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Terms 1/2		A Toy Story	Pudding to Pepys	Changing Ages	Walk like an Egyptian	We'll Meet Again	Who let the Gods out?
	YR	Y1	Y2	Y3	Y4	Y5	Y6
Key Concepts Computer Science (Core Understanding) Information Technology (The Application) Digital Literacy (Using computing competently and safely in the real world) All units should begin with a recap of online safety expectations using the Project Evolve materials.	**Understanding the world: Children recognise that a range of technology is used in places such as homes and schools.** **Being imaginative: children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.** **PSED: Managing feelings and behaviour: children talk about how they and others show feelings, talk about their own and others' behaviour, and its consequences, and know that some behaviour is unacceptable. They work as part of a group or class, and understand and follow the rules. They adjust their behaviour to different situations, and take changes of routine in their stride.** **Understanding the world:**	Unit 1.1 Online Safety **Use technology safely with guidance** Log on and off safely. Understand that passwords are private. Learn the layout of a key board and number pad. Unit 1.2 Grouping & Sorting **Use technology to organise digital content** Understand what is meant by 'technology' Use sorting diagrams to organise different objects e.g. toys	Unit 2.1 Coding **Understand the word 'algorithm' as a list of instructions.** **Create and debug simple programs.** Give a simple algorithm (instructions) to people to follow e.g. to brush their hair Give a simple algorithm to a computer program to get a desired effect e.g. Beebot/Turtle to move in a certain direction. Unit 2.2 Online Safety **Use technology safely and respectfully with guidance** Write a set of rules for using technology. Understand that people you meet online are not your friends. Unit 2.3 Spreadsheets **Use technology to create and store data**	Unit 3.1 Coding **Design, write and debug programs that accomplish a specific goal** **Use sequence, selection and repetition in programs; begin to work with variables, input and output.** **Begin to use logic to explain how algorithms work.** Design a simple programs with a goal in mind. Discuss how to complete that goal. Apply knowledge of algorithms to run prototype. Debug program where errors occur. Understand the terminology of programs, algorithms, beg, debug, variables. Unit 3.2 Online safety **Use technology safely, respectfully and responsibly**	Unit 4.1 Coding **Design, write and debug programs that control physical or online systems.** **Use sequence, selection and repetition in programs; work with variables and various forms of input and output.** **Use logical reasoning to explain how their algorithm works and what their inputs and outputs are.** Design a simple programs using flow charts. Decompose the program into small components. Improve skills by debugging a program they have not designed. Understand and use the terminology of programs, algorithms, beg, debug, variables. **Select digital devices that are appropriate for the program.** Unit 4.2 Online safety	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 and adjust 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.** Translate algorithms that include sequence, selection and repetition into code with increasing ease and own designs show that they are thinking of how to accomplish the set task in code utilising such structures. Design a program that will solve a real world task e.g. how to make a plane take off and land.	Unit 6.1 Coding **Explain how to design, write and debug programs that accomplish increasingly more complex goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.** **Use and evaluate their sequence, selection and repetition in programs; work with variables and various forms of input and output.** **Use logical reasoning to explain how more increasingly complex algorithms work and to detect and correct errors in algorithms and programs.** Use own experiences of gaming. Read and understand code. Create a game to engage others by identifying the important aspects of the task (abstraction) and then decomposing them.

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	They select and use technology for particular purposes.		Gather data from others. Input it onto a spreadsheet.	Understand their responsibility in keeping themselves safe. Recap, discuss and write rules for keeping safe online. Understand the term 'cyberbullying' Understand that some content online is not age appropriate and how to report it.	**Use technology responsibly and safely.** **Recognise acceptable and unacceptable behaviour.** **Identify a range of ways to report concerns.** Explain ways of keeping themselves safe on line. Understand that copying online is called 'plagiarism'. Understand why screen time should be limited. Understand the term 'malware'. Unit Touch Type/Presentation : ONLINE SAFETY **Use technology to present information.** Use word to present information Use the tools for font, size, colour. Understand how to use the return button to start a new line or paragraph Save a document and save it as an appropriate name.	Write the program and test it. Debug and rewrite the program as needed. Evaluate the success of the program. Unit 5.2 Online safety **Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.** Research how to 'fact check' news and articles online. Understand that online content may not be 'true' Check online content for accuracy. Unit Touch Type/presentation: ONLINE SAFETY **Select, use and combine a variety of software to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.** Use PowerPoint to present information from another subject.	Evaluate programming skills as the program is developed and debug/adapt where needed. Apply increasingly complex coding to their game to improve gam play. Systematically and logically assess any bugs to identify the error. Unit 6.2 Online safety **Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.** Understand and explain the term 'digital footprint' Evaluate their own digital foot print and how they would like to be perceived online in the future. Understand and evaluate how technology can improve lives. Unit Touch Type/presentation: ONLINE SAFETY **Select, use and combine a variety of software to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.**

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						Use the tools – animation, insert images, slide show, sounds.	Choose the 'best' method of presenting their information from another subject. Explain what the effect is they desire. Choose the best tools in that program (e.g. Word, PowerPoint etc.) to achieve their desired effect. Evaluate their content.

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Terms 3/4		Amazing Discoveries	Under the Microscope	When in Rome	Raiders and Traders	Rainforest Realms	Earth and Space, the final frontier
	YR	Y1	Y2	Y3	Y4	Y5	Y6
Key Concepts Computer Science (Core Understanding) Information Technology (The Application) Digital Literacy (Using computing competently and safely in the real world) All units should begin with a recap of online safety expectations using the Project Evolve materials.	**PSED: Managing feelings and behaviour: children talk about how they and others show feelings, talk about their own and others' behaviour, and its consequences, and know that some behaviour is unacceptable. They work as part of a group or class, and understand and follow the rules. They adjust their behaviour to different situations, and take changes of routine in their stride.** **Understanding the world:** **They select and use technology for particular purposes.** **Understanding the world:** **Children recognise that a range of technology is used in places such as homes and schools.** **Being imaginative: children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.**	Unit 1.3 Pictograms **Use technology purposefully to create, organise, store, and retrieve data.** Understand that data (numbers) can be represented in different ways. Select and use appropriate images. Unit 1.4 Lego Builders **Create and debug simple programs.** Follow a simple algorithm to draw an animal. Give a simple algorithm (instructions) to people to follow e.g. to make a sandwich. Unit 1.5 Maze Explorers **Use logical reasoning to predict the behaviour of simple programs.** Use logic to explain what is wrong with a simple algorithm when the steps are out of order.	Unit 2.4 Questioning **Use technology to organise, store and retrieve digital content.** Use a database to store information. Use a branch tree diagram to organise information in order to answer questions. Unit 2.5 Effective Searching **Use technology to search for and retrieve digital content.** **Use technology safely and identifying age appropriate content.**	Unit 3.3 Spreadsheets (including excel) **Use and combine a variety of software to create a range of programs that accomplish goals including collecting, analysing and presenting information.** Use the appropriate tools on Excel to input data Use the chart tool to represent the data in a different way Choose and explain why they have chosen a certain chart. Unit 3.4 Touch Typing **Use a program to accomplish improving their familiarity with the keyboard.** Unit 3.5 Email **Recognise acceptable and unacceptable content.** **Select use and combine programs for a desired goal.** **Use email technologies effectively, be discerning in evaluating digital content.**	Unit 4.3 Spreadsheets (including excel) **Use and combine a variety of software to create a logical representation that accomplishes goals including collecting, sorting, analysing and presenting information.** Select and use the appropriate tools on Excel to input data Use and explain why they have chosen a certain chart tool to represent the data. Explain the limitations of the chart. Unit 4.4 Writing for different Audiences (word and/or PowerPoint) **Select, use and combine a variety of software and create a range of content that accomplishes given goals.** Make informed software choices when presenting information and data. Combine different tools like internal hyperlinks, images and text for different effects. Evaluate the effectiveness of their presentation.	Unit 5.3 Spreadsheets (including excel) **Use and combine a variety of software to create a good representation that accomplishes goals including collecting, analysing and presenting information.** Select and use the appropriate tools on Excel to sort data (e.g. by alphabet or by numerical result) Use and explain when using tables on a spreadsheet would be appropriate and beneficial. Explain the limitations. Unit 5.4 Databases **Select, use and combine a variety of software and create a range of content that accomplishes increasingly more complex goals.** Understand and explain the purpose of a database. Choose appropriate data to be stored. Input data and understand how to	Unit 6.3 Spreadsheets (including excel) **Explain how to design, write and debug programs that accomplish increasingly more complex goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.** **Use and evaluate their sequence, selection and repetition in programs; work with variables and various forms of input and output.** **Use logical reasoning to explain how more increasingly complex algorithms work and to detect and correct errors in algorithms and programs.** Use own experiences of gaming. Read and understand code. Create a game to engage others by identifying the important aspects of the task (abstraction) and then decomposing them. Evaluate programming skills as the program is developed and

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				Create purposeful content to attach to emails.	Unit 4.5 Logo **Use sequence, selection and repetition in programs; work with variables and various forms of input and output including control programs.** Explore common instructions on logo. Read and explore different coding. Write algorithms to achieve a desired effect.	'debug' if the data base is incorrect. 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.** **Use and adjust 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.** Translate algorithms that include sequence, selection and repetition into code with increasing ease and own designs show that they are thinking of how to accomplish the set task in code utilising such structures. Design and write a program for a desired effect and test it. Debug and rewrite the program as needed. Evaluate the success of the program.	debug/adapt where needed. Apply increasingly complex coding to their game to improve gam play. Systematically and logically assess any bugs to identify the error. Unit 6.4 Blogging **Understand computer networks, including the Internet; how they can provide multiple services and the opportunities they provide for collaboration.** **Use technology safely understanding their own responsibility in the content of their digital footprint.** **Select and use an expanding variety of software that will present information in different ways with different purposes.** Understand and explain the purpose of a Blog. Create, evaluate and adjust their online content.

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Terms 5/6 Local study		**Who's the King of the Castle?**	**War and Peace**	**Postcards from the seaside**	**Tudor Rose**	**Brilliant Building and Lovely Landscapes**	**It's a Smugglers Life for me**
	YR	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**
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They adjust their behaviour to different situations, and take changes of routine in their stride.** **Understanding the world: They select and use technology for particular purposes.**	Unit 1.6 Animated Story **Use technology purposefully to create, organise, store, and retrieve information including stories.** **Use logical reasoning to predict the behaviour of simple programs.** **Create and debug simple programs.** Unit 1.7 Coding **Understand what algorithms are; how they can be used on digital devices like computers and how you have to follow a precise set of instructions.** **Use logical reasoning to predict the behaviour of simple programs.** **Create and debug simple programs.** Unit 1.8 Spreadsheets **Use technology purposefully to create, organise, store, and retrieve data.** Create a set of criteria to sort data.	Unit 2.6 Creating Pictures **Use technology purposefully to create, store, and present information including art and images.** Understand that different programs produce different effects. Explain the effect they would like to achieve. Evaluate and improve. Unit 2.7 Making Music **Use technology purposefully to create, organise, entertain and present information including music.** Understand that technology can be used to entertain. Evaluate their composition as it is created. Present their composition to others. Evaluate others' composition and suggest improvements. Unit 2.8	Unit 3.6 Branching Databases **Use sequence, selection and repetition in programs; work with variables and various forms of input and output including databases.** **Select, use and combine a variety of software 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.** Understand what a branching database is and explain its uses. Design a database. Understand the purpose of their database. Select the information and questions required for the purpose. Unit 3.7 Simulations **Use simulations to analyse and evaluate programs and situations.** Consider what a simulation is.	Unit 4.6 Animation **Design, write and debug programs that control physical or online systems.** **Use logical reasoning to explain how their algorithm works and what their inputs and outputs are.** Discuss the desired effect they require. Write, share and evaluate coding. Debug where needed independently. Choose and create appropriate images for 'stop motion' animation to achieved desired effect. Unit 4.7 Effective Search **Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.** **Understand computer networks, including the Internet; how they provide multiple services including the WWW.**	Unit 5.6 3D Modelling **Select, design, use and combine a variety of software on range of programs, systems and content that can accomplish set parameters.** Explore the effects of 3D modelling Design for a purpose. Evaluate their 3D model. Unit 5.7 Concept Maps **Select, combine and compare a variety of software for different purposes.** Understand the need for visual representation when generating and discussing complex ideas. Explore the different uses of concept maps. Create collaborative material. Unit 5.8 Word processing (with Microsoft Word) **Use sequence, selection and repetition in programs; work with variables and various**	Unit 6.5 Text Adventures (PowerPoint) **Select, use. compare and combine a variety of software to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.** Use and manipulate different forms of software to engage the reader with a story. Explore and combine tools – hyperlinks (both external and internal), images, animations, slide transition for the best outcome. Unit 6.6 Networks **Understand computer networks, including how the Internet is just one of these; how they can provide multiple services, such as the WWW; and the opportunities they provide for communication and collaboration.** Evaluate the limitations and dangers of networks.

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		Use a spreadsheet to sort according to criteria. Unit 1.9 Technology outside school **Recognise common uses of Information Technology beyond school.**	Presenting Ideas (Word) **Use technology for a defined purpose in order to present information.** Use the tools new, save, colour, size, image, undo. Predict the behaviour of the word processing program.	Explore different simulations. Make a prediction based on logic. Unit 3.8 Graphing **Select, use and combine a variety of software 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.** Enter data into a graph and answer questions. Solve an investigation. Unit 3.9 Presenting (with Microsoft PowerPoint) (this could be combined with 3.6) **Select, use and combine a variety of software 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.**	Carry out simple searches to retrieve digital content. Understand that to do this, they are connecting to the internet and using a search engine. Collect, analyse, evaluate and present data and information using a selection of software. Understand the function, features and layout of a search engine. Appraise selected webpages for credibility and information at a basic level. Unit 4.8Hardware Investigators **Understand computers including their hardware.** Understand how some of their digital footprint is stored. Unit 4.9 Making Music (optional) **Use sequence, selection and repetition in programs; work with variables and various forms of input and output.**	**forms of input and output.** **Select. combine and use technology to present for different purposes.** Explore the effect of tables, images, text boxes and hyperlinks in Word. Utilise different tools to ensure the most purposeful presentation.	Explain how they can use this information to keep themselves and others safe; and their own responsibility to do so. Unit 6.7 Quizzing **Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content, analysing and evaluating and presenting data and information.** Explore other designs of the type they are creating. Evaluate and create the criteria for a 'good design' Design and create a database with a specific purpose. **Unit 6.8 Understanding Binary** **Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.** **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**

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							algorithms work and detect and correct errors. Select, use and combine a variety of software 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.