NC Programme of Study	Year 2 Learning Objectives	Resources
Programming and Computer Science • 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	• Showing independence of their understanding of what an algorithm is. • Independently understands the commands forward, backwards, left and right. • Begins to understand the terms clockwise, anticlockwise and right angle turn. • Execute an algorithm to ahieve a purpose. • Plan and enter a sequence of instructions to achieve an algorithm with a robot. • Understands the term debug and can debug problems in a program. • Predict what will happen in a program and test results. • Able to give logical explanations for what they think a program will do. Scratch Junior • Moving in steps. • Use direction and turn. • Use text. • Show and hide. • Change features of an object.	25th Feb - July Unit 2.1 Purple Mash + Code.org + Barefoot Cover in unit 2.1 Unit 2.1 Puprle Mash, code.org, Barefoot and Scratch Purple Mash Bee Bot (EXTENDED FROM YEAR 1) All coding projects All coding projects All coding projects Scratch Junior animation 6 sessions- summer term AG covering all computer science objectives

NC Programme of Study	Year 2 Learning Expectations	Resources/Activity Suggestions
Multimedia and Data Handling • use technology purposefully to create, organise, store, manipulate and retrieve digital content	• Create own work (possibly with support) combining graphics, text and sound using an increasing variety of tools and effects in paint programs. • Present information using different mediums such as slides and leaflets. • Use keyboard to enter text using index fingers. • Know how to use the return and enter key. • Use the shift and caps lock keys to enter capital letters. • Use delete and backspace keys to correct text. • Create sentences, save, retrieve and save work independently. • Become more independent in using the copy and paste facility. • Use multi-entry spreadsheets and basic databases in various area across the curriculum. (Travelling to school activity with pictorgrams and tally charts)	**2.3 We Are Photographers** (Taking, Selecting And Editing Digital Images) AG 6 sessions 7th Jan- 25th Feb Topics 2Publish 2Publish Plus Many activities allow import of own pictures with the ability to crop via zooming • Upload your own photographs into a publishing project, a game, a coding and many other tools and activities • Add your images to ClipArt, Click on the Purple Plus **William Morris Project** |(Jan) create artwork **2.4 We are Reseachers (Researching a topic- use Safe Search)** www.purplemash.com/site#pup/howwesearch • Discuss how to search the internet effectively • Some topics have slide shows with information e.g. Florence Nightingale, Mary Seacole www.purplemash.com/#app/tools/2Connect • Create a mind map of questions and information on your topic • Add links to your research websites • Use the Presentation functionality of 2Connect to present your research to the class **2.5 We are Detectives-(E-mails)** AG 6 sessions 15th Oct-Nov 26th 2Email,2Connect,2Write www.purplemash.com/#tab/tools/2email • Using 2Respond pupils can read and reply to emails, work with attachments. • Using 2Email, teachers can create a character to send and receive emails to and from pupils. • Send and receive from your friends within the safety of Purple Mash (teachers need to allow emailing within the class – see 2Email settings) www.purplemash.com/#app/lessonplans/info/2Email_Guide_pdf . **Create an e-Card (can be printed)** 2Paint AG xmas 3/10th Dec **Pictograms , databases and spreadsheets (Recording data) Teachers - July** **AG available Tuesday pm. Prior notice required to book slot in timetable.**

		2Count, 2Graph, 2Investigate,2DIY Grouping,2Question www.purplemash.com/#tools/2count • Create pictograph to show how many bugs you found, add your own photos www.purplemash.com/#jsapps/graph • Graph the results of your bug hunt www.purplemash.com/#tools/2inv • Create a collaborative database about the bugs you have found • Use the premade 'Minibeasts' database, add your own bugs • Find, sort, group, arrange and graph the data www.purplemash.com/#tools/2diy/Grouping • Classify your bugs into different groups www.purplemash.com/#app/tools/2question Create a branching database to show how you would classify and group your bugs

NC Programme of Study	Year 2 Learning Expectations	Resources/ Activity Suggestions
Digital Literacy/Technology in our Lives • 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. Recognise common uses of information technology beyond school.	• Can keep safe and show respect to others while using digital technology • Know how to use filtered SafeSearch when looking for images or information on the web. Link with understanding what the internet is and what it can be used for. • Consider not everything on the interent is accurate or true. • Begin to understand the use of email and collaborate in an email activity as a class. • observe age restrictions when playing games out of school. • ask before taking photos of others. • know what to do if they encounter inappropriate content online. • acknowledge the source of information they use. • check that it is safe to open files attached to emails and to respond to emails. • Can understand that they should not share personal information online. • The child should understand that personal information should be kept private. • Personal information should not be posted online to a public audience and should only be shared privately with those who they (or their parents) would trust. • Able to recognise that photos they take in school should not normally be posted to the open web. • They should know that photos taken with smartphones often contain hidden information about where the photo was taken. • Know what to do if they have concerns about content or contact online. • The child should know to close the laptop lid, click 'x', shutdown, tell and adult or turn an iPad over if they find content, such as inappropriate images, which might disturb them or other children; • If someone makes inappropriate contact online or something upsets them. They should know to tell their teacher or their parents if this happens, and be aware that they could talk to another trusted adult or to ChildLine about this. • The child can name a number of purposes for which IT is used beyond school.	Covered in 2.4 Teachers also.- Google SafeSearch Ongoing + AG Sept10-24th Covered in 2.3 + http://www.childnet.com/resources/digiducks-big-decision Ongoing + AG Sept10-24th Teachers Safer Internet Dat Feb 5th + summer term Cover in 2.4 AG 2.5 https://www.youtube.com/watch?v=-nMUbHuffO8 (Lee and Kim) AG AG Sept10-24th Teachers as above **https://www.youtube.com/watch?v=-nMUbHuffO8** (Lee and Kim) **AG** AG Sept10-24th Teachers as above **covered in 2.3** https://www.snopes.com/fact-check/smartphone-pictures-pose-privacy-risks/ AG Ongoing AG Sept10-24th Teachers Safer Internet Dat Feb 5th + summer term Ongoing AG Sept10-24th Teachers Safer Internet Dat Feb 5th + summer term Ongoing AG Sept10-24th Teachers Safer Internet Dat Feb 5th + summer term AG to cover year 1 topic of recognise common uses of technology for 2 weeks (1st/8th Oct) Teachers to cover in Safer Internet Day Tuesday 5th February + summer term. Class assembly for parents. I will give you updated resources for Safer Internet Day nearer the time.