



KILBURN JUNIOR SCHOOL

INSPIRE

— CURRICULUM



COMPUTING

KILBURN JUNIOR SCHOOL

Embark Federation

July 2020

Version II

At Kilburn Junior School, computing is at the heart of the curriculum and is pervasive throughout the whole school as a tool to enhance our teaching and learning. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. Much more than just a set of skills, however, computing teaches pupils computational thinking and creativity giving them the power to understand and change the world around them by applying this way of thinking to solve problems and create and evaluate systems both in the digital world and in reality through control systems.



INSPIRE CURRICULUM VALUES AND ATTRIBUTES



Computing enables us to utilize teamwork much more efficiently and with a wider, more diverse group of people. We can use technology to help us to share our success and reach out to our wider Embark family. However, we also recognize the need for a greater level of integrity when using technology and recognize the challenges our integrity might face in our ethical use of digital systems.



The computing curriculum allows us to escape from our classroom and experience the wider world by using technology to demystify things beyond our experience. We communicate with others around the world, share who we are and our values and compare our lives to that of others.



Computing allows children to demonstrate and develop a multitude of You 22 values: creativity, independence, inquisitiveness, collaboration, perseverance, self-control, precision, resilience, communication, positivity and problem solving.



Computing is a multi-disciplined subject that can provide children with the tools to communicate effectively whilst working as part of a team. These skills can also be put to good use to design and create products that can be used to expedite the research and development phase of product design and ultimately to demonstrate entrepreneurship.



Computing can be used to understand and improve natural systems through simulations or research. Using the power of computing, we can improve our surroundings and create systems that monitor and manage our outdoors, improving our carbon emissions and helping us to reduce our impact on the natural world.

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<p>E- safety</p> <ul style="list-style-type: none"> To or using communication technologies and the importance of abiding by the rules To discuss e-safety and the acceptable use policy understand the rules are to keep them safe when publishing and communicating with others To understand that a password keeps information private and secure Discuss other methods of communication and the importance of personal safety at home or school To find and use copyright free images when publishing work on the web <p>Messaging</p> <ul style="list-style-type: none"> Compare all the different forms of electronic communications on the web, through phones and other devices e.g ipod and games consoles (blogs, forums, Twitter, facebook* club penguin, learning platform, online chat) consider their advantages and disadvantages and their own personal safety By Considering others entries on forums, blogs, compose and respond with their own ideas, consider audience and appropriate language and personal safety <p>Publishing: (Refer to Multimedia Unit)</p> <ul style="list-style-type: none"> Create folders to organise and publish best pieces of work on the learning platform and upload other files from their work onto the learning platform e.g. photo story, flash, purple mash and other ICT documents Author their own pages in their e-portfolio and custom pages adding text images and sound on a given topic or learning journey Contribute an entry to a WIKI either in their own defined space or topic area considering audience Talk about the advantages of using web2.0 tools like Wikis, forums, web pages- wider audience, sharing, ability to see out of school, 	<p>E- safety</p> <ul style="list-style-type: none"> Discuss e-safety and keeping safe when using online communications at home and at school Understand that a password can keep information private and secure Understand how the learning platform allows access to certain rights and areas when a log in is applied Understand and abide by acceptable use policy Understand what copyright is and how to find copyright free image and sounds <p>Messaging</p> <ul style="list-style-type: none"> Compare the different forms of communication on the learning platform and discuss their advantages and disadvantages (Blogs, web pages, Forums , Wikis) Use the Learning platform to create opportunities for pupils to share and contribute ideas, responding to each other, guests or other classes , schools using forums tools, messaging or contributing to blogs always discuss and consider audience appropriate language and personal safety <i>You might also want to consider sites like wall wisher, Primary Pad</i> <p>Publishing: (Refer to Multimedia Unit)</p> <ul style="list-style-type: none"> Create and publish their own folders in their E portfolio including a best work area to share their work with others Author their own custom pages, blogs or wikis in their e-portfolio adding text images and sound, considering layout and intended audience Use a wiki to collaborate with peers on a project to produce a finished piece to support topic work Contribute/edit/refine WIKI entries understand that all changes are visible Embed other files onto the learning platform, photo story, flash Discuss the different styles of language layout and format of different electronic communications and the audience they are intended for 	<p>E- safety</p> <ul style="list-style-type: none"> Show an understanding of personal safety when using electronic communications and possible implications of misuse and abide by acceptable use policy Understand that a password can keep information private and secure Understand that the learning platform allows access and communication to wider communities be aware of implications when communicating and publishing beyond school Ensure they understand the need to keep to copyright rules when publishing their work <p>Messaging</p> <ul style="list-style-type: none"> Create opportunities on the Learning platform to for pupils to share and contribute ideas, respond to peers/ guests using forum or messaging tools They consider audience learning outcomes using appropriate language and respecting personal safety Produce formal or informal messages appropriate to the task, project or to solve problems (request information, share data) Discuss the different styles of language layout and format of different electronic communications and the audience of blogs, wikis, forums, twitter etc <p>Publishing: (Refer to Multimedia Unit)</p> <ul style="list-style-type: none"> Develop e-portfolio to include a range of work and an appealing linked front page, considering the audience. Through self and peer assessment tools discuss ways of editing and improve their work Author their own pages in their e-portfolio and hyperlinks to custom pages and other resources. Add text images and sound appropriately. Use tables to develop layout appropriate for intended audience. Embed files on their pages e.g. video, photo story, flash Collaborate on a project using a range of web 2.0 tools to support their work Contribute/edit/refine from self and peer evaluation WIKI entries understand that all changes are visible Talk about the different forms of electronic communication and web 2.0 tools, discuss appropriateness of using different tools in different contexts and the advantages and disadvantages as well as safety issues 	<p>E- safety</p> <ul style="list-style-type: none"> Discuss e-safety, develop and keep personal rules to keep themselves safe at home and in school and using any form of electronic communication device Understand that a password can keep information private and secure and abide by the schools acceptable use policy Understand the learning platform has many features that can enable communication between groups beyond their school and the importance of their online presence and their contributions Ensure they keep to copyright rules when publishing their work or sharing files <p>Messaging</p> <ul style="list-style-type: none"> Through a range of activities they pupils will produce formal or informal messages appropriate to the task or project, considering the different styles of language layout and format of different electronic communications and the audience <p>Publishing: (Refer to Year 5)</p> <ul style="list-style-type: none"> Use previously taught skills independently to choose, initiate and take part in learning activities using a range of online communication Author and contribute to projects and considering advantages and disadvantages of web 2.0 blogs, e- portfolios, forums, wikis and survey tools Create, compose and respond in forums, blogs, wikis consider purpose language and audience. Refine their use of layout tools including use of tables to develop their layout and make appropriate for intended audience Consider intended audience and suitability of tools to author and contribute to their own and collaborative pages adding appropriate text images and sound and other embedded files (video, sound, flash etc)

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<ul style="list-style-type: none"> • Begin to plan more complex sequences of instructions, test and amend (using on-screen or floor robot) • Solve open ended problems with floor robot, on-screen turtle and other programmable devices. • Plan a sequence of instructions to create different, more complex 2D shapes with a floor robot or on screen turtle. • Create different moods in music through different sequences of sounds. • Operate appropriate controls to produce a variety of effects. • Use a PC microscope to collect a series of images • Begin to collect data using data loggers in science or maths to capture sequences of measurements over time of sound, temperature, pulse rate or light <p>In order to progress further</p> <ul style="list-style-type: none"> • Develop sequencing skills in programming control devices 	<ul style="list-style-type: none"> • Investigate how everyday devices are controlled using inputs and outputs e.g. automatic doors, kettle, traffic lights, microwave oven • Investigate changes in the environment using a data-logging device • Discuss and interpret graphs illustrating the data collection • Be able to compare using a data logger to other methods of gathering data and discuss the advantages and disadvantages • Develop sequencing skills in programming control devices <p>In order to progress further</p> <ul style="list-style-type: none"> • Apply their knowledge and understanding of sequencing commands in other contexts such as the composition of music and time-lapse photography using a digital camera 	<ul style="list-style-type: none"> • Use data-logging devices to investigate changes in the environment over time. • Use graphical information to answer questions and solve simple problems. • Apply knowledge of control sequences in real life situations discuss in terms of inputs and outputs. Create simple flow diagrams to explain what is happening • Apply their knowledge and understanding of sequencing commands in other contexts such as the composition of music and time-lapse photography using a digital camera • Control an on-screen mimic or simulation with inputs and outputs • Sequence instructions to control output devices such as alarms, traffic lights, motors or Scratch Animation • Refine procedures to improve desired outcomes. • Combine procedures to solve more complex problems. <p>In order to progress further</p> <ul style="list-style-type: none"> • Use sensor inputs to control outputs 	<ul style="list-style-type: none"> • Sequence instructions to control a number of output devices such as alarms, lights etc. • Refine procedures to improve desired outcomes. • Control an on screen mimic or simulation with inputs and outputs • Use sensors as inputs to activate sets of instructions e.g a burglar alarm or light sensor or opening a door or moving a character • Apply knowledge of control sequences to real life situations – where is control in our lives what inputs and outputs are there? • Use simple control language to activate multiple devices or outputs concurrently

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<p>Graphics Packages</p> <ul style="list-style-type: none"> Locate different graphics files on the network or learning platform Acquire, store and retrieve images from cameras and scanners, Internet and begin to use paint packages or photo-manipulation software to change and manipulate an image (e.g. copy/paste/crop/make a stamp) Through peer assessment and self evaluation, evaluate design and suggest suitable improvements Children are able to talk about changes they can make to achieve a specific outcome <p>Digital Imagery</p> <ul style="list-style-type: none"> Begin to independently capture, store, retrieve and begin to edit a digital image Begin to take pictures thinking about the purpose of the image. Develop greater control over the digital stills video camera and use the enhanced tools (Macro, Landscape, Zoom) and begin to make choices such as portrait or landscape, face shot or body shot. Discuss and evaluate the quality of their own and others' captured images and make decisions (e.g. keep, delete, change) <p>Animation</p> <ul style="list-style-type: none"> Create a short animated sequence to communicate a specific idea making use of a simple plan <p>Sharing their work</p> <ul style="list-style-type: none"> Ensure they reduce an image in size using photo editing software and Upload their work on the learning platform 	<p>Graphics Packages</p> <ul style="list-style-type: none"> To begin to enhance a presentation by acquiring, storing and retrieving images from different sources Use paint packages or photo-manipulation software to change and manipulate an image appropriate to audience or task Through peer assessment and self-evaluation, evaluate design suggest and make suitable improvements Talk about their choices and changes they have made to achieve a specific outcome or purpose <p>Digital Imagery – Including Video** Longer Unit</p> <ul style="list-style-type: none"> To independently capture store retrieve and begin to edit a digital image or digital video recording To take pictures and video thinking about the purpose of the image. Developing greater control over the digital stills or video camera and use the enhanced tools (Macro, Landscape, Zoom) and begin to make choices such as portrait or landscape, face shot or body shot and reasons for doing so Discuss and evaluate the quality of their own and others' captured images or video and make decisions (eg. keep, delete, change) Use software to edit put still images and video together to create a sequence for a story, or information piece <p>Animation</p> <ul style="list-style-type: none"> To create a short animated sequence to communicate a specific idea making use of a simple storyboard <p>Sharing their work</p> <ul style="list-style-type: none"> Ensure they reduce any image size using photo editing software before adding to a page on the learning platform 	<p>Graphics Packages</p> <ul style="list-style-type: none"> Enhance a presentation by acquiring, storing, retrieving and combining images from different sources Through peer and self-evaluation, children refine and make appropriate changes Use an object based graphics package to design and develop a plan to find a solution to a specific problem (<i>e.g. design a child's bedroom, garden, zoo, map, playground, crazy golf</i>) <p>** Digital Video (long Unit)</p> <ul style="list-style-type: none"> To use different filming techniques and camera angles e.g. zoom, panning, wide shot etc to create different mood/perspective Plan a video or animation by drawing a storyboard Use a range of sound effects, music and voice-overs to create mood/ atmosphere Select and edit sounds, text, movie clips and other effects to suit purpose and audience Evaluate and improve work with a view to purpose and audienceAs part of the ongoing creative process children discuss and evaluate their own and others' movies and refine for given audience/task <p>Animation</p> <ul style="list-style-type: none"> Plan and create a short animated sequence to communicate a specific idea, using a storyboard and timeline <p>Sharing their work</p> <ul style="list-style-type: none"> Upload their work on the learning platform for self and peer evaluation – show an awareness of file size and file type reduce if necessary. <p>In Order to Progress further:</p> <ul style="list-style-type: none"> To begin to identify opportunities to use a CAD package as opposed to a paint package 	<p>Graphics Packages</p> <ul style="list-style-type: none"> Enhance a presentation by acquiring, storing, retrieving and combining images from different sources Create images using a range of techniques to develop a particular style Through peer assessment and self-evaluation, evaluate design and suggest suitable improvements Use an *object based graphics package (CAD) to design and develop to find a solution to a specific problem in 2D. consider scale of objects and costs when creating a plan <p>Digital Imagery</p> <ul style="list-style-type: none"> Independently capture store retrieve and edit digital images to improve them thinking about the purpose of the image. Make choices such as portrait or landscape, face shot or body shot. Use moving editing software to combine stills, video and sound using a timeline. As part of the ongoing creative process children discuss and evaluate their own and others' movies and refine for given audience/task When using a video camera take into account background, camera position and sound quality to ensure the recording is fit for purpose Understand issues relating to copyright of images – e.g. when selecting image sources. <p>Animation</p> <ul style="list-style-type: none"> Plan and create a short animated sequence to communicate a specific idea, using a storyboard and timeline <p>Sharing their work</p> <ul style="list-style-type: none"> Upload their work on the learning platform for self and peer evaluation

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<p>Graphing</p> <ul style="list-style-type: none"> • Answer a question by organising, representing and interpreting data • Create frequency tables, pictograms and bar charts to show results and observations • Choose, print and annotate appropriate graphs to answer simple questions e.g. bar charts or pie charts. • Compare different charts and graphs and understand they are used for different purposes <p>Database</p> <ul style="list-style-type: none"> • Collect appropriate information, enter it into a database and use the database to answer simple questions • Add new records to a file and place information in the correct fields using the correct conventions • Construct questions and suggest plausible answers • Translate questions into search criteria to find information (E.g. to find most common, favourite etc) • Search using key words and use fields correctly to answer questions • Use the search tool to find answers to simple questions • Create simple bar charts to answer questions 	<p>Graphing</p> <ul style="list-style-type: none"> • Determine the data needed to answer a specific question; organise, present, analyse and interpret the data in tables, diagrams, tally charts, pictograms and bar charts, using ICT where appropriate • Enter data into a pre defined database use the information to answer a specific question • Use the data produced to answer specific lines of enquiry • Have regular opportunities to enter data into a spreadsheet and use it to create a range of graphs and charts, and to interpret data across all subjects • Compare how different graph types can be used for different purposes and how some are more appropriate than others • Use the survey tool in UniServity to collect and interpret data <p>Branching Databases:</p> <ul style="list-style-type: none"> • Develop an understanding of how a branching database is used to identify objects or outcomes (control systems) • Develop efficient questions to organise and sort objects by properties using yes no fields • Create and use a branching database or flow charts to organise information • 	<p>Graphing</p> <ul style="list-style-type: none"> • Determine the data needed to answer a set of related questions; select and organise relevant information • Use frequency tables; construct pictograms, bar graphs and line graphs that represent the frequencies of events and changes over time; use the ICT to present and highlight features that lead to further questions <p>Databases:</p> <ul style="list-style-type: none"> • Use the Survey tool in the learning platform to develop a database and collect data • Design questions using key words, to search a large pre-prepared database • If adding to a database recognise the need for accuracy and how this will effect the information and answers to questions • Make queries using and/or to search data when looking for relationships and patterns in data (complex searches) • Search using search terms greater and less than • Modify a search pattern in order to find specific information • Check for accuracy by checking data, using different views, search tools, and graphing. Be able to recognise and correct the data • Use graphs to provide supporting evidence for their conclusions 	<ul style="list-style-type: none"> • Solve problems involving selecting, processing, presenting and interpreting data • Construct and interpret frequency tables, bar charts with grouped discrete data and line graphs; interpret pie charts • Use ICT to present and highlight information and identify further questions to ask from data collected • Collect and organise data in an efficient and accurate way by designing fields and records in a database • Interpret data by using a range of searches, sorting , filtering and graphing and check for accuracy • Draw conclusions from data and use conclusions to solve the original problem • Present findings to a specified audience and display in other software (e.g poster, multimedia, Word processing, learning platform) <p>In order to progress further</p> <ul style="list-style-type: none"> • Justify reasons for their choices and explain why other methods were not appropriate

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<ul style="list-style-type: none"> Develop key questions to search for specific information with purpose to answer a problem e.g. to find out about different garden birds Save and retrieve accessed information through the use of Favourites, History, and Save As Understand that some information found through searching is more relevant than others Use the information purposefully to complete specific tasks e.g. copy, paste and edit relevant information (ref. multimedia unit) Talk about and describe the process of finding specific information Be able to manipulate pre-prepared electronic information using copy and paste, edit and use different presentation features to suit the purpose <p>In order to progress further</p> <ul style="list-style-type: none"> Ask questions and develop keywords to enter their own search and choose an appropriate website Navigate to their chosen website to answer their questions on a specific topic 	<ul style="list-style-type: none"> Navigate to their chosen website to answer their questions on a specific topic Ask questions and develop keywords to enter their own search and choose an appropriate website Know there are different search engines and understand they work in different ways. E.g. some within specific sites e.g. BBC, and some the whole of the Internet e.g. Google, Yahoo!igans, Ask Jeeves To be able to discuss the different search engines and their features To know that they can use search engine tools for different types of media e.g. Google Image Search, video, sound but understand that the results are not always what you expect To be aware that web sites are not always accurate and that information should be checked before it is used. To develop keywords and enter them into a chosen search engine To present their findings using a word processing or multimedia/publishing package for a specific audience <p>In order to progress further:</p> <ul style="list-style-type: none"> To modify searches further to find relevant information for a report To select and combine information from a range of different source 	<ul style="list-style-type: none"> Select an appropriate search engine to find information related to their topic To modify searches further to find relevant information for a report To be able to discuss the different search engines and their features Discuss different strategies for finding relevant information e.g. using different keywords to find information on a given enquiry Use a range of keywords to find different sources of information and enter them into a chosen search engine To select and combine information from a range of different sources, present their findings using a word processing or multimedia/publishing package for a specific audience To be aware that web sites are not always accurate and that information should be checked before it is used. Discuss issues of copyright and downloading material e.g. mp3s, images, videos etc <p>In order to progress further:</p> <ul style="list-style-type: none"> Begin question the validity and plausibility of information found 	<ul style="list-style-type: none"> To understand the dynamics of different search engines and know that there are different search engines which may focus on different media To modify searches further to find relevant information for a report Talk about where web content might originate from by looking at web address, author, other linked pages Talk about validity and plausibility of information by checking other sources Recognise the impact of using incorrect information in their work Skim and select information checking for bias and different viewpoints Discuss issues of copyright and downloading material e.g. mp3s, images, videos etc and reference sources used in their work Save and use pictures, text and sound and be able to import into a document for a specific audience or task (ref. multimedia presentation)

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<ul style="list-style-type: none"> Enter data into a computer simulation to explore the effect of changing the variables (different options). Use them to make and test predictions to support learning in other subject areas Discuss their use of simulations and compare with reality Talk about the rules found in a simulation <p>In order to progress further</p> <ul style="list-style-type: none"> Develop rules when sequencing or programming devices floor robots or on screen control 	<ul style="list-style-type: none"> Investigate how everyday devices are controlled using inputs and outputs eg automatic doors, kettle, traffic lights, microwave oven Draw flow diagrams to show how everyday devices work (relate to handling data branching databases) Enter instructions to enable the on screen sprite/turtle navigate a screen or draw specific shapes, relate this to the floor robot Use the repeat command to shorten sets of instructions Use and change a pre-written procedure Create a set of instructions either as a list, as a flow diagram or as a sequence of icons to complete a task (such as drawing a shape with a screen turtle or controlling a set of traffic lights) and name it as a procedure <p>In order to progress further</p> <ul style="list-style-type: none"> To use a procedure linked to or within a procedure to achieve a specific out come (create a flower by repeating a command to spin a square) Write a series of instructions to control output devices eg. lights and sound 	<p>**Spread sheet modelling (Longer Unit)</p> <ul style="list-style-type: none"> Enter labels and numbers into a spreadsheet Enter formulae into a spreadsheet and modify the data, (simple calculations + -/ X total) Make predictions and changes and check results Use 'SUM' to calculate the total of a set of numbers in a range of cells Change data in a spreadsheet to answer 'what if...?' questions and check predictions Discuss how a spreadsheet with formulas can allow quick changes and enable them to test their ideas Create and use a spreadsheet to create costings which are within budget To consider appropriate layout and design of their information and data <p>In order to progress further</p> <ul style="list-style-type: none"> Discuss how using formula can enable them to test different variables 	<ul style="list-style-type: none"> Children will learn skills to enable them to set up and use a spraedsheet to solve a real problem to support a business enterprise project Discuss how using formula can enable them to test different variables Identify and enter the correct formulae into cells, modify the data, make predictions of changes and test them Use spreadsheets to solve mathematical problems Identify formulae and enter them into a spreadsheet (e.g. for calculations, Sum, average, mode etc) Copy formulae to create tables of results Create a spreadsheet to solve a particular problem including the drawing of graphs and interpretation of information Change the data and formulae in a spreadsheet to answer 'what if ...?' questions and check predictions Match the information in the spreadsheet to the needs of the audience

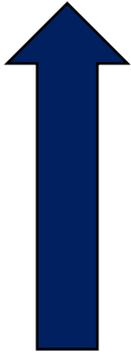
OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<ul style="list-style-type: none"> Evaluate a range of printed and electronic texts, appropriate to task e.g. newspaper, posters, web site and recognise key features of layout and design. Recognise the difference and the advantages and disadvantages between electronic media and printed media and select key features when designing publications Combine text and graphics in different layouts, font formats, graphics and images for different purposes or audiences Use design features such as text boxes, columns, borders, WordArt Select suitable information from electronic resources and prepare it for processing using ICT e.g. Internet CD ROMs and cached web content (Espresso) Amend, save and print work as necessary Use appropriate editing tools to ensure their work is clear and error free (use tools such as spell checker, thesaurus) Cut, copy and paste in order to refine and reorder content within applications Through peer assessment and self-evaluation, evaluate design and suggest suitable improvements Discuss how they have developed design and layout features for a specific audience and how the software has helped them do this Recognise intended audience for their work and begin to suggest appropriate improvements to their work Use ICT to collaborate to create a finished product, e.g. magazine, newspaper <p>Extension</p> <ul style="list-style-type: none"> Begin to use hyperlinks to link to web pages or other pages. Use ICT to collaborate to create a finished product, e.g. magazine, newspaper, Wiki, Custom page 	<ul style="list-style-type: none"> Evaluate a range of electronic multimedia, appropriate to task. Recognise key features of layout and design and discuss what makes good design Select and import different sounds to include in their presentations Select and import graphics from digital cameras, graphics packages and other sources and prepare for use (cropping, resizing, editing) Combine text, sound and graphics use font sizes and effects appropriately to communicate meaning for a given audience To amend and improve text by using the find and replace Spell Check, Thesaurus and other language tools appropriately facility To be aware of copyright and plagiarism when creating presentations Develop increasing sense of audience and talk about their choices and decisions Through peer assessment and self evaluation, evaluate their own designs and make suitable improvements Begin to use hyperlinks to link to web pages or other pages Use ICT to collaborate to create a finished product, e.g. magazine, newspaper, Wiki, Custom page <p>Extension</p> <ul style="list-style-type: none"> To be able to format text to indicate relative importance Begin to develop consistency across a document, presentation or web page using styles where possible. 	<ul style="list-style-type: none"> Develop and use criteria to evaluate the design and layout when evaluating a range of multilayered multimedia, web sites, pages on Learning Platforms, online resources and presentations Understand how pages are linked together and recognise the need for clarity. Produce a diagram to show the links between pages. Create a range of hyperlinks to produce a non-linear presentation Use a multimedia authoring program to organise, refine and present information in different forms for a specific audience Select and import graphics from digital cameras, graphics packages and other sources and prepare it for processing using ICT Select and import sounds from their own recording, create their own effects and music and import from other sources Format and edit work to improve clarity and mood, use a range of tools e.g. cut and paste, justify, insert and replace and format text to indicate relative importance develop consistency across a document, using the same styles of font, colour, size for headings, body text etc throughout a document or a set of web-pages Selecting information to meet the needs of the audience Through peer assessment and self-evaluation evaluate their design and make suitable improvements <p>In Order to Progress further:</p> <ul style="list-style-type: none"> Create a page of sounds which are activated by appropriately named and positioned action buttons 	<ul style="list-style-type: none"> Develop and use criteria to evaluate the design and layout of a range of multimedia and published texts (printed and electronic) Plan the outline of their non-linear presentation creating a diagram to show the links between different pages. Include a menu navigation page to offer audience a choice Begin to use hyperlinks or action buttons in multimedia software or webpages Create a page of sounds which are activated by appropriately named and positioned action buttons Use a range of software appropriate to task to communicate their ideas effectively (e.g. Word processing- letters, Multimedia-talking book, DTP – poster/card, Video editing – multimodal combining movies, images, sound and text, Collaborate with others on Learning Platform – to create a homepage/wiki) Enhance communication and content within the presentation using a variety of display features Choose appropriate techniques to create an effective and well polished piece of work considering purpose and intended audience Discuss and evaluate their presentations and outcomes give reasons for the chosen styles and techniques In light of comments made by peers and audience amend and improve their work <p>In Order to progress Further</p> <ul style="list-style-type: none"> Set personal targets to improve presentation, using a range of presentational devices on screen and paper

OBJECTIVES

YEAR 3	YEAR 4	YEAR 5	YEAR 6
<ul style="list-style-type: none"> Use existing sound files from the school network or learning platform in a presentation Use ICT to select and record voice and sounds – e.g. tape recorder, Dictaphone, digital voice recorder, Talking Tins Use music software to organise and reorganise musical phrases using icons to create a piece of music for a theme Use music software to create a simple multipart percussion composition Explore the range of sounds from an electronic keyboard for a specific audience Inset music and sounds into other presentations talking about suitability of their choices Record their voice and other sounds using the sound recording tool on the learning platform to add to their presentations or information Begin to talk about software which allows easy manipulation and creation of sound and music <p>Sharing their work</p> <ul style="list-style-type: none"> Upload their work on the learning platform for self and peer evaluation Embed sound onto a page or forum on the learning platform <p>In order to progress further</p> <ul style="list-style-type: none"> Locate sound files from CD ROMs, Internet sources, learning platform and Multimedia software e.g. PowerPoint clip art Begin to show an awareness of copyright when selecting music and sound 	<ul style="list-style-type: none"> Locate sound files from CD ROMs, Internet sources, learning platform and Multimedia software e.g. PowerPoint clip art Select and import existing sound files using computer software Use IT to record voice, sounds vocal, sound effects and instrumental to create a sound story Or Use ICT to combine and layer sounds to create sound stories or backing tracks to their voice or poem Use music software to organise and reorganise musical phrases using notes on a scale Share their work on the learning platform for others to play and review Talk about how the software allows easy manipulation and creation of sound and music Begin to show an awareness of copyright when selecting music and sound <p>Sharing their work</p> <ul style="list-style-type: none"> Upload their work on the learning platform for self and peer evaluation Upload sound and Embed their radio broadcast onto a page on the learning platform, consider audience and length of piece <p>In order to progress further</p> <ul style="list-style-type: none"> Use ICT to create and perform sounds or music that would otherwise not be possible live – e.g. playing a multi-part piece or a very fast piece 	<ul style="list-style-type: none"> Copy sound files from CD ROMs/Internet sources Use a variety of appropriate devices to record musical and non-musical sounds <p>** Creating and publishing a broadcast (Long Unit)</p> <ul style="list-style-type: none"> Listen to radio broadcasts and identify different sound elements Begin to use a software with a timeline to layer sound, adding voice, music and sound effects to create a radio broadcast Manipulate existing sound files using computer software – e.g. take sound and reverse it or layer a series of sounds Use ICT to perform sounds or music that would otherwise not be possible live – e.g. playing a multi-part piece or a very fast piece <p>Sharing their work</p> <ul style="list-style-type: none"> Upload their work on the learning platform for self and peer evaluation Embed sound onto a page on the learning platform consider the suitability of the embedded sounds Show awareness of copyright when sharing files <p>In order to progress further</p> <ul style="list-style-type: none"> Create their own sounds and compositions to add to their presentations/films/images/photos 	<ul style="list-style-type: none"> Independently choose and use an appropriate device to record sounds in order to create a sound file Choose to use software independently to manipulate sounds using computer software – e.g. remove unwanted silences/trimming start and end Create their own sounds and compositions to add to their presentations/films/images/photos Use ICT to produce sound/music for a specific purpose, considering the impact on the audience - e.g. length or sound level of performance Understand issues relating to copyright of music – e.g. when selecting samples Listen to and evaluate professional broadcasts identify key features and different elements of the sound recording http://www.bbc.co.uk/bbc7/kids/ Use Podcasting tool on the learning platform to share a prepared broadcast – e.g. school radio, sports reports, stories, poems etc Begin to have an awareness of different sound file formats. – e.g. MP3 files are smaller than .WAVs and may be more suited to import into a multimedia presentation <p>Sharing their work</p> <ul style="list-style-type: none"> Upload their work on the learning platform for self and peer evaluation Use podcasting tools to share broadcasts

**DEEPER
LEARNING**



**SURFACE
LEARNING**

	COGNITIVE	AFFECTIVE	PSYCHOMOTOR
	<p>Synthesising – creating new material, putting together distinct ideas to create a coherent whole</p> <p>Evaluating – presenting and defending opinions about information, criticality</p> <p>Analysing – examining and breaking down information into component parts and identifying relationships between those parts</p> <p>Applying – using acquired knowledge in a new situation</p> <p>Understanding – comprehension may be demonstrated by describing, organising or interpreting</p> <p>Remembering – key information is memorised</p>	<p>Characterising – abstract knowledge is built</p> <p>Organising – different pieces of learning can be structured and linked within a schema</p> <p>Valuing – value is assigned to a piece of learning</p> <p>Responding – active participation</p> <p>Receiving – passively paying attention</p>	<p>Origination – new movement patterns can be created in response to complex situation</p> <p>Adaptation – learned responses can be modified for different situations</p> <p>Complex overt response – skilful performance of complex motor patterns</p> <p>Mechanism – the action has become habitual and can be performed with some confidence and accuracy</p> <p>Guided response – imitation, trial and error, practice is needed</p> <p>Set – readiness to act</p> <p>Perception – the use of sensory cues to guide motor activity</p>

TAXONOMY VERBS

COGNITIVE	AFFECTIVE	PSYCHOMOTOR
<p>Synthesising – Categorizes, Combines, Compiles, Composes, Creates, Devises, Designs, Explains, Generates, Modifies, Organizes, Plans, Rearranges, Reconstructs, Relates, Reorganizes, Revises, Rewrites, Summarizes, Tells, Writes</p> <p>Evaluating – Appraises, Compares, Concludes, Contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports</p> <p>Analysing – Analyzes, Breaks Down, Compares, Contrasts, Diagrams, Deconstructs, Differentiates, Discriminates, Distinguishes, Identifies, Illustrates, Infers, Outlines, Relates, Selects, Separates</p> <p>Applying – Applies, Changes, Computes, Constructs, Demonstrates, Discovers, Manipulates, Modifies, Operates, Predicts, Prepares, Produces, Relates, Shows, Solves, Uses</p> <p>Understanding – Comprehends, Converts, Defends, Distinguishes, Estimates, Explains, Extends, Generalizes, Gives an Example, Infers, Interprets, Paraphrases, Predicts, Rewrites, Summarizes, Translates</p> <p>Remembering – Defines, Describes, Identifies, Knows, Labels, Lists, Matches, Names, Outlines, Recalls, Recognizes, Reproduces, Selects, States</p>	<p>Characterising – Act, Discriminate, Display, Influence, Internalize, Listen, Modify, Perform, Practice, Propose, Qualify, Question, Revise, Serve, Solve, Use, Verify</p> <p>Organising – Adhere, Alter, Arrange, Codify, Combine, Compare, Defend, Discriminate, Display, Explain, Generalize, Identify, Integrate, Modify, Order, Organize, Prepare, Relate, Systemize, Weigh</p> <p>Valuing – Accept, Complete, Defend, Describe, Devote, Differentiate, Explain, Follow, Form, Initiate, Invite, Join, Justify, Propose, Puruse, Read, Report, Seek, Select, Share, Study, Work</p> <p>Responding – Answer, Assist, Complete, Comply, Conform, Cooperate, Discuss, Examine, Greet, Help, Label, Obey, Perform, Practice, Present, Read, Recite, Report, Respond, Select, Tell, Write</p> <p>Receiving – Accept, Ask, Attend, Choose, Describe, Develop, Follow, Give, Hold, Identify, Locate, Name, Point to, Recognize, Select, Sit Erect, Reply, Use</p>	<p>Origination – Arranges, Builds, Combines, Composes, Constructs, Creates, Designs, Initiate, Makes, Originates.</p> <p>Adaptation – Adapts, Alters, Changes, Rearranges, Reorganizes, Revises, Varies</p> <p>Complex overt response – NOTE: The Key Words are the same as Mechanism, but will have adverbs or adjectives that indicate that the performance is quicker, better, more accurate, etc.</p> <p>Mechanism – Assembles, Calibrates, Constructs, Dismantles, Displays, Fastens, Fixes, Grinds, Heats, Manipulates, Measures, Mends, Mixes, Organizes, Sketches</p> <p>Guided response – Copies, Traces, Follows, React, Reproduce, Responds</p> <p>Set – Begins, Displays, Explains, Moves, Proceeds, Reacts, Shows, States, Volunteers</p> <p>Perception – Chooses, Describes, Detects, Differentiates, Distinguishes, Identifies, Isolates, Relates, Selects</p>



NOTES

