SWITCHEDON Computing AND Purple Mash

Setting 2Dos:

Any of the activities, resources or tools suggested below can be set as a 2Do task for your children to complete. For more information on setting 2Dos, click here.
N.B. You cannot use the collaborative functionality of 2Write, 2Connect and 2Investigate as a 2Do.

Displayboards:

Any of the activities, resources or tools suggested below can be shared with classmates and/or parents/carers/friends via the Displayboard feature.
For more information on creating and managing Displayboards, click here.

Unit	Title	Unit Summary	Computing POS Summary	Purple Mash Resources to Support unit	
1.1	We Are Treasure Hunters	Using Programmable Toys	Programming	2Go	www.purplemash.com/#tools/2go • Use Challenge #1 to guide the fish to the treasure chest • Use the Islands background to find the treasure
				Paint Projects	www.purplemash.com/#app/pap/nature/islandmap • Design a treasure island map with a key
1.2	We Are TV Chefs	Filming The Steps Of A Recipe	Computational Thinking	Mash Cams 2Publish	www.purplemash.com/#app/mashcam/chefcam • Become a chef www.purplemash.com/#app/tools/2pub/storyboard • Plan and draw the steps for making a healthy snack www.purplemash.com/#app/pup/shoppinglist • Create a shopping list for your healthy snack

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1.3	We Are Painters	Illustrating an eBook	Creativity	2Paint	www.purplemash.com/#tools/2paint
					• Draw a picture for your book and write about it
				2Create a Story	www.purplemash.com/#tools/2cas
					• Create an animated eBook with sounds
				2Publish	www.purplemash.com/#app/tools/2pubextra/storybook
					• Design and illustrate your own story book
					• Children can upload saved images or use clipart
				Fairy tales Topic	www.purplemash.com/#tab/themes/fairy_tales
					• Explore the fairy tale paint projects and writing projects
1.4	We Are Collectors	Finding Images Using The Web	Computer Networks	Searching For Images	www.purplemash.com/#pup/imagesearch
					• Discuss how to find images online and the possible safety concerns
					www.purplemash.com/#pup/internetresearch
					• Discuss how the internet can be used to research different topics
				Internet Research	www.purplemash.com/site#app/tools/2diy/Grouping
					• Use clipart or upload images to create a grouping game for your pupils
					www.purplemash.com/#app/tools/2pub/storyboard
				Sorting images into groups	• Create a bespoke clipart selection of images for children to sort into labelled groups
					• See guide on how to customise clipart: www.purplemash.com/app/videos/teachermodepublishing
1.5	We Are Storytellers	Producing A Talking Book	Communication / Collaboration	2Create a Story	www.purplemash.com/#tools/2cas
					• Use the sound options to record your own voice, an instrumental soundscape or use built-in sounds
1.6	We Are Celebrating	Creating A Card Electronically	Productivity	2Paint	www.purplemash.com/#app/tools/2paint
					• Design a card and write a simple message
				2Publish	www.purplemash.com/#app/tools/2pub/celebrationcard
					• Design and create a card using the card template – print, fold and send to your friends or family
				2Publish Plus	www.purplemash.com/#app/pup/Blank_greetingcard
					www.purplemash.com/#app/pup/Blank_invitation
					• Create an invitation to your party or a card
				Use a premade celebration card:	www.purplemash.com/#app/pup/christmas_card
					www.purplemash.com/#app/pup/mothersday_card
					www.purplemash.com/#app/pup/Fathersday_card

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2.1	We Are Astronauts	Programming On Screen	Programming	2Go 2Code – Free Code Scenes 2Code - Free Code - Chimp	www.purplemash.com/#tools/2go • Use the space background to move a rocket around in space – or create your own www.purplemash.com/app/code/openended/freecodescenes • Make your own space scene come alive with code www.purplemash.com/app/code/openended/freecodechimp • Create your own game using the space background and add some rockets, aliens or astronauts • There are lesson plans here: www.purplemash.com/#app/lessonplans/2c_y2_lp
2.2	We Are Games Testers	Exploring How Computer Games Work	Computational Thinking	Maths games 2Code – Free Code - Chimp 2DIY: Games 2DIY 3D	www.purplemash.com/#tab/games • Play the maths games to test and reflect on how games work • Create your own games, send them to a Display board then play your friend's games • Work out the rules to each other's games • Give feedback – how could you make this game better? www.purplemash.com/app/code/openended/freecodechimp • Create a game with your own background, characters and actions www.purplemash.com/#tab/tools/2diy • Create a game using Catching, Collecting, Journey, Platform, Snake or Maze. Use Levels to combine your 2DIY games. www.purplemash.com/#tab/tools/2diygaming • Create a 3D maze game
2.3	We Are Photographers	Taking, Selecting And Editing Digital Images	Creativity	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

2.4	We Are Researchers	Researching A Topic	Computer Networks	Effective Searching On The Internet 2Connect	www.purplemash.com/site#pup/howwesearch • Discuss how to search the internet effectively • Some topics have slide shows with information e.g. Stone Age 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	Communicating Clues	Communication / Collaboration	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 www.purplemash.com/#app/tools/2Connect www.purplemash.com/#app/jsapps/write • Use the collaborative features of 2Connect and 2Write to collect and share clues
2.6	We Are Zoologists	Recording Bug Hunt Data	Productivity	2Count 2Graph 2Investigate 2DIY Grouping 2Question	www.purplemash.com/#tools/2count • Create a pictograph to show how many bugs you found – add photos of your own 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

Unit	Title	Unit Summary	Computing POS Summary	Purple Mash Resources to Support unit	
3.1	We Are Programmers	Programming An Animation	Programming	2Publish (Storyboard) 2Animate 2Code – Free Code - Gibbon 2Blog	www.purplemash.com/#app/tools/2pubextra/storyboard • Plan your animation in a storyboard • You can print a storyboard for children to complete offline www.purplemash.com/#app/tools/animate • Plan your animation in 2Animate • Draw and modify your character on each slide, add a background, sound and text www.purplemash.com/app/code/openended/freecodegibbon • Create backgrounds and characters in your own animation in Gibbon free code • Share to a Display board – play and feedback on each other's games • There are lesson plans here: www.purplemash.com/#app/lessonplans/2c_y3_lp www.purplemash.com/#app/link/2blog • Blog about developing your animation – include a link to your animation
3.2	We Are Bug Fixers	Finding And Correcting Bugs In Programs	Computational Thinking	2Code - Free Code – Gibbon 2Code - Debug Challenges – Gibbon	www.purplemash.com/app/code/openended/freecodegibbon • Identify and debug your own animations or games in Gibbon free code www.purplemash.com/app/code/debug challenges/2codedebuggibbon • Find and correct the bugs in these Gibbon debugging challenges
3.3	We Are Presenters	Videoing Performance	Creativity	2Publish (Storyboard)	www.purplemash.com/#app/tools/2pubextra/storyboard • Plan your video in a storyboard • You can print a storyboard for children to complete offline
3.4	We Are Network Engineers	Exploring Computer Networks, Including the Internet	Computer Networks	Computer Networks	www.purplemash.com/#games/2diy/Computer_networks

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3.5	We Are Communicators	Communicating Safely On The Internet	Communication/ Collaboration	2Respond	www.purplemash.com/#tab/tools/2email • Practise reading and replying to emails from a variety of characters • 2Respond activities generate automatic responses for pupils to reply to
				2Respond Creator	www.purplemash.com/app/links/2respondcreator# • Teachers - create your own automatic response email activity • Pupils will receive and respond to, emails from a variety of characters
				2Email	www.purplemash.com/#tab/tools/2email • Practice composing, sending and responding to emails to/from other Purple Mash users in your class • Teachers manage the email settings to determine who pupils can email and whether their emails require approval • Attach files, pictures • Pupils can report an email to teacher
				Internet Safety	www.purplemash.com/site#games/2diy/Internetsafety www.purplemash.com/#pup/videowatch • Discuss what to do if you see an upsetting video
				E-Safety Leaflet	www.purplemash.com/#leaflets/esafety • Create an eSafety leaflet www.purplemash.com/#pup/socialnetwork • Are children too young to be on a social network? www.purplemash.com/#pup/friendbookparty • A child has posted details of her party on a social network page www.purplemash.com/#pup/onlinegame • Should Tony meet up with a gamer he has met online? www.purplemash.com/#pup/socialnetworkdebate • Have a class debate on whether children should use social networking sites • Record your for and against arguments using the 'Argument' template in 2Connect www.purplemash.com/#app/tools/2Connect

3.6	We Are Opinion Pollsters	Collecting And Analysing Data	Productivity	2Connect 2Write	www.purplemash.com/#app/tools/2Connect www.purplemash.com/#app/jsapps/write
					• Use the collaborative features of 2Connect and 2Write to brainstorm your survey questions
				2Graph	www.purplemash.com/#jsapps/graph
					• Create a frequency table based on your opinion poll or survey
					• Graph and analyse the results
				2Investigate	www.purplemash.com/#tools/2inv
					• Create a database of your survey/opinion poll responses
					• Sort, group, arrange, graph and create statistical analyses of the results
				2Calculate	www.purplemash.com/#app/tools /2Calculate
					• Record your survey results in a spreadsheet, graph and analyse the results

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4.1	We Are Software Developers	Developing A Simple Educational Game	Programming	2Diy 3D 2Code – Coding Principles 2Code - Free Code – Gibbon Displayboards 2Blog	www.purplemash.com/#/tools/2diygaming • create a 3D maze game www.purplemash.com/app/code/codeprinciples/countingmachines1 • Learn how to create a number sequence program www.purplemash.com/app/code/codeprinciples/calculationmachines1 • Learn how to create a calculation machine www.purplemash.com/app/code/openended/freecodegibbon • Create and debug your own game using variables in Gibbon free code • Share to a Display board – play and feedback on each other's games • There are lesson plans here: www.purplemash.com/#app/lessonplans/2c_y4_lp www.purplemash.com/#app/link/2blog • Blog about developing your game – include a link to your game
4.2	We Are Toy Designers	Prototyping An Interactive Toy	Computational Thinking	2Write 2Connect 2Publish Plus: Sketch Book	www.purplemash.com/#jsapps/write www.purplemash.com/#app/tools/2Connect • Use the collaborative functionality of 2Write and 2Connect to brainstorm and share ideas on developing a toy www.purplemash.com/#app/pup/Blank_sketchbook • Present your information in a booklet or sketchbook
4.3	We Are Musicians	Producing Digital Music	Creativity	2Beat 2Sequence	www.purplemash.com/#app/tools/2beat • Compose a rhythm soundtrack using different kick drum, snare, hi-hat and percussion sounds www.purplemash.com/#app/tools/2seq • Compose a soundscape using different instruments, • Record or upload your own sounds • Export your soundtrack as an MP3 and upload into other music making software

4.4	We Are Html Editors	Editing And Writing Html	Computer Networks		www.purplemash.com/#app/games/2diy/Computer_networks • Label the network in this diagram to show how your school and home are connected to the internet
4.5	We Are Co-Authors	Producing A Wiki	Communication / Collaboration	2Write 2Connect 2Blog	www.purplemash.com/#jsapps/write www.purplemash.com/#app/tools/2Connect • Use the collaborative functionality of 2Write and 2Connect to brainstorm and share ideas on developing a wiki www.purplemash.com/#app/link/2blog • Use 2Blog to create and share a wiki on your chosen topic • Include links to your 2Connect document and/or other Purple Mash work • Teachers create a class blog, decide who can see, post or comment • Share your wiki blog with other classes and/or friends/family • How to use 2Blog: www.purplemash.com/manuals/2blog/index.html
4.6	We Are Meteorologists	Presenting The Weather	Productivity	2Graph 2Investigate	www.purplemash.com/#jsapps/graph • Create a line graph of weather conditions across a day or a week www.purplemash.com/#app/tools/2inv • Create a database of different weather conditions • Add your own fields and records • Find, sort, group, arrange, graph the data and extract statistical reports

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5.1	We Are Game Developers	Developing An Interactive Game	Programming	2Publish (Storyboard)	www.purplemash.com/#app/tools/2pubextra/storyboard • Plan the algorithm for your game as a series of scenes on a storyboard • You can print a storyboard for children to complete offline
				2DIY 3D	www.purplemash.com/#/tools/2diygaming • Design, play and share a 3D maze game • Create 'baddies' to avoid and 'goodies' to collect
				2Code – Free Code scenes	www.purplemash.com/app/code/openended/freecodescenes • Use the pre-made scenes to get started on your game • Choose or design your own characters
				2Code - Free Code - Gorilla	www.purplemash.com/app/code/openended/freecodegibbon • Create and debug your own game in Gorilla free code • Design your own backgrounds and characters and record backing music • There are lesson plans here: www.purplemash.com/#app/lessonplans/2c_y5_lp
				Displayboards	• Share to a Displayboard – play and feedback on each other's games
				2Blog	www.purplemash.com/#app/link/2blog • Blog about developing your game – include a link to your game
5.2	We Are Cryptographers	Cracking Codes	Computational Thinking	How to stay safe online	www.purplemash.com/#app/games/2diy/Internet_safety • Sort which online behaviours are safe and unsafe www.purplemash.com/#app/leaflets/esafety • Create a leaflet on how to stay safe online www.purplemash.com/#app/pup/passwords
				Keeping Passwords Safe	• Create a poster about the importance of having a secure password

5.3	We Are Artists	Fusing Geometry And Art	Creativity	2Go	www.purplemash.com/#app/tools/2go
					• Create and share your own geometric patterns and tessellations using the programming elements in 2Go
				Logo	www.purplemash.com/#tools/logo
					• Create and share your own geometric patterns and tessellations using commands, angles, repetition and sequences in Logo
					• Print out your patterns and colour them in
				2Paint a Picture	www.purplemash.com/app/tools/2paintapic
					• Explore pattern using the range of painting tools in particular Pattern, Slice, Lines and eCollage.
				2Design and Make	www.purplemash.com/#app/tools/2dam
					• Create 3D shapes and design your own patterns using the pattern fill tool
5.4	We Are Web Developers	Creating A Website About Cyber Safety	Computer Networks	How We Search	www.purplemash.com/#pup/howwesearch
					• Explore how to search effectively online using this writing template
				2Publish Plus: Blank Web Page	www.purplemash.com/#app/pup/Blank_webpage
					• Design your webpage using this template (you can also print and use offline)
5.5	We Are Bloggers	Sharing Experiences And Opinions	Communication / Collaboration	2Write and 2Connect	www.purplemash.com/#app/jsapps/write
					www.purplemash.com/#app/tools/2Connect
					• Use the collaborative functionality of 2 write and/or 2Connect to brainstorm and share ideas to plan your blog
				2Blog	www.purplemash.com/#app/link/2blog
					• Teachers create a class blog, decide who can see, post or comment
					• Pupils can create individual blogs that are private
					• Share your blog with other classes and/or friends/family
					• Create a blog post, add images, comment on posts
					• How to use 2Blog: https://www.purplemash.com/#app/guides/2Blog_pdf_Guide
5.6	We Are Architects	Creating A Virtual Space	Productivity	2Design And Make	www.purplemash.com/#tools/2dam
					• Create sculptures using 2Design and Make – print as a 2D Net and fold into 3D shape or on a 3D printer
					• Create furniture for your space – add extra points to a prism template

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6.1	We Are App Planners	Planning the creation of a mobile app	Programming	2Write 2Connect Game Planner	www.purplemash.com/#app/jsapps/write www.purplemash.com/#app/tools/2Connect • Use the collaborative functionality of 2 write and/or 2Connect to brainstorm and share ideas to plan your app www.purplemash.com/#app/pup/2codeplanner02 • Plan your app game using this Game planner
6.2	We Are Project Managers	Developing project management skills	Computational Thinking	2Write (To Create the Survey) 2Connect	www.purplemash.com/#app/jsapps/write www.purplemash.com/#app/tools/2Connect • Use the collaborative functionality of 2 write and/or 2Connect to brainstorm and share ideas to plan your Yearbook
6.3	We Are Market Researchers	Researching the app market	Productivity	2Investigate (To Collate the Answers And Present The Results) 2Graph (To Present Results) 2Calculate	www.purplemash.com/#tools/2inv www.purplemash.com/#jsapps/graph http://www.purplemash.com/#app/tools/2 Calculate
6.4	We Are Interface Designers	Designing an interface for an app	Communication / Collaboration	2Publish Plus – Blank Template	www.purplemash.com/#app/pup/blank_template • Create your own Yearbook adding your own images, text and sound options in this blank template. This template could be used in teacher mode to prepare a template that includes a checklist of tailored writing tips and then set as a 2do for the class.

| 6.5 | We Are App Developers | Developing a simple mobile phone app | Programming | 2Code - Gorilla
2Code - Free Code - Gorilla | www.purplemash.com/site#tab/pm-home/tools/2code_lessons
www.purplemash.com/app/code/openended/freecodegorilla |
| 6.6 | We Are Marketers | Creating video and web copy for a mobile phone app | Creativity | 2Write (To Brainstorm Ideas)
2Publish – Storyboard

2Sequence | www.purplemash.com/#jsapps/write

www.purplemash.com/#app/tools/2pubextra/storyboard
• Plan using this storyboard
www.purplemash.com/#app/tools/2seq
Create a musical sound track |