

Llangyfelach Primary School



Lower KS2 ICT

Scheme.

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ICT Curriculum Map – Year 3 & 4

Year 3/4 Cycle A	Blood, Bones & Gory Bits	Children of the Revolution	Castles and Dragons	Disaster Zone	Global Gourmet	Predator
	Data & Computational Thinking	Interacting & Collaborating	Producing	Interacting & Collaborating	Data & Computational Thinking	Producing
	Heart Rate Monitor Microbit	Research Presentation PowerPoint/Keynote	Myths & Legends Toontastic 3D	Disaster Recount J2E/Word/Pages	Managing Orders Excel/Spreadsheets	Predators Explain Everything
Year 3/4 Cycle B	Tribe	Robot Rampage	Blue Abyss	Flight Engineers	Travel Agents	Sensoria
	Data & Computational Thinking	Data & Computational Thinking	Interacting & Collaborating	Interacting & Collaborating	Producing	Producing
	Gods Database J2E data	Robot Destruction Probots & Logo	Marine Animal Journey Playlists	How Things Fly PowerPoint/Keynote	Design Advert iMovie	Music Authoring Garage Band Launchpad

ICT Scheme Lower KS2 - Cycle A

Blood, Bones & Gory Bits	Children of The Revolution	Castles & Dragons	Disaster Zone	Global Gourmet	Predator
Data & Computational Thinking	Interacting & Collaborating	Producing	Interacting & Collaborating	Data & Computational Thinking	Producing
Heartrate Microbit	Research Presentation	Myths & Legends Toontastic	Disaster Recount	Managing Orders (Excel)	Explain Everything
<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Discuss file organisation & storage etiquette 3. Learn about coding algorithms 4. Introduce to microbits and explore their uses and components 5. Plan and design a scientific enquiry based on circulation 6. Use selected platform to develop code needed for heartrate monitor 7. Develop microbit skills to use in scientific enquiry. 8. Upload onto microbit 9. 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 about Presentation software and their features: 3. Slides 4. Titles 5. Multimedia Upload 6. Effects 7. Transitions 8. Animations 9. Hyperlinks 10. Research topic 11. Select & save relevant information required for presentations 12. Ensure sources are recorded 13. Plan and design PowerPoint or Keynote including references 14. Peer assess presentation via email and CC class teacher. 15. Edit content and style 16. Present to group or class. 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Study Myths & Legends features 3. Select ideas and storyboard away from iPad 4. Study Toontastic app features and skills 5. Transfer storyboard ideas into App 6. Save and review animations 7. Share with groups or class via Apple TV 8. Export file to video format 9. Share with class teacher and upload to hwb folders 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Research information about global disasters 3. Select and save information 4. Study recount writing features 5. Collaborate on news reports regarding selected event 6. Use word processing features: <ul style="list-style-type: none"> • Bold/Italic • Font selection • Insert media • Text boxes • Text flows • Text Columns 7. Write a recount about the event 8. Peer Evaluate via email – including sources of information. 9. Feedback via email cc Class Teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Discuss file organisation & storage etiquette 3. Learn about the features of excel spreadsheet: 4. Use of cells 5. Inputting formula 6. Set up restaurant order tasks e.g. structuring and compiling food order tables 7. Use excel to create and/or complete spreadsheets, creating charts and graphs from data 8. Extend to include formulae 9. 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. Research facts about Predators 3. Save relevant information and media to iPad storage 4. Study Explain Everything app features and skills: <ul style="list-style-type: none"> • Inserting media • Recording audio • Animating objects • Writing • Typing • Arrows and labelling • Video Conversion 5. Save and review presentation 6. Share with groups or class via Apple TV 7. Export file to video format 8. Share with class teacher and upload to hwb folders

ICT Scheme Lower KS2 - Cycle B

Tribe	Robot Rampage	Blue Abyss	Flight Engineers	Travel Agents	Sensoria
Data & Computational Thinking	Data & Computational Thinking	Interacting & Collaborating	Interacting & Collaborating	Producing	Producing
Gods Database	Probot & Logo	Marine Animal Journey Playlist	How Things Fly Presentation	Advert Design	Music Authoring
<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. File Organisation – storage etiquette 3. Research information about the Gods 4. Select and save information 5. Learn how to use databases: 6. Define fields 7. Choose format type 8. Input data on form 9. Use fields to create tables and charts 10. Insert information into databases appropriately 11. Peer assess databases via Apple TV mirroring and amend where necessary 12. Save and share database with class teacher 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Discuss difference between input and output devices. 3. Learn directional instructions: <i>forward 1, back 1, right 90, left 90, repeat (rpt)</i> 4. Experiment with Logo programming language: <i>fd, bk, rt, lt, cls, home, penup, pendown</i> and the importance of spaces between the command and the number. 5. Experiment with debugging and errors within code 6. Use Pro-Bots to design a robot rampage – Create a town or city for robots to destroy 7. Film, edit and share Movie with class 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. File Organisation – storage etiquette 3. Learn about Playlists and their features: <ul style="list-style-type: none"> • Slides • Titles • Multimedia Upload • Effects • Hyperlinks • Quiz 4. Research topic 5. Select & save relevant information required for presentations 6. Ensure sources are recorded 7. Plan and design Playlists including references 8. Peer assess presentation via email and CC class teacher. 9. Edit content and style 10. Present to group or class. 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. File Organisation – storage etiquette 3. Learn about Presentation software and their features <ul style="list-style-type: none"> • Slides • Titles • Multimedia Upload • Effects • Transitions • Animations • Hyperlinks 4. Research topic 5. Select & save relevant information required for presentations 6. Ensure sources are recorded 7. Plan and design PowerPoint or Keynote including references 8. Peer assess presentation via email and CC class teacher. 9. Edit content and style 10. Present to group or class. 	<ol style="list-style-type: none"> 1. Discuss citizenship skills related to task 2. Research and identify features of travel agent adverts 3. Choose style of advert 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 task 2. Experiment with Garage Band 3. Smart Drums – Use dice to randomise 4. Show how this is recorded onto the timeline 5. Add several instruments 6. Experiment with the Auto play feature 7. Create new project demonstrating use of Audio Recorder 8. Use effects: <ul style="list-style-type: none"> • Monster, robot, small room, etc 9. Add more AR tracks <ul style="list-style-type: none"> • Repeat Tracks • Move & Trim tracks • Loops & Dragging 10. Export the Sensoria project and embed or link to school website

Citizenship Skills

Year 3	Year 4
<ul style="list-style-type: none"> <input type="checkbox"/> Be aware of simple rules for sharing images and data, e.g. understand that photographs cannot be taken of others or shared online without seeking permission first. <input type="checkbox"/> use strategies for creating and keeping strong, secure passwords, e.g. three to four random words joined together or using capitalisation and numbers. <input type="checkbox"/> acknowledge age restrictions and suitability of digital media and devices, e.g. locate and begin to understand PEGI ratings and age restriction guidelines. <input type="checkbox"/> identify physical and emotional effects of playing/watching inappropriate content/games. <input type="checkbox"/> Explain how giving credit, is a sign of respect. Explain when and how it is acceptable to use the work of others. <input type="checkbox"/> Explain the similarities and differences between offline and online communications, e.g. follow the same rules when communicating face-to-face and online; discuss how online communication can be misinterpreted. <input type="checkbox"/> Compose clear and appropriate messages in online communities. <input type="checkbox"/> Identify different forms of bullying, including cyberbullying, and suggest strategies for dealing with it, e.g. screenshot, block, report. 	<ul style="list-style-type: none"> <input type="checkbox"/> Understand how to protect themselves from online identity theft, e.g. security symbols such as a padlock, phishing, scam websites. <input type="checkbox"/> Be aware that information put online leaves a digital footprint or trail, e.g. to aid identity theft. <input type="checkbox"/> Identify risks and benefits of installing software, e.g. identify possible risks of installing free and paid for software, for instance free software could download viruses to the device/computer. <input type="checkbox"/> Identify the positive and negative influences of technology on the environment, e.g. consider the different ways free time is spent and begin to find a balance between active learning and digital activities. <input type="checkbox"/> Explain the importance of balancing game and screen time with other parts of their lives. <input type="checkbox"/> Understand that copying the work of others and presenting it as their own is called 'plagiarism', e.g. begin to consider consequences of plagiarism. <input type="checkbox"/> Recognise watermarks and copyright symbols, e.g. recognise watermarks on a variety of media, know the reasons for using watermarks and explore how watermarks can be added in different software. <input type="checkbox"/> Identify actions to report and prevent cyberbullying, e.g. use strategies such as not replying, reporting and saving evidence <input type="checkbox"/> Identify appropriate behaviour when participating or contributing to collaborative online projects for learning, e.g. devise a set of rules.

Interacting and Collaborating Skills

Year 3	Year 4
<ul style="list-style-type: none"> <input type="checkbox"/> Exchange simple online communication in one or more languages, e.g. e-mail or video call. <input type="checkbox"/> Explain the advantages of communicating electronically, e.g. time saving (especially covering large distances almost instantly), resource saving, cost effectiveness, able to have multiple users from different countries communicating simultaneously, content is easily shared/saved/stored/tagged. <input type="checkbox"/> Use an online collaborative platform to create or edit a file in one or more languages, e.g. word processing, presenting tools, spreadsheets. <input type="checkbox"/> Save files to a specific location using an appropriate file name, e.g. select a file name that would be searchable at a later date. <input type="checkbox"/> Understand the importance of saving work periodically to avoid losing work. <input type="checkbox"/> Use identified success criteria as a plan for completion of digital task. <input type="checkbox"/> Develop strategies for finding information using different keywords and techniques, e.g. follow a step-by-step set of instructions on how to search effectively for information relevant to a task and select an appropriate website from skimming through a small number of sources. 	<ul style="list-style-type: none"> <input type="checkbox"/> Exchange online communication with other learners in one or more languages, making use of a growing range of available features, e.g. send e-mails with attachments and change formatting (where device allows). <input type="checkbox"/> Manage an online file, adding and responding to comments in one or more languages, e.g. create, share and edit an online file engaging in reflective discussion with teacher and/or peers. <input type="checkbox"/> Be aware of different types of storage, e.g. local, network, online, removable. <input type="checkbox"/> Manage files and folders locally or online, e.g. move files to a different folder. <input type="checkbox"/> Develop own success criteria to plan a digital task. <input type="checkbox"/> Find relevant information using different keywords and search techniques. <input type="checkbox"/> Select an appropriate website from search results and begin to consider if the content is reliable.

Producing Skills

Year 3	Year 4
<ul style="list-style-type: none"> <input type="checkbox"/> Create and edit multimedia components <input type="checkbox"/> Organise a range of text, image, sound, animation and video for selected purposes. <input type="checkbox"/> Text - Format text using Bold, Italic, Underline. Use bullet points to create a list. <input type="checkbox"/> Images - Import an image. Add an effect, frame and shadow, as appropriate, to enhance a document. <input type="checkbox"/> Audio - Add sound clips at appropriate points in a presentation. <input type="checkbox"/> Video - Create a simple stop-frame animation and add a title. <input type="checkbox"/> Give an opinion about their own work and suggest improvements, e.g. spot mistakes and use editing tools to improve their work. 	<ul style="list-style-type: none"> <input type="checkbox"/> Create and modify multimedia components using a range of software. <input type="checkbox"/> Modify and present a range of text, image, sound, animation and video for selected purposes. <input type="checkbox"/> Manipulate text boxes on screen, by moving, resizing and duplicating. Use tables to structure information in a document or presentation. <input type="checkbox"/> Images - Digitise hand-drawn pictures and include in a presentation. <input type="checkbox"/> Audio - Record and edit audio clips. <input type="checkbox"/> Video - Simple editing (trimming) of video, which includes long shot, mid shot, close up. Use a greenscreen to place learners in front of different backdrops. <input type="checkbox"/> Give an opinion about their own and others' work and suggest improvements independently and collaboratively, e.g. check through their work and correct their spelling/use a spellchecker; decide if the red line underneath words point to misspelt words; use suggested spellings where appropriate. <input type="checkbox"/> Give reasons for choices made, e.g. discuss the benefits and limitations of a spellchecker especially with Welsh language documents.

Data & Computational Thinking Skills

Year 3	Year 4
<ul style="list-style-type: none"> <input type="checkbox"/> Represent a solution symbolically, e.g. the order of waking up, through a diagram or flowchart, and find the variables in the solution. <input type="checkbox"/> Detect and correct mistakes in sequences of instructions, e.g. identify mistakes in a solution that would cause it to fail (debug). <input type="checkbox"/> Identify repetitions or loops in a sequence, e.g. identify where to shorten a set of instructions by repeating steps, for instance when learning a new song. <input type="checkbox"/> Learners will work out a simple algorithm, a set of instructions on how to share objects, and compare the similarities and differences between them. <input type="checkbox"/> Give a set of instructions in the wrong order, e.g. watering a plant, melting chocolate or sequencing a story in the wrong order. <input type="checkbox"/> An unplugged activity where learners create handclapping, hand tutting or hand jive sequences of movements. Learners will detect and correct a set of instructions. <input type="checkbox"/> Collect data, enter and analyse in given formats e.g. table, charts, databases and spreadsheets. <p>Database</p> <ul style="list-style-type: none"> <input type="checkbox"/> Search and sort a given and online database following a simple line of enquiry, e.g. deciding which data needs collecting and giving reasons for sorting. <p>Spreadsheet</p> <ul style="list-style-type: none"> <input type="checkbox"/> Use a spreadsheet to store and interrogate information, e.g. add information to a spreadsheet, discuss the information and begin to answer specific questions. <input type="checkbox"/> Create a graph using a spreadsheet. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate how part of a solution might need repetition. <input type="checkbox"/> Represent a simple solution in a flowchart that contains a looping element, e.g. identify where a repeat or loop may work in a flowchart, for instance traffic lights, and select variables. <input type="checkbox"/> Model a variety of simple scenarios involving the preparation of food/drinks that includes repetition, where instructions for making a sandwich for one person adapts to making sandwiches for four people. <input type="checkbox"/> Could observe a set of traffic lights and note down the pattern of the lights and then different states (e.g. red light on for 15 seconds) using timer variable for seconds. This could then be modelled in a flow chart. <input type="checkbox"/> Learners learn about repetition (loops) by creating programs to draw patterns made of simple shapes (using scratch). <input type="checkbox"/> Create data sets and extract information from them with tables, charts, spreadsheets and databases. <p>Database</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create a simple database, e.g. identifying records, fields, etc., using prepared software. <input type="checkbox"/> Perform simple searches and extract information on branching databases, e.g. simple search on branching database to answer questions and check statements. <input type="checkbox"/> Add and amend records in databases, e.g. fields. <p>Spreadsheet</p> <ul style="list-style-type: none"> <input type="checkbox"/> Extract information from spreadsheet to answer specific questions. <input type="checkbox"/> Add information to a given spreadsheet.

