Wellesbourne Primary and Nursery School Computing Curriculum

Year	Autumn		Spring		Summer	
1	**Computer detective 1** The Mouse.	**Computer detective 2** The Keyboard.	**Kodable** Simple coding, instructions.	**Photography** The world around us.	**GarageBand** Creating your own song.	**Animation** The seasons**.**
2	**Touch typing 1** The Home Row.	**Lightbot** Simple coding and procedures.	**Touch typing 2** The Top Row.	**Animation** Great fire of London.	**Touch Typing 3** The Bottom Row.	**Photography** Nature.
3	**Photography** British Artists.	**Tynker** Programming 101.	**Animation** New Zealand folklore.	**Podcasting** Stone age – Iron Age.	**Presentation** Monet.	**Garageband** The Blues.
4	**Photography** Portrait and landscape.	**Code Combat** Python coding.	**Garage Band** Samba.	**Presentation** The Tudors.	**Animation** Normans.	**Podcast** USA.
5	**Garage band** Earthquakes and volcanoes.	**Scratch** Java script coding.	**Photography** Macro Lenses.	**Podcast** Rainforest.	**Presentation** Life Cycles.	**Animation** Islam.
6	**Presentations** Maya.	**Kodu** Creating your own game.	**Podcast** Transitions and feelings.	**Animations** Vikings.	**Photography** Memories.	**E-Safety** Creating board games.

Key Stage 1 Computing coverage.	
Year 1 Coverage:	
Units	**Links to national Curriculum and Cross-curricular.**
Computer Detective 1	• **IT** - Pupils will be learning how each individual part of the computer works and how to control it properly • **IT -** Focusing on the mouse pupils will be using games to improve their control. • **DL** - Pupils will be using the games responsibly and as they are online, will be gaining responsibility for their online safety. - ***This links in with PE and gaining the use of fine motor skills.***
Computer Detective 2	• **IT –** Pupils will be moving their focus to the keyboard this half term. • **DL –** Through various games pupils will be becoming more familiar as to where each letter is on the keyboard. • **DL** - Pupils will be using the games responsibly and as they are online, will be gaining responsibility for their online safety **-** ***this has links to English, as the term progresses pupils will be using games that will have them typing simple CVC words as well as increasing their typing speed.***
Kodable	• **CS –** understand what algorithms are; how they are implemented as programs through Kodable • **CS –** Create and debug simple programs. • **DL –** Pupils will be learning how to keep their personal information safe online as they will have their own logins to save progress.
Photography	• **IT –** Pupils will be learning how to save their work using devices such as iPads and tablets in their own individual folder. • **IT –** Pupils will be learning how to use the computer to create a collage of their pictures. ***-This topic links with art and design technology.***
Garageband	• **DL –** Pupils will be learning about how music technicians work and how they compose and create music using technology. • **IT -** Pupils will learn how to save their music on the iPads and how it is stored. - ***This topic links with music.***
Animation	• **DL –** Pupils will be learning how simple animations are made and how this is used in the movie industry. • **IT –** Pupils will be learning how animation works by animating inanimate objects. ***- This topic links with geography and design technology***.

Key Stage 1 Computing coverage.	
Year 2 Coverage:	
Units	**Links to national Curriculum and Cross-curricular.**
Touch Typing 1	• **DL –** Pupils will be using touch typing to improve their own computer literacy skills learning to use each hand and fingers independently from each other for each letter. • **DL –** pupils will learn that touch typing is a vital skill that can improve their productivity not only in school but in the wider world. - ***This topic has links with English and maths due to spelling out words and the speed they type which will slowly increase over time***.
Lightbot	• **CS –** Understand what an algorithm is; how it can be used to program characters. • **CS -** Create and debug simple algorithms to solve levels. • **CS -** Use logic to try and predict what a simple algorithm will do.
Touch Typing 2	• **DL –** Pupils will be using touch typing to improve their own computer literacy skills learning to use each hand and fingers independently from each other for each letter. - This will now be focusing on the top and home row. Consolidating previous learning and building on it. • **DL –** pupils will learn that touch typing is a vital skill that can improve their productivity not only in school but in the wider world. - ***This topic has links with English and maths due to spelling out words and the speed they type which will slowly increase over time.***
Animation	• **DL –** Pupils will be learning how simple animations are made and how this is used in the movie industry. • **IT –** Pupils will be learning how animation works by animating inanimate objects. - ***This topic links with history and design technology***
Touch Typing 3	• **DL –** Pupils will be using touch typing to improve their own computer literacy skills learning to use each hand and fingers independently from each other for each letter. • **DL –** pupils will learn that touch typing is a vital skill that can improve their productivity not only in school but in the wider world. - ***This topic has links with English and maths due to spelling out words and the speed they type which will slowly increase over time.***
Photography	• **IT –** Pupils will be learning how to save their work using devices such as iPads and tablets in their own individual folder. • **IT –** Pupils will be learning how to use the computer to create a collage of their pictures. ***- This topic links with Science***.

Key Stage 2 Computing coverage.	
Year 3 Coverage:	
Units	**Links to national Curriculum and Cross-curricular.**
Photography	• **IT –** Pupils will be learning how to save their work using a shared folder with class codes and initials. • **IT –** Pupils will be learning how to use the computer to create an imitation of an artist's work. • **DL –** Pupils will be learning to use the internet to research their artist and images of their work. - ***This has links to Art***
Tynker	• **CS –** Understand what an algorithm is; how it can be used to program characters and backgrounds. • **CS -** Create and debug simple algorithms. Learn to use loops and conditionals to make their codes simpler • **CS -** Use logic to try and predict what a simple algorithm will do.
Animation	• **DL–** Pupils will be learning how animations are made and how this is used in the movie industry. • **IT –** Pupils will be learning how animation works by animating characters to create a story. • **IT –** Pupils will be using New Zealand folklore to recreate a story using computing and animation. - ***This topic links with Geography and English.***
Podcasting	• **DL –** Pupils will be learning about how podcasting came about and how this has developed the radio industry. • **DL –** Pupils will be using the internet to research their topic and create a short script. • **IT –** How the radio industry has moved forward using technology. - ***This has links with history, music and develops English skills.***
Presentation	• **DL –** We will be discussing how presentations can be used in and around the world of work and not only in schools. • **DL –** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • **DL** - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. - ***This has links to Art and History***
Garageband	• **CS -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output • **CS -** select, use and combine a variety of software on a range of digital devices to design a piece of music • **DL -** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content – ***this links with Music and SMSC***

Key Stage 2 Computing coverage.	
Year 4 Coverage:	
Units	**Links to national Curriculum and Cross-curricular.**
Photography	• **IT –** Pupils will be learning how to save their work using a shared folder with class codes and initials. • **IT –** Pupils will be learning how to use the computer to create an imitation of an artist's work. • **DL –** Pupils will be learning to use the internet to research their artist and images of their work. - ***This has links to Art, Geography and SMSC***
Code Combat	• **CS -** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • **CS -** Use sequence, selection, and repetition in programs. • **CS**- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. ***– This has links to Maths and English***
Garageband	• **CS -** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • **CS -** Select, use and combine a variety of software on a range of digital devices to design a piece of music. • **DL -** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content – ***This links to Music, Science and Geography***
Presentation	• **DL –** We will be discussing how presentations can be used in and around the world of work and not only in schools. • **DL –** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • **DL** - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. - ***This has links to History and English***
Animation	• **DL–** Pupils will be learning how animations are made and how this is used in the movie industry. • **IT –** Pupils will be learning how animation works by animating characters to create a story. • **IT –** Pupils will be using the internet to research and to recreate a story using computing and animation. - ***This topic links to Geography and English***
Podcast	• **DL –** Pupils will be learning about how podcasting came about and how this has developed the radio industry. • **DL –** Pupils will be using the internet to research their topic and create a short script. • **IT –** How the radio industry has moved forward using technology. ***This has links to Geography, Music and English.***

Key Stage 2 Computing coverage.	
Year 5 Coverage:	
Units	**Links to national Curriculum and Cross-curricular.**
Garageband	• **CS -** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • **CS -** Select, use and combine a variety of software on a range of digital devices to design a piece of music. • **DL -** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • **DL -**Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact ***This links to Music, Science and Geography***
Scratch	• **CS -** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • **CS -** Use sequence, selection, and repetition in programs. • **CS**- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. • **CS –** How do computer games work? ***– This has links to Maths and English***
Photography	• **IT –** Pupils will be learning how to save their work using a shared folder with class codes and initials. • **IT –** Pupils will be learning how to use the computer to create an imitation of an artist's work. • **CS –** How has technology developed to allow us to create and take pictures such as this? - ***This has links to Art, Geography and Science***
Podcast	• **DL –** Pupils will be learning about how podcasting came about and how this has developed the radio industry. • **DL –** Pupils will be using the internet to research their topic and create a short script. • **IT –** How the radio industry has moved forward using technology. • **CS -** 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 ***This has links to Geography, Music and English.***
Presentation	• **DL –** We will be discussing how presentations can be used in and around the world of work and not only in schools. • **DL –** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • **DL** - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. - ***This has links to Science and English***
Animation	• **DL–** Pupils will be learning how animations are made and how this is used in the movie industry. • **IT –** Pupils will be learning about the different types of animation available. • **IT –** Pupils will be learning how animation works by animating drawings on whiteboards to create a story. • **IT –** Pupils will be using the internet to research and to recreate a story using computing and animation. - ***This topic links to Religious studies and English***

Key Stage 2 Computing coverage.	
Year 6 Coverage:	
Units	**Links to national Curriculum and Cross-curricular.**
Presentation	• **DL –** We will be discussing how presentations can be used in and around the world of work and not only in schools. • **DL –** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • **DL** - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. • **IT –** How to save your work and be able to find it next time. - ***This has links to History and English***
Kodu	• **CS -** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • **CS -** Use sequence, selection, and repetition in programs. • **CS**- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. • **CS –** How do computer games work? • **CS -** 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 ***– This has links to Maths and English***
Podcast	• **DL –** Pupils will be learning about how podcasting came about and how this has developed the radio industry. • **DL –** Pupils will be using the internet to research their topic and create a short script. • **IT –** How the radio industry has moved forward using technology. • **CS -** 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 ***-This has links to SMSC, Music and English.***
Animation	• **DL–** Pupils will be learning how animations are made and how this is used in the movie industry. • **IT –** Pupils will be learning about the different types of animation available. • **IT –** Pupils will be learning how animation works by animating characters to create a story using a green screen. • **IT –** Pupils will be using the internet to research and to recreate a story using computing and animation. - ***This topic links to History and English***
Photography	• **IT –** Pupils will be learning how to save their work using a shared folder with class codes and initials. • **IT –** Pupils will be learning how to use the computer to create an imitation of an artist's work. • **DL –** Pupils will be learning how to transfer and upload pictures from one digital source to another. • **CS –** How has technology developed to allow us to create and take pictures such as this? - ***This has links to Art, SMSC***
E-Safety	• **IT -** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • **CS -** 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** - 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 • **DL -** Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact