Brecknock School Computing Overview

	Computer Science	Information Technology	Digital Literacy
1	Unplugged Lego Activity Beebots -Objectives: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions -create and debug simple programs -use logical reasoning to predict the behaviour of simple programs	2Simple make a poster related to transport (2Draw) Objectives: -use technology purposefully to create, organise, store, manipulate and retrieve digital content	Using Websites Safely; Searching for infomation; Privacy Security; Sending Emails https://digital-literacy.org.uk/curriculum-overview/ Objectives: -recognise common uses of information technology beyond school -use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies
2	Beetbots- London maps Scratch Jnr- explorative Objectives: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions -create and debug simple programs -use logical reasoning to predict the behaviour of simple programs	2Simple- data (2Calculate) Objectives: use technology purposefully to create, organise, store, manipulate and retrieve digital content	Staying Safe Online- digital footprint; Cyberbullying; Keyword searching; Reliability of information https://digital-literacy.org.uk/curriculum-overview/ Objectives: -recognise common uses of information technology beyond school -use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies
3	Scratch Jnr- simple animations Scratch- explorative Objectives: -design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -use sequence, selection, and repetition in programs; work with variables and various forms of input and output -use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Word Book Creator Objectives: -Use search technologies effectively -Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Powerful Passwords; How to communicate online; Things for Sale; Show Respect Online; Writing Good Emails https://digital-literacy.org.uk/curriculum-overview/ Objectives: -Understand the opportunities [networks] offer for communication and collaboration -Be discerning in evaluating digital content Use technology safely, respectfully - and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
4	Scratch-/Water Cycle (additional-computer networks and search engines basic) Objectives: -design, write and debug programs that accomplish specific goals, including controlling or simulating	Word Publisher Objectives: -Use search technologies effectively	Responsible and respectful digital citizens; Privacy Security-How can you protect yourself from online identity theft?; Cyberbullying- The Power of Words; How to search using keywords; Plagiarism

	physical systems; solve problems by decomposing them into smaller parts -use sequence, selection, and repetition in programs; work with variables and various forms of input and output -use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (Additional Basic coverage) - understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration - Appreciate how [search] results are selected and ranked	-Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	https://digital-literacy.org.uk/curriculum-overview/ Objectives: -Understand the opportunities [networks] offer for communication and collaboration -Be discerning in evaluating digital content -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
5	Scratch Space Maze Game Computer Networks in detail Objectives: -design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -use sequence, selection, and repetition in programs; work with variables and various forms of input and output -use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs - understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	Publishing data and graphs Objectives: -Use search technologies effectively -Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Strong Passwords; Digital Citizens Pledge; Privacy Security- spam; citing sources when researching; photo alteration- distorting our perceptions of beauty and health. https://digital-literacy.org.uk/curriculum-overview/ Objectives: -Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
6	Scratch Maths Quiz Search engines in details Objectives: -design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -use sequence, selection, and repetition in programs; work with variables and various forms of input and output -use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs - Appreciate how [search] results are selected and ranked	Powerpoint Objectives: -Use search technologies effectively -Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Talking Safely Online- private information; Good/Bad Digital citizenship; Privacy Rules - protect their private information, secure sites, sharing info; Cyberbullying – strategies; Self-Image – media and stereotypes https://digital-literacy.org.uk/curriculum-overview/ Objectives: -Understand the opportunities [networks] offer for communication and collaboration -Be discerning in evaluating digital content -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Overview / Skills Summary

	KS1	KS2
CS	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web Appreciate how [search] results are selected and ranked
IT	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
DL	Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact