Curriculum intent

At Deansbrook Infants we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever changing digital world. We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross curricular learning to engage children and enrich their experiences in school.

We use 'Purple Mash' software which children are able to access at home so as to further embed their computing knowledge. We run workshops for parents to help them understand the software we use in school.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Knows how to operate simple equipment Shows skills in making toys work by pressing parts Can use technology appropriately through role play Provide children with a range of toys with buttons etc. Such as washing machine, telephones etc.	Technology can be used in homes and schools <u>Key learning</u> . Children can make a beebot move Provide children with bebots let them explore what happens when the press the various buttons.	Interacts with age appropriate computer software(mini-Mash) <u>Key learning</u> Use mini mash paint projects on the IWB to colour in pictures using a range of textures.to	Interacts with age appropriate computer software(Mini-Mash) <u>Key learning</u> Can use the IWB/tablet using touch technology for sorting or drawing etc. Have a go at 2 paint on mini mash to their own pictures IWB	Knows how to operate simple equipment(mini-mash) <u>Key learning</u> Begins to use a key board and mouse Introduce laptops. Children paint and create own pictures on laptops(mini mash)	Knows how to operate simple equipment (mini-mash) <u>Key learning</u> Begins to use a key board and mouse On laptops children use 'to create' on mini mash to have a go at making music

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Reception	Children recognise that technology can be used in homes and schools **Key learning** Use a CD player in outdoor area, use microphones and torches	Children recognise that technology can be used in homes and schools **Key learning** Use a CD player in outdoor area, use microphones and torches Begin to give instructions to bee bots Children have a go at directing a beebot around a beebot map Use '2'go' on Mini-mash Can I follow the school's safer internet rules (Think then click-Hector the protector)	Interacts with age appropriate computer software **Key learning** Can use a simple paint programme. On Mini mash (2 paint to colour the and have a go at labelling a picture-use IWB and lap tops Can I follow the school's safer internet rules (Think then click-Hector the protector)	Interacts with age appropriate computer software **Key learning** Can use and a play phonics games on mini-mash, espresso) Can I follow the school's safer internet rules (Think then click-Hector the protector)	Interacts with age appropriate computer software **Key learning** Can name and use a keyboard and mouse with developing control. Can I follow the school's safer internet rules (Think then click-Hector the protector)	Knows how to operate simple equipment **Key learning** Can use keyboard skills to type a simple username Show children how to login to mini-mash. Children login and choose which activities they want to explore. Can I follow the school's safer internet rules (Think then click-Hector the protector)

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Year 1	**Online safety/exploring purple mash** Children will log in and log out of the computer using their own login Add their name to a picture they created on the computer. Beginning to develop an understanding of ownership of work online. Save and find work into the My Work folder in Purple Mash. Find messages that their teacher has left for them on Purple Mash. Search Purple Mash to find resources Explore the Tools section on Purple Mash and become familiar with some of the key icons: Save, Print, Open and New.	**Coding** Give and follow instructions. Draw symbols to represent instructions. Arrange code blocks to create a set of instructions. Create a program using code blocks. Use event, object and action code blocks. Notice that codes execute when their program is run. Edit a scene by adding, deleting and moving objects. Create a design plan for a program. Use code to make a program they have designed work.	**Pictograms** Children will discuss and illustrate the transport used to travel to school. Contribute to the collection of class data. Use illustrations to create a simple pictogram. Discuss what the pictogram shows. Collect data and record and represent rolling a dice as a pictogram	**Animation** Know the difference between a traditional book and an e-book. Use the different drawing tools to create a picture on the page. Add text to a page. Open previously saved work. Add an animation to a page. Save changes and overwrite the file. Add a sound to the page. Add a background to the page. Use the additional drawing tools on My Story mode in purple mash. Change the font style and size. Use the copy and paste function to add more pages to their animated e-book.	**Coding(lego builders)** Know that to achieve the effect they want when building something, they need to follow accurate instructions. Know that by following the instructions correctly, they will get the correct result Know that an algorithm is a precise, step-by-step set of instructions used to solve a problem or achieve an objective. Can follow instructions in a computer program. Can explain the effect of carrying out a task with no instructions. Know that computers need precise instructions to follow. Know that an algorithm written for a computer to follow is called a program. Recap logon procedures (why do we have to keep our password safe?) and show them how to navigate to 'Inside the castle' on P/Mash (Topic: castle paint projects). Upload an image and add text to an image(castles)	**Navigating the internet /safety online** **Sending emails** Navigate a webpage To be able to use arrows to move backwards and forwards on a website and maximise and minimise windows. Read and reply to an email. Children to write and send an email to Anna about the seaside Children log in to their Purple Mash accounts. Select the '2 email' option and 2 respond activities. Click on Anna's day at the seaside. Show chn how to open and read an email sent to them from 'Anna'. Show them how to reply and send an attachment e.g. of something they can do on the train.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 2	**Coding** Explain and describe what an algorithm is. Explain that for the computer to make something happen, it needs to follow clear instructions. Plan an algorithm and program that includes collision detection. Read blocks of code and predict what will happen when it is run. Create a program that uses a timer after command and explain what it does to their programme Predict what will happen in a program that includes a timer-after command. Create a computer program that includes different objects. use different events in a program to make objects move. Create a computer program that includes a button object. And explain what a button does in a program.	**Creating Pictures** Describe the main features of impressionist art. Use 2Paint a Picture to create art based upon this style. Explain what pointillism is. Use 2Paint a Picture to create art based upon this style. Describe the main features of Piet Mondrian's work. Use 2Paint a Picture to create art based upon his style. Describe the main features of art that uses repeating patterns. Use 2Paint a Picture to create art by repeating patterns in a variety of ways. Combine more than one effect in 2Paint a Picture to enhance patterns. Describe surrealist art Use the eCollege function in 2Paint a Picture to create surrealist art using drawing and clipart	**Questioning** Understand that the information on pictograms cannot be used to answer more complicated questions. Use a range of yes/no questions to separate different items. Understand what is meant by a binary tree. Design a binary tree to sort pictures of children. Understand that questions are limited to 'yes' and 'no' in a binary tree and it can't be used to find out answers to more complicated questions. Understand what is meant by a database and use one to answer more complex search questions.	**Spread sheets** Explain what rows and columns are in a spreadsheet. Open, save and edit a spreadsheet Add images from the image toolbox and allocate them a value. Can add the count tool to count items Use copying, cutting and pasting to help make spreadsheets. Use tools in a spreadsheet to automatically total rows and columns. Use a spreadsheet to solve a mathematical puzzle. Use images in a spreadsheet. Create a table of data on a spreadsheet and use the data to create a block graph manually	**Effective searching- powerpoint** Recall the meaning of key Internet and searching terms. Complete a quiz about the Internet. Identify the basic parts of a web search engine search page. Learn to read a web search results page. Search the Internet for answers to a quiz/ find information about London. Create a leaflet to consolidate knowledge of effective Internet searching. Create a PowerPoint about London. Add titles Bullet points Change font and colour of text Change page background colour Insert pictures Insert pages	**Making music –Online safety** Use the search facility to refine searches on Purple Mash by year group and subject. Share the work they have created to a display board. Understand that the teacher approves work before it is displayed. Children are beginning to understand how things can be shared electronically for others to see both on Purple Mash and the Internet. Explore, edit and combine sounds using 2Sequence Add sounds to a tune to improve it. Think about how music can be used to express feelings and create tunes which depict feelings. Upload a sound from a bank of sounds into the Sounds section. Record their own sound and upload it into the Sounds section. Create their own tune using the sounds which they have added to the Sounds section.