**National curriculum coverage for each subject-**

**Computing 2021-2022**

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|  | **Early Years** | **Key Stage 1** | **Lower Key Stage 2** | **Upper Key Stage 2** |
| **Autumn 1 – Computing Systems and Networks** | **Reception****PSED 3-4** Increasingly follow rules, understanding why they are important.**UTW 3-4** Explore how things work.**PD Reception** Develop their small motor skills so that they can use a range of tools competently, safely and confidently.**EA&D Reception** Explore, use and refine a variety of artistic effects to expresstheir ideas andfeelings. | **Y1/Y2 -** use technology purposefully to create, organise, store, manipulate and retrieve digital content.**Y1/Y2 -** recognise common uses of information technology beyond school.**Y1/Y2 -** 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. | **Y3 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output.**Y3/Y4 -** 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.**Y3/Y4 -** 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.**Y4 –** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.**Y4 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | **Y5/Y6 -** design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.**Y5/Y6 -** 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.**Y5/Y6 -** 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.**Y5 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output. **Y5 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.**Y6 –** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. |
| **Autumn 2 – Creating Media** | **Little Acorns****Physical development 0-3 years**Develop manipulation and control**Great Oak****PSED 3-4 years**Remember rules without needing an adult to remind them**Physical development 3-4 years**Match their developing physical skills to tasks and activities in the setting**Reception****PSED Reception**Show resilience and perseverance in the face of a challenge**Physical development** Develop their small motor skills so that they can use a range oftools competently, safely and confidently**EA&D** Explore, use and refine a variety of artistic effects to expresstheir ideas and feelings. | **Y1/Y2 -** use technology purposefully to create, organise, store, manipulate and retrieve digital content.**Y2 -** recognise common uses of information technology beyond school. | **Y3/Y4 -** 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.**Y4 –** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.**Y4 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | **Y5/Y6 -** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.**Y5/Y6 -** 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.**Y5/Y6 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| **Spring 1 –** **Programming A** | **Little Acorns** **(0-3 Years)****C/L** - Listen and respond to simple instructions.**Literacy** - Enjoy drawing freely.Mathematics - Notice patterns and arrange things in patterns.**UTW** - Repeat actions that have an effect.**Great Oak** **(3-4 Years)****PD** - Increasingly be able to use and remember sequences and patterns of movements which are related to music and rhythm.**Mathematics** - Notice patterns and arrange things in patterns.**Reception****PSED** - Increasingly follow rules, understanding why they are important.**PD** - Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.**EAD** - Explore, use and refine a variety of artistic effects to express their ideas and feelings. | **Y1/Y2 -** understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.**Y1/Y2 -** create and debug simple programs.**Y1/Y2 -** use logical reasoning to predict the behaviour of simple programs.**Y1 -**recognise common uses of information technology beyond school. | **Y3/Y4 -**design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.**Y3/Y4 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output. **Y3/Y4 -** use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.**Y3/Y4 -** 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. | **Y5/Y6 -**design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.**Y5/Y6 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output. **Y5/Y6 -** use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.**Y5/Y6 -** 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.**Y6 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| **Spring 2 –****Data and Information** | **Little Acorns** **(0-3 Years)****C/L** - Listen and respond to simple instructions.**Literacy** - Enjoy drawing freely.Mathematics - Notice patterns and arrange things in patterns.**UTW** - Repeat actions that have an effect.**Great Oak** **(3-4 Years)****PD** - Increasingly be able to use and remember sequences and patterns of movements which are related to music and rhythm.**Mathematics** - Notice patterns and arrange things in patterns.**Reception****PSED** - Increasingly follow rules, understanding why they are important.**PD** - Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.**EAD** - Explore, use and refine a variety of artistic effects to express their ideas and feelings. | **Y1/Y2 -** use technology purposefully to create, organise, store, manipulate and retrieve digital content.**Y1-** recognise common uses of information technology beyond school.**Y2 -** 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. | **Y4 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output. **Y3/Y4 -** 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. | **Y5 -** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.**Y5/Y6 -** 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. |
| **Summer 1 –** **Creating Media** | **Little Acorns****C&L 0-3**Listen and respond to simple instructions.**PD 0-3**Develop manipulation and control.**UTW 0-3**Repeat actions that have an effect.**Great Oak****PSED 3-4**Remember rules without needing an adult to remind them.**UTW 3-4**Explore how things work.**Reception****PSED Reception**Show resilience and perseverance in the face of challenge.**UTW 3-4**Explore how things work. | **Y1/Y2 -** use technology purposefully to create, organise, store, manipulate and retrieve digital content. **Y1 -** 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. | **Y3/Y4 –** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.**Y3/Y4 -** 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.**Y4 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | **Y5/Y6 -** 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.**Y6 -** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| **Summer 2 –****Programming B** | **Little Acorns****C&L 0-3**Listen and respond to simple instructions.**PD 0-3**Develop manipulation and control.**UTW 0-3**Repeat actions that have an effect.**Great Oak****PSED 3-4**Remember rules without needing an adult to remind them.**UTW 3-4**Explore how things work.**Reception****PSED Reception**Show resilience and perseverance in the face of challenge.**UTW 3-4**Explore how things work. | **Y1/Y2 -** understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.**Y1/Y2 -** create and debug simple programs.**Y1/Y2 -** use logical reasoning to predict the behaviour of simple programs.**Y1/Y2 -** use technology purposefully to create, organise, store, manipulate and retrieve digital content.  | **Y3/Y4 -**design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.**Y3/Y4 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output. **Y3/Y4 -** use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.**Y3/Y4 -** 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. | **Y5/Y6 -**design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.**Y5/Y6 -** use sequence, selection, and repetition in programs; work with variables and various forms of input and output. **Y5/Y6 -** use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.**Y5/Y6 -** 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. |