

	Desktop publishing	Data handling	Problem solving and programming	Communication and networks	Film and animation
5 7c	<ul style="list-style-type: none"> Select and justify the most appropriate software package to use and features employed to meet the requirements of the end user defined in the task brief. Researching and selecting publications and other assets and experiment with a range of layouts, deciding on the most appropriate to meet the expectations of the target audience, using a development cycle to routinely test and adjust their document prototype with justified explanations Set out clearly defined user requirements plan and develop an original sophisticated publication, using a range of features in a discerning way to meet the expectations of the client or audience defined in the task brief. This might include designing and using a bespoke template that is suitable for both audience and purpose, and adding a table of contents and/or list of figures. Identify, with increasing discernment, the end user's requirements and publication's purpose at the outset and review systematically the final publication against the requirements at the end of the process, clearly identifying which have been met and which have not. This might include gathering end user feedback and making further refinements or setting out recommendations for improvement. Systematically, organise, store and retrieve a logically structured digital bank of work to showcase learning across the curriculum, taking account of format, portability, size, copyright and versioning. 	<ul style="list-style-type: none"> Research and select the most relevant data collected from a range of sources, found and created, discriminating between these for relevance, reliability and accuracy, justifying and referencing their sources. Select and justify the most appropriate package and features to use to meet the requirements of the end user defined in the task brief. using a development cycle to routinely test and adjust their prototype Exploit a range of appropriate database software facilities, which might include integrating a menu-based system with access to customised forms or subforms validated for data entry and customer-driven reports, using a range of criteria and calculated fields. Output might also take the form of reports using mail merge, to produce a solution that meets user needs specified at the start of the project. share and collaborate on their developed ideas and information with peers, experts and end users, contributing to a collaborative global environment Identify the end user's requirements and the database's purpose review systematically the final version against the requirements at the end of the process, clearly identifying which have been met and which have not. 	<ul style="list-style-type: none"> represent programs using a structured notation. identify that there are patterns in algorithms and multiple different algorithms can solve the same problem. (pattern recognition and generalisation). demonstrate awareness for arrays, validation and effective readability in my program (algorithm) evaluate the impact of an algorithm when problem solving. 	<ul style="list-style-type: none"> know how search engines rank search results. know how to construct static web pages using HTML and CSS. know how data transfers between computers over networks, including the internet i.e. IP addresses and packet switching. discuss the use of network protocols. analyse and evaluate data and information, and know that poor quality data leads to unreliable results, and inaccurate conclusions. 	<ul style="list-style-type: none"> Research, select and evaluate assets from a range of digital sources, found and created, discriminating between these for relevance, reliability and accuracy, justifying and referencing their sources. Select and justify the most appropriate features to use to meet the end user requirements defined in the task brief and work between various software applications to realise a complete project. researching and selecting movie clips, animations and other assets and systematically experimenting with a range of effects, deciding on the most appropriate to meet the expectations of the target audience, using a development cycle to routinely test and adjust their prototype presentation, and justify choices and decisions based on their original intentions Set out clearly defined user requirements and plan, develop and test an original multipage presentation suitable for audience and purpose that includes a range of advanced features and assets that have been appropriately edited. adding sound, music, voiceover, transitions and effects, making creative use of moving image conventions to meet the needs of a specific audience and purpose. review and test the final moving image or animation product against the requirements at the end of the process,
4 6c- 6a	<ul style="list-style-type: none"> Creating a suitable interface for a given purpose Using Master Pages Use of numerous hyperlinks to navigate through a powerpoint demonstrate an understanding of how layout, font, styles and colour transfer from screen to print; taking into account copyright and intellectual property issues and acknowledging these where appropriate, to inform or include in their document. Investigate a range of tools and features in the desktop publishing software, taking into account the specific audience and purpose described in the task brief. plan and develop a consistent publication targeted at a specific audience Create a complex publication or amend an appropriate template, adopting a suitable colour scheme, more advanced text features such as the including headers and footers and ordering or grouping images. Justify the software application they chose to complete the desktop publishing task, the alternatives they considered and the process they carried out in producing the publication. Justify how their document is effective for the specified audience and purpose. This might include identifying and describing the development process and identifying key points where they made value judgements that enhanced the final document. Organise, store and maintain their work within a personalised area to showcase learning digitally across the curriculum. 	<ul style="list-style-type: none"> Research, select, edit, use and evaluate more information from a range of digital sources to help with designing and/or collecting data to store in the database, justifying and referencing their sources. Use a range of software tools and features to develop a database that can be manipulated to provide customised forms or reports, using features such as parameter or multiple criteria queries, mail merge or calculated fields to meet the audience's needs. Create a customised database targeted at a specific audience and purpose. Creating customised forms or subforms and reports Use of validated data from multiple tables linked together by key fields and queries using a range of criteria. Output might take the form of reports using mail merge. Justify the software application they chose to complete the database task, the alternatives they considered and the process they carried out in producing the publication. Justify why their database is effective for the specified audience and purpose. Organise, store and maintain their database in a personalised area to showcase learning digitally across the curriculum. To find information using Lookup formulas. Use the IF formula Creating Macros' 	<ul style="list-style-type: none"> show an awareness of tasks best completed by humans or computers. design programs (algorithms) by breaking down a problem and creating sub-solutions (decomposition). create a program (algorithm) which uses procedures, sequencing, selection, variables, relational operators and iteration to meet a client's needs and target audience. implement effective readability within a program identify appropriate data types within a program 	<ul style="list-style-type: none"> know how to effectively use search engines, and I know how search results are selected, including that search engines use 'web crawler programs'. discuss the advantages and disadvantages of network topologies. show awareness of networking protocols and how data is sent across networks (e.g.: packet switching) show responsible use of technologies and online services, and know a range of ways to report concerns. 	<ul style="list-style-type: none"> Creating their own moving image footage, stills, photographs and audio recordings; Research and select relevant assets from a range of digital sources to include in their moving image or animation product considering the specific audience and purpose, and retaining references where appropriate. Investigate and experiment with a range of tools and features in the editing software and when using hardware such as cameras and microphones to capture footage, taking account of the specific audience and purpose defined in the task brief. Identify user requirements and plan, develop and test a moving image or animation product that includes a range of more sophisticated features and has a consistent look and feel for the audience and purpose specified in the task brief. This might include systematically planning a shoot, using a storyboard and script, capturing and editing footage, showing an awareness of pace, rhythm and tempo and preparing additional assets such as titles and captured sound for including in the final product. Justify the software application chosen to complete the task, the alternatives considered and the process undertaken in the production of the moving image or animation product. Justify how their moving image or animation product meets the requirements of specified audience and purpose. identifying and describing the development process and identifying key points where they made value judgements that enhanced the final version of the image or product. Organise, store and maintain their moving image or animation work in a personalised area to showcase learning digitally across the curriculum.
5c-5a	<ul style="list-style-type: none"> plan and create a more complex document research and select assets, such as text, images, graphs or tables, from a wider range of sources; analyse the assets researched and be discerning in relation to their relevance and quality; know that not all information is objective and not all sources are reliable; select, edit and use assets demonstrating a clear understanding of the intended audience and purpose; understand and use document layout settings such as page margins and tabs; use linked text boxes to allow for text flow; use grouping, for example picture and caption; add effects such as filters, shadows and styles to enhance images; make use of a digital spellchecker, thesaurus and dictionary; reference sources and be aware of copyright regulations; store downloaded assets in an appropriate format for further use 	<ul style="list-style-type: none"> use some features of digital tools to analyse data and solve problems, for example use built-in spreadsheet functions like SUM or AVERAGE; adapt formulae to solve problems after discussion of initial results. To present information professionally 	<ul style="list-style-type: none"> plan and solve a more complex problem or design and create an interactive 'product' demonstrating a clear sense of purpose and audience, for example plan, create and refine a simple interactive game using Scratch or use embedded procedures in a Logo project carry out ongoing improvements and evaluate their process and outcome investigate and solve problems in a digital environment, for example access and view Scratch projects and modify these for their own use, or create their own Scratch project or Mediascape showing an awareness of audience; 	<ul style="list-style-type: none"> plan, create and maintain their own online workspace such as a wiki, blog or website, demonstrating a clear sense of purpose and audience, for example plan and create a wiki, blog or website on an inspirational person they have been studying and engage in discussion with pupils from another school; integrate found and self-produced text, sound, still and/or moving images in an online area, collaborating with others where appropriate, for example set up a VoiceThread and ask others to contribute; be aware of copyright regulations; engage in meaningful online discussions using acceptable and appropriate online behaviour; and post timely responses and attachments to communicate online, initiating new threads when appropriate. 	<ul style="list-style-type: none"> Use the 'plan, do, review' cycle to improve their work and ask peers to give feedback on their image. plan and storyboard a film or animation demonstrating a clear understanding of audience; create a film or animation production, for example an animation of the Titanic leaving Belfast or a film about a special event in their school; start to be discriminating in the use of effects and transitions; use appropriate sound effects, music and/or a planned narration; make clear editing decisions, for example what to omit and what to include when shooting and during the editing process; organise and save project assets in a meaningful file structure export files in an appropriate format such as .wmv.

<p>3 4c-4a</p>	<ul style="list-style-type: none"> plan and create a document showing an awareness of audience and purpose; research and select assets, such as text, images, graphs or tables, from a range of sources; download assets in a suitable format; create text and format it using features such as alignment, justification, bullets, numbering, paragraphs, columns and text wrapping; use text boxes and format them appropriately use features such as colour, borders or page numbers to enhance the document understand how to save and export an image in the appropriate file format; demonstrate an awareness that not all sources are reliable create presentation with audio, animation and transitions 	<ul style="list-style-type: none"> make predictions and solve problems using a given spreadsheet; demonstrate an understanding of what is meant by the terms cell, formulae, rows and columns; use a range of sources, such as catalogues, internet sites, tables or lists, to research the data needed to solve a problem; input data from their own research into a given spreadsheet; answer simple questions by using SORT or using simple formulae such as + and -. 	<ul style="list-style-type: none"> input more complex sequences of commands, for example in Scratch use the 'broadcast' and 'when I receive' commands within a script o create and use procedures in Logo; use appropriate ICT tools and features to improve work. analyse how algorithms can be used to solve everyday problems. construct a program (algorithm) using text based editors such as python, which uses sequencing, selection and iteration. describe the types of errors within programs e.g. syntax errors. illustrate readability within your code e.g. Sensible variable names / comments 	<ul style="list-style-type: none"> navigate through a VLE to locate and access specific materials; contribute to an online activity or project and, where appropriate, collaborate with others using acceptable and appropriate online behaviour, for example participate in a collaborative project with a school in another area or country or create a simple online workspace such as a wiki or blog; share work or resources by using email to send attachments or uploading to an online environment 	<ul style="list-style-type: none"> plan, storyboard and produce a short film or animation showing an awareness of audience; use moving image language when planning and evaluating, for example annotate their storyboard using appropriate shot sizes such as close-up, mid shot and long shot, and explain decisions using the language of film; begin to make editing decisions, for example what to omit and what to include when shooting or editing; use appropriate editing software to construct a short film or animation; experiment with adding a variety of features such as titles, transitions and effects; add appropriate sound effects, music or narration; organise saved work and export it in an appropriate format such as .wmv.
<p>2 3c-3a</p>	<ul style="list-style-type: none"> search for text and images from given digital sources access, select and import images from a range of given sources create text or edit found text, altering its font, size, style and colour create a document using a template, if appropriate scale an image proportionally; demonstrate some awareness of referencing sources. combine and position text and images appropriately, showing an awareness of word include a title or subtitles if appropriate create a presentation with animations 	<ul style="list-style-type: none"> input their own or given data into a given database or spreadsheet; solve simple problems using some of the facilities available in a given database or spreadsheet make observations and draw conclusions, for example make comments about the data, results or graphical representation. Explain the difference between data and information 	<ul style="list-style-type: none"> solve problems using a digital device or environment, Plan and create a simple Scratch project or use the 'repeat' command to create patterns or shapes using Logo or Scratch; input sequences of commands; make modifications to improve their work. identify the key features of a flow chart. design an algorithm (program) to include selection (If statements) to solve a problem. identify and correct errors within a program i.e. debugging, in algorithms. identify variables within a program 	<ul style="list-style-type: none"> navigate through a Virtual Learning Environment (VLE) and access materials; understand that online communication can be a two-way process; and communicate online with others send and respond to emails using acceptable and appropriate online behaviour. know what acceptable and unacceptable behavior when using technologies and online services. know the difference between the internet and internet service e.g. world wide web. compare wired and wireless networks 	<ul style="list-style-type: none"> use a storyboard to plan the order of the images required for a simple animation or film; use suitable software to produce a simple animation or film using still photographs or self-created images, for example make a film on 'How to Make Pancakes', make an animation on 'Growing a Sunflower', or draw a sequence of images to create a digital flipbook; add a narration, sounds or music to the film or animation begin to add features such as titles, transitions or effects begin to use moving image language, for example talk about the shot sizes they have chosen to use.
<p>1 2c-2a</p>	<ul style="list-style-type: none"> Find and select text and images and use them purposefully; combine text and images to create a document, for example create a simple poster; Consider layout and adjust alignment as appropriate; Choose appropriate font size and colour; Understand scaling of images and other objects; Create a simple presentation with simple transitions 	<ul style="list-style-type: none"> collect the data that needs to be analysed, for example use a data collection sheet to collect data enter the collected data into a database or other graphing software produce a graphical representation and make observations. Identify examples of data 	<ul style="list-style-type: none"> Enter commands to create movement or change to make an onscreen turtle move or change the appearance of a sprite or make a sprite move in more than one direction identify solutions to basic problems understand that algorithms can be used to solve problems know that algorithms are implemented on digital devices as programs. create a simple program (algorithm) using visual programming software Understand that computers need instructions Define the term Algorithm 	<ul style="list-style-type: none"> describe different types of networks and explain how a network can be secured. demonstrate how to refine a search using Boolean operators on the web to collect digital content. show use of computers safely and responsibly, explain a range of ways to report unacceptable content and contact when online. identify and understand the importance of a network know what to do when concerned about content or being contacted. 	<ul style="list-style-type: none"> use suitable software to work with pre-loaded images or take still images of objects or models arrange the images into a sequence to develop a narrative and record a voiceover if appropriate, for example use Photo Story to rearrange a sequence of still images or take photographs of an object or person in graduated poses or positions to create an animation.
<p>B1 1c</p>	<ul style="list-style-type: none"> Enter text and insert an image or sound into appropriate presentation software 	<ul style="list-style-type: none"> enter given data in a database or other graphing software produce a graphical representation from given data. 	<ul style="list-style-type: none"> explore a digital device or environment using simple commands, select an existing sprite and use pre-existing commands to make it move or change; talk about what they have done. 	<ul style="list-style-type: none"> find content from the world wide web using a web browser. know the importance of communicating safely and respectfully online, and the need for keeping personal information private. Define E-Safety keywords 	<ul style="list-style-type: none"> look at and talk about examples of still images and moving images, for example look at photographs that the teacher has taken or view a short animated film and talk about what they see;
<p>B2 1b</p>	<ul style="list-style-type: none"> Create a simple phrase or sentence to accompany the image 	<ul style="list-style-type: none"> Know how digital data can be represented in many forms Know the difference between some of these forms and can explain the different ways that they communicate. 	<ul style="list-style-type: none"> Create my own instructions for everyday life Understand what a program "should" do 	<ul style="list-style-type: none"> Identify a real life situation of poor E-safety Identify what a network is identifyhow to use a web browser 	<ul style="list-style-type: none"> take photographs with a digital camera, for example take photographs as part of a topic they are doing in class;
<p>B3 1a</p>	<ul style="list-style-type: none"> Find, select and import text or a familiar image into appropriate software with some help from the teacher 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Follow instructions Use a program 	<ul style="list-style-type: none"> Access the internet Follow instructions to inform an adult of online behaviour 	<ul style="list-style-type: none"> view photographs on screen and talk about them, for example look at their photographs, which the teacher has put on screen, and talk about them.