser World Wide Web Content Links Files Use Content Download Sharing Ownership Permission Information Sharing Accurate Honest Content Adverts
Effective Search (Purple Mash 4.7) INFORMATION TECHNOLOGY	• To locate information on the search results page. • To use search effectively to find out information. • To assess whether an information source is true and reliable.	Balanced View Internet Easter eggs Key words Reliability Results page Search engine
Coding (Purple Mash 4.1) COMPUTER SCIENCE	• To begin to understand selection in computer programming. • To understand how an IF statement works. • To understand how to use co-ordinates in computer programming. • To understand the 'repeat until' command. • To understand how an IF/ELSE statement works. • To understand what a variable is in programming. • To use a number variable. • To create a playable game.	Action Alert Algorithm Background Button Code blocks Command Debug Design Execute Event Flowchart 'If' Statement 'If/Else' Statement Implement Input Nest Object Predict Prompt Properties Repeat Repeat until Run Selection Sequence Timer Variable
Creating media – Audio editing (NCCE) INFORMATION TECHNOLOGY	• To identify that sound can be digitally recorded • To use a digital device to record sound • To explain that a digital recording is stored as a file • To explain that audio can be changed through editing • To show that different types of audio can be combined and played together	Audio Microphone Speaker Headphones Input device Align Layer Import Record Playback

	• To evaluate editing choices made	Output device Sound Podcast Edit Trim Selection Load Save Export MP3
Spreadsheets (Purple Mash 4.3) DIGITAL LITERACY	• To format cells as currency, percentage, decimal to different decimal places or fraction. • To use the formula wizard to calculate averages. • To combine tools to make spreadsheet activities such as timed times tables tests. • To use a spreadsheet to model a reallife situation. • To add a formula to a cell to automatically make a calculation in that cell.	Row Column Spreadsheet Formula Average Budget Chart Data Decimal place Equals tool Format Cell Formula Wizard Line graph Percentage Place value Random Number Tool Spin Tool Timer
Logo (Purple Mash 4.5) COMPUTER SCIENCE	• To learn the structure of the coding language of Logo. • To input simple instructions in Logo. • Using 2Logo to create letter shapes. • To use the Repeat function in Logo to create shapes. • To use and build procedures in Logo.	Debugging Grid LOGO LOGO Commands (e.g FD, BK, RT, LT) Multi Line Mode Pen Down Pen Up Prediction Procedure Repeat Run Speed SETPC SETPS
Creating media – Photo editing (NCCE) INFORMATION TECHNOLOGY	• To explain that digital images can be changed • To change the composition of an image • To describe how images can be changed for different uses • To make good choices when selecting different tools • To recognise that not all images are real • To evaluate how changes can improve an image	Image Edit Digital Crop Rotate Undo Zoom Save Adjustments Effects Colours Hue Saturation Sepia Vignette Edit Retouch Clone Select Cut Copy Paste Combine Made up Real Composite Alter Background Foreground Font
Animation (Purple Mash 4.6) INFORMATION TECHNOLOGY	• To discuss what makes a good animated film or cartoon. • To learn how animations are created by hand. • To find out how animation can be created in a similar way using the computer. • To learn about onion skinning in animation.	Animation FPS (Frames Per Second) Frame Onion Skinning

	• To add backgrounds and sounds to animations. • To be introduced to ‘stop motion’ animation. • To share animation on the class display board and by blogging	Pause Stop motion

Year 5

Content	Knowledge, Skills and Understanding Built	Key vocabulary
Computing systems and networks – Communication (Web searching) (NCCE) COMPUTER SCIENCE/DIGITAL LITERACY	• To identify how to use a search engine • To describe how search engines select results • To explain how search results are ranked • To recognise why the order of results is important, and to whom • To recognise how we communicate using technology • To evaluate different methods of online communication	System Connection Digital Input Process Output Search Search engine Refine Index Crawler Bot Ordering Ranking Search engine Links Algorithm Search Engine Optimisation (SEO) Content creator Selection
Creating media – Video editing (NCCE) INFORMATION TECHNOLOGY	• To explain what makes a video effective • To identify digital devices that can record video • To capture video using a range of techniques • To create a storyboard • To identify that video can be improved through reshooting and editing • To consider the impact of the choices made when making and sharing a video	Video Audio Camera Talking head Close up Video camera Microphone Lens Close up Mid range Long shot Moving subject Side by side High angle Low angle Normal angle Static camera Zoom Pan Tilt, Storyboard Import Split Trim Clip Edit Reshoot Delete Reorder Export Evaluate Share
Programming A – Selection in physical computing (NCCE) COMPUTER SCIENCE	• To control a simple circuit connected to a computer • To write a program that includes count-controlled loops • To explain that a loop can stop when a condition is met • To explain that a loop can be used to repeatedly check whether a condition has been met • To design a physical project that includes selection • To create a program that controls a physical computing project	Microcontroller Components Connection Infinite loop Output component Motor Repetition Count-controlled loop Crumble controller Crocodile clips Connect Battery box Program Condition Input Output Selection Action Repetition Debug

		Switch Led Sparkle
Spreadsheets (Purple Mash 5.3) INFORMATION TECHNOLOGY	• To use formulae within a spreadsheet to convert measurements of length and distance. • To use the count tool to answer hypotheses about common letters in use. • To use a spreadsheet to model a real-life problem. • To use formulae to calculate area and perimeter of shapes. • To create formulae that use text variables. • To use a spreadsheet to help plan a school cake sale.	Row Column Spreadsheet Data Advance mode Format Formula Formula bar Formula wizard 'How Many?' Tool Totalling tool Variable
Databases (Purple Mash 5.4) INFORMATION TECHNOLOGY	• To learn how to search for information in a database. • To contribute to a class database. • To create a database around a chosen topic.	Arrange Avatar Chart Collaborative Data Database Database Report Field Group Record Search Sort Statistics
Game Creator (Purple Mash 5.5) INFORMATION TECHNOLOGY	• To plan a game. • To design and create the game environment. • To design and create the game quest. • To finish and share the game. • To self and peer evaluate.	Evaluation Feedback Image Instructions Promotion Quest Scene Screenshot Texture Theme
Programming B – Selection in quizzes (NCCE) COMPUTER SCIENCE	• To explain how selection is used in computer programs • To relate that a conditional statement connects a condition to an outcome • To explain how selection directs the flow of a program • To design a program which uses selection • To create a program which uses selection • To evaluate my program	Selection Condition True False Count-controlled loop Outcomes Conditional statement Algorithm Program Debug Question Answer Task Design Algorithm Input Outcomes Implement Design Test Run Debug Setup

Year 6

Content	Knowledge, Skills and Understanding Built	Key vocabulary	
Computing systems and networks – Sharing information (NCCE) COMPUTER SCIENCE/DIGITAL LITERACY	• To explain that computers can be connected together to form systems • To recognise the role of computer systems in our lives • To recognise how information is transferred over the internet • To explain how sharing information online lets people in different places work together • To contribute to a shared project online • To evaluate different ways of working together online	Communication Protocol Data Address Internet Protocol (IP) address Domain Name Server (DNS) Packet Header Data Payload Chat Explore	Slide deck Reuse Remix Collaboration Communication Internet Public Private One-way Two-way One-to-one One-to-many
Creating media – Web page creation (NCCE) INFORMATION TECHNOLOGY	• To review an existing website and consider its structure • To plan the features of a web page • To consider the ownership and use of images (copyright) • To recognise the need to preview pages • To outline the need for a navigation path • To recognise the implications of linking to content owned by other people	Website Web page Browser Media Hypertext Markup Language (HTML) Logo Layout Header Media Purpose Copyright Fair use Home page	Preview Evaluate Device Google sites Breadcrumb trail Navigation Hyperlink Subpage Hyperlink Evaluate Implication External link Embed
Programming A – Variables in games (NCCE) COMPUTER SCIENCE	• To define a ‘variable’ as something that is changeable • To explain why a variable is used in a program • To choose how to improve a game by using variables • To design a project that builds on a given example • To use my design to create a project • To evaluate my project	Variable Change Name Value Set Task Algorithm Design Event	Artwork Program Project Code Test Debug Improve Evaluate Share
Quizzing (Purple Mash 6.7)	• To create a picture-based quiz for young children.	Audience	Cloze

INFORMATION TECHNOLOGY	• To learn how to use the question types within 2Quiz. • To explore the grammar quizzes. • To make a quiz that requires the player to search a database. • To make a quiz to test your teachers or parents.	Audio Case-Sensitive Clone	Preview Quiz
Spreadsheets (Purple Mash 6.9) INFORMATION TECHNOLOGY	• To know what a spreadsheet looks like. • To navigate and enter data into cells. • To introduce some basic data formulae in Excel for percentages, averages and max and min numbers. • To demonstrate how the use of Excel can save time and effort when performing calculations. • To use a spreadsheet to model a reallife situation. • To demonstrate how Excel can make complex data clear by manipulating the way it is presented. • To create a variety of graphs in Excel. • To apply spreadsheet skills to solving problems.	Auto fit Cell Cell Reference Chart Column Computational Model Conditional formatting Data Delimiter	Formula(e) Formula Bar Graph Horizontal axis Range Row Spreadsheet Text Wrapping Vertical axis
Programming B – Sensing (NCCE) COMPUTER SCIENCE	• To create a program to run on a controllable device • To explain that selection can control the flow of a program • To update a variable with a user input • To use an conditional statement to compare a variable to a value • To design a project that uses inputs and outputs on a controllable device • To develop a program to use inputs and outputs on a controllable device	Micro:bit MakeCode Input Process Output Flashing USB Trace Selection Condition If then else Variable Random Sensing	Accelerometer Value Compass Direction Navigation Design Task Algorithm Step counter Plan Create Code Test Debug