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|  | **Subject : ICT** | | | | | | |
|  | **Subject Leader ‘overview’** | | | | | | |
|  | **Reception** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Autumn** | Communication and language | **Unit 1.1 Online Safety & Exploring Purple Mash**  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. | **Unit 2.2 Online Safety**  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.  **Unit 2.1 Coding**  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. | **Unit 3.2 Online Safety**  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.  **Unit 3.1 Coding**  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 | **Unit 4.2 Online Safety**  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.  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.  **Unit 4.1 Coding**  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  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. | **Unit 5.2 Online Safety**  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.  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.  **Unit 5.1 Coding**  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.  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. | **Unit 6.2 Online Safety**  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact\*.  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  Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.  **Unit 6.1 Coding**  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.  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. |
| Expressive arts | **Unit 1.2 Grouping & Sorting**  Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.  **Unit 1.3 Pictograms**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 2.3 Spreadsheets**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 3.3 Spreadsheets**  Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.  **Unit 3.4 Touch-Typing**  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. | **Unit 4.1 Coding**  Continued  **Unit 4.3 Spreadsheets**  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. | **Unit 5.3 Spreadsheets**  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. | **Unit 6.3 Spreadsheets**  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. |

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|  | **Reception** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Spring** | Literacy | **Unit 1.4 Lego Builders**  Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.  **Unit 1.5 Maze Explorers**  Create and debug simple programs  Use logical reasoning to predict the behaviour of simple programs.  Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. | **Unit 2.4 Questioning**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 3.5 Email**  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.  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.  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | **Unit 4.4 Writing for Different Audiences**  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. | **Unit 5.4 Databases**  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. | **Unit 6.4 Blogging**  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.  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.  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact\*. |
| Maths | **Unit 1.6 Animated Story Books**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 2.5 Effective Searching**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content  Recognise common uses of information technology beyond school  **Unit 2.6 Creating Pictures (May run over to S1)**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 3.6 Branching Databases**  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. | **Unit 4.5 Logo**  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 | **Unit 5.5 Game Creator**  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  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. | **Unit 6.5 Text Adventures**  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.  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** | Understanding the word  PSED | **Unit 1.7 Coding**  Create and debug simple programs  Use logical reasoning to predict the behaviour of simple programs.  Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 2.7 Making Music**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 3.7 Simulations**  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. | **Unit 4.6 Animation**  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. | **Unit 5.6 3D Modelling**  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. | **Unit 6.6 Networks**  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. |
| Physical development | **Unit 1.8 Spreadsheets**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content  **Unit 1.9 Technology outside school**  Recognise common uses of information technology beyond school. | **Unit 2.8 Presenting Ideas**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Unit 3.8 Graphing**  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. | **Unit 4.7 Effective Searching**  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.  Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.  **Unit 4.8 Hardware Investigators**  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. | **Unit 5.7 Concept Maps**  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. | **Unit 6.7 Quizzing**  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. |