ICT

**Key Skills**

**Multimedia**

**Programming**

**Online**

**E safety**

**Data**

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| Multimedia | Year 1/2 | Year 3/4 | Year 5/6 |
| **Graphics**  Use ICT to generate ideas for their work.  Use various tools such as brushes, pens, rubber, stamps, shapes.  Save retrieve and print work.  **Text**  Use spacebar, backspace, delete, arrow keys, return.  Start to use two hands when typing  Word process short texts to present.  **Sound recording**  Record sound at and away from a computer.  Use software to record sounds.  Change sounds recorded.  Save, retrieve and edit sounds.  **Video**  Capture video.  Discuss which videos to keep, and which to delete.  Arrange clips to create a short film  Add a title and credits  Presentatuion  Choose a suitable subject and collect some information  Create a mind map of this data  Link appropriate bubbles  Present information to a group. | **Graphics**  Acquire, store and combine images from cameras or the internet for a purpose.  Use the print screen function to capture an image.  Select certain areas of an image and resize, rotate and invert the image.  Edit pictures using a range of tools in a graphics programme.  **Create a story**  Create a new book aimed at a target audience.  Combine text and sound on each page.  Add information about the author and title for publishing.  **Animation**  Plan what they would like to happen in their animation.  Move items within their animation to create movement on playback.  Edit and improve their animation.  **Video**  Capture video for purpose  Choose which clips to keep and which to to discard  Trim and arrange clips to convey meaning.  Add titles, credits, slide transitions, special effects.  **Text**  Get quicker at typing with both hands  Use a variety of font sizes, styles and colours  Align text left, right and centre  **Presentation**  Create a slide and choose a style.  Change the layout of a slide.  Insert a picture/text/graph from the internet or personal files.  Decide upon and use effective transmissions. | **Sound recording**  Collect audio from a variety of resources including own recordings and internet clips  Crate a multi-track recording using effects  Edit and refine their work to improve outcomes  **Animation**  Plan a multi-scene animation including characters, scenes, camera angles and special effects,  Use stop-go animation software (Ican Animate/Hue animation) with an external camera to shoot animation frames.  Adjust the number of photographs taken and the playback rate to improve the quality of the animation.  Publish their animation and use a movie-editing package to edit/refine and add titles.  **Graphics**  Use to create a 3D representation of an existing building.  Use the tools available to design their own fit for purpose building.  Change the style, colour, and texture of the walls.  Change the viewpoint angle whilst designing the building to gain insight to its look from a variety of angles.  **Video**  Storyboard and capture video for a purpose  Plan for the use of special effects and transitions.  Trim, arrange and edit audio levels to improve quality of their outcome.  Export their video  **Presentation**  Work independently to create a multi slide presentation that includes speaker’s notes.  Use transitions and animations to improve the quality of the presentation.  Include sounds and moving graphics in the slides.  Present to a large group or class using the note made. |
| Programming | **Bee-Bots or similar**  Give commands including straight forwards/backwards/turn one at a time.  Explore what happens when a sequence of instructions is given.  Give a set of simple instruction to follow out a task.  Give a set of instructions to form simple geometric shapes.  Improve/change their sequence commands. | **Scratch or similar**  Navigate the Scratch programming environment.  Crate a background and a sprite for a game.  Add inputs to control their sprite.  Use conditional statements within the programme to control the sprite (if…then…) | **Scratch or similar**  Use external triggers and infinite loops to control sprites  Create and edit variables.  Use conditional statements.  Design their own game including sprites, backgrounds, scoring and/or timers.  Use conditional statements, loops, variables and broadcast messages in the game.  The game finishes when a player wins or loses and they must know that they have won or lost.  Evaluate the effectiveness of the game and debug as required. |
| Online | **Internet research**  Talk about websites they have been on.  Explore a website by clicking on the arrows, menus and hyperlinks.  **Emails**  Recognise an email address.  Find the @ key on the keyboard.  Contribute to a class email.  Open and select to reply to an email as a class**.** | **Blogging**  Navigate to view their class blog.  Understand that it can be updated from a range of devices.  Comment on their class blog.  **Internet research**  Type a URL to find a website.  Add websites to a favourite list.  Use a search engine to find a range of media e.g. images, text.  Think of search terms to use linked with questions they wish to answer.  Talk about the reliability of information on the internet e.g. the difference between fact and opinion.  **Emails**  Log into an email account, open and create and send an email.  Attach files to an email.  Download and save files from an email.  Email more than one person and reply to all. | **Internet research**  Use advance search functions in Google (quotations)  Understand websites such as Wikipedia are made by users (link to E-safety)  Use strategies to check the reliability of information (cross check with another source such as books)  Use their knowledge of domain names to aid their judgement of the validity of websites.  **Cloud computing**  Understand files may be saved off their device in ‘clouds’  Upload/download a file to the cloud on different devices.  Understand about syncing files using cloud computing folders.  **Blogging**  Register for a blog, select a URL and navigate to their blog once it is created.  Alter the theme and appearance of their blog once it is created.  Create a new post, save it as a draft and publish it  Embed photos, hyperlinks and videos into posts.  Reorganise posts and remove posts they no longer want.  Like/follow other blogs and build up their blog content over the year. |
| E-safety | **Online safety section from ‘Growing up with Yasmine and Tom.’**  Make decisions about whether or not statements found on the internet are true or not.  Identify devices that can be used to search the internet.  Identify what things count as personal information.  Recognise when inappropriate content is accessed and act appropriately.  Recognise that a variety of devices can be used to connect a number of people.  Consider other people’s feelings on the internet. | **Online safety section from ‘Growing up with Yasmine and Tom.’**  Question the validity of what they see on the internet.  Use a browser address bar not just search box and shortcuts  Think before sending and comment on consequences of sending/posting.  Recognise online behaviours that would be unfair.  Recognise social networking sites and social networking features built into other things (such as online gaming and handheld games consoles.)  Make judgements in order to stay safe whilst communication with others online.  Tell an adult if anything worries them online.  Identify dangers when presented with scenarios, social networking profiles etc.  Articulate examples of good and bad behaviour online. | **Online safety section from ‘Growing up with Yasmine and Tom.’**  Judge what sort of privacy settings might be relevant to reducing different risks.  Judge when and where not to answer a question online.  Be a good online citizen and friend.  Articulate what constitutes good behaviour online.  Use different sources to double check information found online.  Find ‘report’ and ‘flag’ buttons in commonly used sites and name sources of help (Childline, Cybermentors etc.)  Click CEOP button and explain to parents what it is for.  Discuss scenarios involving online risks.  State the source of information found on the internet.  Act as a role model for younger pupils. |
| Data | Know that images give information  Say what a pictogram is showing them.  Put data into a program.  Sort objects and pictures into lists or simple tables.  Make a simple y/n tree diagram to sort information.  Create and search a branching database. | Choose information to put into a data table.  Recognise which information is suitable for their topic.  Design a questionnaire to collect information.  Sort and organise information to use in other ways.  Create and search a branching database.  Create a database from information I have selected. | Create data forms and enter accurately from these.  Know how to check for and spot inaccurate data.  Know which formula to use when I want to change my spreadsheet.  Sort and filter information.  Understand that changing the numerical data effects a calculation. |