

Llangyfelach Primary School



Upper KS2 ICT Scheme.

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ICT MAP – Year 5 & 6

Year 5/6 Cycle A	Blitz	Stargazers	What a Wonderful World	Allotment	Skin Deep	Scream Machine
	Interacting & Collaborating	Producing	Interacting & Collaborating	Data & Computational Thinking	Producing	Data & Computational Thinking
	Propaganda Poster J2E/Word/Pages	Moon Landing Animation iCan Animate	7 Wonders Presentation Playlists	Testing of Soil Moisture Coding - Microbit	Advert Creation Audio Overlay iMovie & Garage Band	Theme Park Budgets Excel
Year 5/6 Cycle B	Off With Her Head	Alchemy Island	Darwin's Delight	Pharaohs	Bend and Flow	Gallery
	Data & Computational Thinking	Data & Computational Thinking	Producing	Producing	Interacting & Collaborating	Interacting & Collaborating
	Monarchy Database J2E Data	Potions Formulae Excel	Darwin Game Creator Scratch	Tomb Planner Room Creator	The River Blog LPS Website	Art Appreciation Sumo Paint Hwbmail

ICT Scheme Upper KS2 - Cycle A

BLITZ	STARGAZER	WONDERFUL WORLD	ALLOTMENT	SKIN DEEP	SCREAM MACHINE
Interacting & Collaborating	Producing	Interacting & Collaborating	Data & Computational Thinking	Producing	Data & Computational Thinking
Propaganda Poster	Stop Motion Animation	7 Wonders Playlist	Coding Sensors	Audio Overlay Advert	Excel Budget Sheet
<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. File Organisation – storage etiquette 3. Research Propaganda Poster 4. Select and save information and media 5. Plan Design of Poster 6. Insert information and media appropriately 7. Use tools for effect: <ul style="list-style-type: none"> • Layers • Bold/Italic • Font selection • Image Manipulate 8. Peer Evaluate via email – including explanations of sources of information. 9. Feedback via email cc Class Teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Learn about Stop Motion Animation 3. Learn the skills required to produce Stop Motion Animation Movie Applications 4. Watch various animations online to collate ideas. 5. Storyboard your animation with clear dialogue 6. Understand different effects: <ul style="list-style-type: none"> • Modelling and Movement • Camera Angles • Backdrops • Onion Skinning • Shots per Second • Editing • Voice Over • Soundtrack • Titles and Credits 7. Finalise and evaluate movies 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Learn about Playlists and their features 3. Research the 7 Wonders of the World 4. Select & save relevant information required for presentations 5. Ensure sources are recorded 6. Plan and design Playlists including references 7. Peer assess Playlists via email and CC class teacher. 8. Edit content and style 9. Present to group or class. 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Learn about block coding and algorithms 3. Introduce to microbits and explore their uses and components 4. Plan and design a scientific enquiry based on plants 5. Use selected platform to develop code needed for soil moisture sensors 6. Develop microbit skills to use in scientific enquiry: <ul style="list-style-type: none"> • Upload onto microbit • Link microbit to soil using crocodile clips and screws 7. Save code onto personal storage files on hwb and share with class teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Research and identify features of cosmetic adverts 3. Choose cosmetic advert to produce/remix 4. Plan narration to overlay the advert 5. Familiarise with iMovie app 6. Record audio and edit the chosen advert 7. Save iMovie onto iPad and upload the file onto personal storage files on hwb and share with class teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to the task 2. Learn about the features of excel spreadsheet: <ul style="list-style-type: none"> • Use of cells • Inputting formula • Colour formatting cells 3. Work through Theme Park Maths tasks 4. When on Task 5, use excel to create and complete the spreadsheet, including the use of formulas 5. Save spreadsheet and store onto personal storage files on hwb and share with class teacher

ICT Scheme Upper KS2 - Cycle B

OFF WITH HER HEAD	ALCHEMY ISLAND	DARWIN'S DELIGHT	PHARAOHS	BEND AND FLOW	GALLERY
Data & Computational Thinking	Data & Computational Thinking	Producing	Producing	Interacting & Collaborating	Interacting & Collaborating
Monarchy Database	Potions Shop Excel	Coding Darwin Game	Tomb Planner	The River Blog	Art Appreciation
<ol style="list-style-type: none"> 1. Discuss citizenship skills related to the task 2. File Organisation – storage etiquette 3. Research information about the Tudor monarchy 4. Select and save information 5. Learn how to use databases: <ul style="list-style-type: none"> • Define fields • Choose format type • Input data on form 6. Use fields to create tables and charts 7. Insert information into databases appropriately 8. Peer assess databases via Apple TV mirroring and amend where necessary 9. Save and share database with class teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to the task 2. Learn about the features of excel spreadsheet (covered in pre-prepared excel spreadsheet tasks): <ul style="list-style-type: none"> • Use of cells • Inputting formula • Colour formatting cells 3. Use prior learning to create spreadsheet based on information provided in a table – using formulas to help answer questions provided 4. Save spreadsheet and store onto personal storage files on hwb and share with class teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Learn about coding algorithms 3. Use pre-made maze game to reinforce algorithm understanding 4. Introduce to Scratch platform, model effects of commands 5. Remix and edit pre-made maze game 6. Plan and design own game including: <ul style="list-style-type: none"> • Choosing new sprite • Designing background • Points system • Timer 7. Save code onto personal storage files on hwb and share with class teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Learn and research about King Tutankhamun's tomb 3. Complete Tomb area activity 4. Introduce to www.roomstyler.com, model how to: <ul style="list-style-type: none"> • Toggle between metric and imperial measurements • Edit the length and width of walls • Add additional rooms • Create doorways 5. Use tomb plan used in area activity to create an accurate representation of King Tut's tomb 6. Allow design of interior 7. Save floor plan to roomstyler account 8. Receive tomb plan via email from class teacher 9. Save onto personal storage file 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Research information about river features 3. Select and save information 4. Research blog style of writing 5. Attend trip, investigating journey of a river 6. Use word processing features: <ul style="list-style-type: none"> • Bold/Italic • Font selection 7. Write a blog about the trip down the river 8. Peer Evaluate via email – including explanations of sources of information. 9. Feedback via email cc Class Teacher 10. Upload blog of trip onto LPS web page 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Learn about sumo paint features: <ul style="list-style-type: none"> • Uploading images • Image duplication • Layering • Gradients • Shadowing • Removing background 3. Practise skills by amending and editing previous artwork 4. Create own artwork by uploading original picture and using sump paint features 5. Download images to computer and upload onto personal storage file. 6. Peer Evaluate via email and Feedback to CC Class Teacher

Citizenship Skills

Year 5	Year 6
<ul style="list-style-type: none"> <input type="checkbox"/> Talk about the impact that the digital content created can have, e.g. think critically about the information shared online; be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. <input type="checkbox"/> Explain why it is important to discuss their use of technology with an adult, e.g. discuss aspects of positive and negative reputation maintain secure passwords on a regular basis and refrain from using the same password more than once. <input type="checkbox"/> Understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons why. <input type="checkbox"/> Cite all sources when researching and explain the importance of this, e.g. create simple lists for the referencing of digital and offline sources; discuss rights and permissions associated with this. <input type="checkbox"/> Understand how to cite a site; that photographs can be edited digitally, and the rights and permissions associated with this. <input type="checkbox"/> Demonstrate appropriate online behaviour and apply a range of strategies to protect self and others from possible online dangers, bullying and inappropriate behaviour, e.g. turn off comments on digital media, block users; know how to deal with and report inappropriate content and misuse. 	<ul style="list-style-type: none"> <input type="checkbox"/> Explain what metadata of a photograph can include, e.g. date, time and location. <input type="checkbox"/> Identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g. apps accessing location. <input type="checkbox"/> Identify secure sites by looking for privacy seals of approval, e.g. https, padlock icon. <input type="checkbox"/> Identify the benefits and risks of giving personal information and device access to different software. <input type="checkbox"/> Understand how and why people use their information and online presence to create a virtual image of them as a user. <input type="checkbox"/> Understand the importance of balancing game and screen time with other parts of their lives, e.g. explore the reasons why they may be tempted to spend more time playing games or find it difficult to stop playing and the effect this has on their health. <input type="checkbox"/> Cite all sources when researching and explain the importance of this, e.g. create simple lists for the referencing of digital and offline sources; discuss rights and permissions associated with this. <input type="checkbox"/> Understand that photographs can be edited digitally and discuss rights and permissions associated with this. <input type="checkbox"/> Demonstrate appropriate online behaviour and apply a range of strategies to protect self and others from possible online dangers, bullying and inappropriate behaviour, e.g. turn off comments on digital media, block users; identify the risks and legal consequences of sending intimate images and content/sexting; recognise language that could be deemed to be offensive (including racist, sexist, homophobic, transphobic) in online activities.

Interacting and Collaborating Skills

Year 5	Year 6
<ul style="list-style-type: none"> <input type="checkbox"/> Exchange online communication in one or more languages, making use of a growing range of available features, e.g. when e-mailing, use search function, manage contacts. <input type="checkbox"/> Show an understanding of the advantages and disadvantages of different forms of communication and when it is appropriate to use each, e.g. explain when video conferencing may be more appropriate than e-mail, and visa versa. <input type="checkbox"/> Explain the pros and cons of using instant messaging in social contexts; talk about purpose and audience. <input type="checkbox"/> Work with others to create an online collaborative project for a specific purpose in one or more languages, sharing and appropriately setting permissions for other group members, e.g. editing, commenting, viewing. <input type="checkbox"/> Back up files to a second or third storage device, e.g. removable storage device, network drive (locally or on-line) <input type="checkbox"/> Search for a specific file <input type="checkbox"/> Upload files from a local drive to online storage. <input type="checkbox"/> Create a written plan using a template provided <input type="checkbox"/> Adjust keywords and search techniques to find relevant information; <input type="checkbox"/> Begin to reference sources used in their work; consider if the content is reliable, e.g. find information using accurate terms, use a range of sources to check validity and understand the impact of incorrect information. 	<ul style="list-style-type: none"> <input type="checkbox"/> Exchange online communication in one or more languages, making use of a growing range of available features, e.g. manage folders within e-mail including using reporting features to filter spam and make use of webcams to facilitate video calls <input type="checkbox"/> Show an understanding of the advantages and disadvantages of different forms of communication and when it is appropriate to use each, e.g. explain when video conferencing may be more appropriate than e-mail, and visa versa; explain the pros and cons of using instant messaging in social contexts; talk about purpose and audience. <input type="checkbox"/> Work with others to create an online collaborative project for a specific purpose in one or more languages, sharing and appropriately setting permissions for other group members, e.g. editing, commenting, viewing. <input type="checkbox"/> Create and share hyperlinks to local, network and online files <input type="checkbox"/> Password-protect a file.

Producing Skills

Year 5	Year 6
<ul style="list-style-type: none"> <input type="checkbox"/> Combine a range of multimedia components to produce an appropriate outcome. <input type="checkbox"/> Create, collect and combine a range of text, image, sound, animation and video for selected purposes. <input type="checkbox"/> Text - Manipulate text boxes by changing background colours, adding frames. <input type="checkbox"/> Images - Add more than one image to a document. Overlap the images and display the required part of each image by reordering the layer on which they sit. <input type="checkbox"/> Audio - Remove original sound from a video and overlay a new narration. <input type="checkbox"/> Video - Combine more than one clip using extreme close up, extreme long shot and point of view shots. <input type="checkbox"/> Explain reasons for layout and content of own work, e.g. evaluate the presentation for audience and appropriateness. <input type="checkbox"/> Comment on reasons for layout. <input type="checkbox"/> Invite feedback/responses from others. <input type="checkbox"/> Create groups and share work between them to allow review of work. 	<ul style="list-style-type: none"> <input type="checkbox"/> Plan work independently before beginning the 'creative work'. <input type="checkbox"/> Extend strategies for finding information; store previous searches and results for future use, e.g. reference through hyperlinks and bookmark a website. www.j2e.com/ysgol-teilo-sant/RobW/3.1+Referencing+year+6.mov/ <input type="checkbox"/> Use a range of software to produce and refine multimedia components. <input type="checkbox"/> select and combine a range of text, image, sound, animation and video to produce an outcome for a selected purpose; use software tools to enhance the outcomes for specific audiences. <input type="checkbox"/> Text - Use superscript and subscript characters. Use both landscape and portrait page orientation, where appropriate; use spellcheckers. <input type="checkbox"/> Images - Resize an image, using a fixed and non-fixed aspect ratio. <input type="checkbox"/> Audio - Record a multitrack audio clip. <input type="checkbox"/> Video - Combine clips, appropriate effects, transitions and titles, including reverse angle shot. <input type="checkbox"/> Explain reasons for layout and content of own work, e.g. evaluate the presentation for audience and appropriateness. <input type="checkbox"/> Ensure output is appropriate for specific purpose. <input type="checkbox"/> Comment on reasons for layout and content. <input type="checkbox"/> Invite feedback/responses from others, e.g. use 'comment' in Word Online/Excel Online for asking questions or adding suggestions. <input type="checkbox"/> Create groups and share work between them to allow review of work.

Data & Computational Thinking Skills

Year 5	Year 6
<ul style="list-style-type: none"> <input type="checkbox"/> Design simple sequences of instructions (algorithms) including the use of Boolean values (i.e. yes/no/true/false), e.g. within the algorithm, demonstrate the correct use of Boolean values giving an either/or response. <input type="checkbox"/> Create, explore and analyse data sets, highlighting relationship within them e.g. using spreadsheets, databases, tables and charts <p>Databases:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interrogate a database using search and sort filters, e.g. sorting on a particular field or record. <input type="checkbox"/> Create a database collect, prepare and create a database ensuring accuracy of entry and editing mistakes. <input type="checkbox"/> Perform simple manipulations of a database, e.g. adding field. <input type="checkbox"/> Perform searches on larger databases and online databases. <p>Spreadsheets:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create a spreadsheet with a variety of data and use simple formulas, e.g. sum, +, -, *, /. <input type="checkbox"/> Explore patterns and relationships and make simple predictions about changing variables in data, e.g. such as selling twice as many apples. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate how programs or processes run by following a sequence of instructions exactly and in order. Learners explain the rules for a number sequence and predict what comes next. <input type="checkbox"/> Demonstrate how an algorithm is useful for representing a solution to a problem through testing. <input type="checkbox"/> Understand that changing instructions can affect or even terminate a process, e.g. moving instructions around in a program could produce unexpected outcomes or cause the program to fail altogether. <input type="checkbox"/> Develop a solution to a problem and demonstrate what would happen if the instructions were in the wrong order. <input type="checkbox"/> Construct, refine and interrogate data sets to test or support an investigation. <p>Database</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create and organise a database with a variety of fields to record results, <input type="checkbox"/> Search using two or more criteria for a specific purpose. <input type="checkbox"/> Add and remove data fields to improve quality. <input type="checkbox"/> Use the results from searches and represent the information appropriately, e.g. carry out relevant searches using =, >, <, >=, <=, <> and represent searched information in relation to task. <p>Spreadsheet</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create spreadsheets with increasing complexities and test hypothesis, e.g. create spreadsheets with simple formulae (+ - * / , sum, max, min, average). <input type="checkbox"/> 'What if' – predict outcome of change of single data items, perform changes and record actual outcome.