Darwen St James CE Primary Academy Computing Curriculum 2021/22

	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 5 Weeks 4 Days	Spring 2 6 Weeks 4 days	Summer 1 5 Weeks 4 days	Summer 2 5 Weeks 3 days
Year 1	Using Cromebooks - logging on/off and accessing PM **2 weeks** Online safety 1:1 **4 weeks**	Grouping and sorting 1:2 **2 weeks** Pictograms 1:3 **3 weeks** Christmas Card Competition	Lego builders 1:4 **3 weeks** Maze explorers 1:5 **3 weeks** ==Safer Internet Day Tues 8/2/22==	Coding 1:7 **6 weeks**	Animated stories 1:6 **5 weeks**	Spreadsheets 1:8 **3 weeks** Technology outside school 1:9 **2 weeks**

National Curriculum Objective	Strand	Units
Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	Computer Science	1.4 1.5.1.7
Create and debug simple programs.	Computer Science	1.5 1.7
Use logical reasoning to predict the behaviour of simple programs.	Computer Science	1.5 1.7
Use technology to purposefully create, organise, store, manipulate and retrieve digital content.	Information Technology	1.2 1.3 1.6 1.7 1.8
Recognise common uses of information technology beyond school.	Digital Literacy	1.9
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.	Digital Literacy	1.1

	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 5 Weeks 4 Days	Spring 2 6 Weeks 4 days	Summer 1 5 Weeks 4 days	Summer 2 5 Weeks 3 days
Year 2	Online safety 2.2 **3 weeks** Effective searching 2.5 **3 weeks**	Spreadsheets 2.3 **4 weeks** Making music 2.7 **3 weeks** Christmas Card Competition	Questioning 2.4 **5 weeks** ==Safer Internet Day Tues 8/2/22==	Coding 2.1 **5 weeks**	Presenting ideas 2.8 **4 weeks**	Creating pictures 2.6 **5 weeks**

National Curriculum Objective	Strand	Units
Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	Computer Science	2.1
Create and debug simple programs.	Computer Science	2.1
Use logical reasoning to predict the behaviour of simple programs.	Computer Science	2.1
Use technology to purposefully create, organise, store, manipulate and retrieve digital content.	Information Technology	2.3 2.4 2.5 2.6 2.7 2.8
Recognise common uses of information technology beyond school.	Digital Literacy	2.5
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.	Digital Literacy	2.2

	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 5 Weeks 4 Days	Spring 2 6 Weeks 4 days	Summer 1 5 Weeks 4 days	Summer 2 5 Weeks 3 days

| Year 3 | Online safety 3.2
3 weeks

Spreadsheets 3.3
3 weeks | Coding 3.1
6 weeks

Christmas Card Competition | Touch typing 3.4
4 weeks
==Safer Internet Day Tues 8/2/22== | Branching databases 3.6
4 weeks

Simulations 3.7
3 weeks | Animated Stories 3.6
6 weeks | Graphing 3.8
3 weeks |

National Curriculum Objective	Strand	Units
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Computer Science	3.1
Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Computer Science	3.1
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Computer Science	3.1
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.	Computer Science	3.5
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Information Technology	
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.	Information Technology	3.4 3.5 3.6 3.7 3.8

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Digital Literacy	3.2 3.5

	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 5 Weeks 4 Days	Spring 2 6 Weeks 4 days	Summer 1 5 Weeks 4 days	Summer 2 5 Weeks 3 days
Year 4	Online safety 4.2 **4 weeks** Hardware investigators 4.8 **2 weeks**	Coding 4.1 **6 weeks** Christmas Card Competition	Spreadsheets 4.3 **5 weeks** Safer Internet Day Tues 8/2/22	Logo 4.5 **4 weeks** Animation 4.6 **3 weeks**	Writing for different audiences 4.4 **5 weeks**	Effective searching 4.7 **3 weeks**

National Curriculum Objective	Strand	Units
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Computer Science	4.1 4.5
Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Computer Science	4.1 4.5
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Computer Science	4.1 4.5
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.	Computer Science	4.2 4.7 4.8
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Information Technology	4.7
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.	Information Technology	4.1 4.3 4.4 4.6 4.9

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Digital Literacy	4.2

	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 5 Weeks 4 Days	Spring 2 6 Weeks 4 days	Summer 1 5 Weeks 4 days	Summer 2 5 Weeks 3 days
Year 5	Online safety 5.2 **3 weeks** Databases 5.4 **4 weeks**	Coding 5.1 **6 weeks** Christmas Card Competition	Game creator 5.5 **5 weeks** <mark>Safer Internet Day Tues 8/2/22</mark>	Spreadsheets 5.3 **6 weeks**	Modelling 5.6 **4 weeks**	Concept maps 5.7 **4 weeks**

National Curriculum Objective	Strand	Units
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Computer Science	5.1 5.5
Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Computer Science	5.1
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Computer Science	5.1
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.	Computer Science	5.2
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Information Technology	Various search technologies are taught more specifically in unit 4.7. Children will utilise this knowledge in many internet based sessions in all areas of the curriculum.
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.	Information Technology	5.1 5.3. 5.4 5.5 5.6 5.7 5.8

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Digital Literacy	5.2 and discussed in other units.

	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 5 Weeks 4 Days	Spring 2 6 Weeks 4 days	Summer 1 5 Weeks 4 days	Summer 2 5 Weeks 3 days
Year 6	Online safety 6.2 **3 weeks** Blogging 6.4 **4 weeks**	Coding 6.1 **6 weeks** Christmas Card Competition	Spreadsheets 6.3 **5 weeks** ==Safer Internet Day Tues 8/2/22==	Quizzing 6.7 **6 weeks**	Text adventures 6.5 **5 weeks**	Networks 6.6 **3 weeks**

National Curriculum Objective	Strand	Units
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Computer Science	6.1 6.5 6.9
Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Computer Science	6.1 6.5
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Computer Science	6.1 6.5 6.9
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.	Computer Science	6.2 6.4 6.6
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Information Technology	6.2
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.	Information Technology	6.1 6.3 6.4 6.5 6.7 6.9
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Digital Literacy	6.2 6.4