



Computing

| | <i>EYFS</i> | <i>Year 1</i> | <i>Year 2</i> |
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| E-Safety and E-Sense | <p>Talk about good and bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets you. Talk about good and bad choices when using websites – being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private</p> <p>Knowledge – Understand that we have choices. Understand what choices we have in real life. Understand we have information about ourselves. Know we have to keep information about ourselves private.</p> <p>Skills – Recognise choices when they occur in their lives. Talk about information that is about themselves. Talk about how we keep information private.</p> | <p>Keep a password private. Explain what personal information is. Know how to tell an adult when something unexpected or worrying is seen online. Explain why it's important to be kind and polite. Recognise an age appropriate website. Agree and follow sensible e-safety rules.</p> <p>Knowledge – Understand what a password is. Understand that a password needs to be kept private. Understand what personal information is. Know to tell an adult if something worrying or unexpected is seen online. Know that it is important to be kind and polite. Know there are age appropriate websites. Know that there are e-safety rules.</p> <p>Skills – Know how to keep a password safe Explain what information is personal information. Explain how to tell an adult if something is worrying or unexpected is seen online. Explain how to be kind and polite online. I can explain what age appropriate websites are and what they look like. Explain what e-safety rules we have.</p> | <p>Explain why it is important to keep passwords and personal information private. Describe the things that happen online that I must tell an adult about. Explain why children should go online for a short amount of time. Explain why it is important to be kind and polite online and in real life. Understand that not everyone is who they say they are on the internet.</p> <p>Knowledge – Understand to keep important passwords and personal information private. Understand that things can happen online that I must tell an adult about. Understand that children should only go online for a short amount of time. Understand that you need to be kind and polite online and in real life. Understand that not everyone is who they say they are on the internet.</p> <p>Skills – Explain how to keep important passwords and personal information private. Explain what things I need to tell an adult about that happen online. Explain why children should only go online for a short amount of time. Explain why it is important to be kind and polite online and in real life.</p> |

St John's C of E Infant School
 Knowledge, Skills and Vocabulary Progression Map



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| Key Vocab | Choices Grown up Website Safe Information Private | Password Personal information Online Offline Website E-safety | Password Personal information Online Offline Internet | |
| Handling Information | Collect information as photos or sound files. Use a simple pictogram or set of photos to count and organise information. Knowledge – Understand I can collect information Understand I can organise information Skills – Know how to collect information Explain how to organise information | Discuss the different ways in which information can be shown. Use technology to collect information, including photos, video and sound. Sort different kinds of information and present it to others. Add information to a pictograph and talk about what I have found out. Knowledge – Know there are different ways information can be shown Understand that information can be collected with technology. Know I can sort different kinds of information Skills – Explain different ways to collect information Use technology to collect information. Sort different kinds of information to show others. Add information to a pictograph and talk about it. | Discuss different ways in which technology can be used to collect information, including a camera, microscope or sound recorder. Make and save a chart or graph using the data that has been collected. Discuss data that is shown in a chart or graph. Begin to understand a branching database. Explain the types of technology that could be used to help to investigate a question. Knowledge – Know different ways technology can be used to collect information Know what a branching database is. Name different types of technology that can be used to help investigate a question. Skills – Make and save a chart or graph using data that has been collected. Talk about data that us shown in a chart or graph. Describe types of technology that can be used to help investigate a question. | |
| Key Vocab | Information Photos Sound Pictogram Organise | Information Technology Collect Photos Videos Sound Pictograph | Technology Collect Information Chart | Graph Data Database Investigate |

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 Knowledge, Skills and Vocabulary Progression Map



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| <p>Multimedia</p> | <p>Use a mouse to rearrange objects and pictures on a screen. Recognise text, images and sound when using ICT. Use a camera or sound recorder to collect photos or sound. Use paint programs to create pictures. Begin to use a keyboard. Develop an interest in ICT by using age appropriate websites or programs.</p> <p>Knowledge – Know that a mouse moves objects on the screen. Know what text, image and sound are. Know what program can be used to paint. Understand that a keyboard creates text. Know what technology creates what media.</p> <p>Skills - Use a mouse to rearrange objects and pictures on a screen. Use a camera or sound recorder to collect photos or sound. Use paint programs to create pictures. Begin to use a keyboard. Develop an interest in ICT by using age appropriate websites or programs.</p> | <p>Create with different technology tools. Use technology to create and present ideas. Use the keyboard or a word bank to enter text. Save information and open it again.</p> <p>Knowledge – Know technology can be used to create and present ideas. Know a keyboard creates text. Know that information can be saved and opened again.</p> <p>Skills - Create with different technology tools. Use technology to create and present ideas. Use the keyboard or a word bank to enter text. Save information and open it again.</p> | <p>Use technology to organise and present ideas in different ways. Use the keyboard on a device to add, delete and space text for others to read. Describe an online tool that will help to share ideas with other people. Save and retrieve files on a device.</p> <p>Knowledge – Understand that technology can be organised and presented in different ways. Know a keyboard can add, delete and create spaces of text. Know what keys, delete, add and space text. Name an online tool that will help to share ideas with other people. Know that files can be saved and retrieved.</p> <p>Skills - Use technology to organise and present ideas in different ways. Use the keyboard on a device to add, delete and space text for others to read. Describe an online tool that will help to share ideas with other people. Save and retrieve files on a device.</p> |
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St John's C of E Infant School
 Knowledge, Skills and Vocabulary Progression Map



| Key Vocab | Mouse Screen Text Images | Program Keyboard Website | Technology tools Create Present Keyboard | Text Save Open | Organise Present Keyboard Delete | Space Text Save Retrieve |
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| Programming | <p>Help adults operate equipment around the school, independently operating simple equipment. Use simple software to make things happen. Press buttons on a floor robot and talk about the movements.</p> <p>Explore options and make choices with toys, software and websites.</p> <p>Knowledge – Know that I can use simple software to make things happen. Understand that the buttons of a robot make it move.</p> <p>Skills - Help adults operate equipment around the school, independently operating simple equipment. Use simple software to make things happen. Press buttons on a floor robot and talk about the movements. Explore options and make choices with toys, software and websites.</p> | | <p>Give simple instructions on everyday devices to make things happen Make choices to control simple models or simulations. Understand what an algorithm is (a sequence of instructions or set of rules for performing a specific task) (out of the context of programming). Understand that algorithms need to be precise, simple, clear and limited. Understand that an algorithm is implemented as program on a digital device. Input simple instructions (into programmable device or coding program) to see what happens.</p> <p>Knowledge – Understand everyday devices need instructions to make things happen. Understand I can make choices to control simple models and simulations. Understand what an algorithm is (a sequence of instructions or set of rules for performing a specific task) (out of the context of programming). Understand that algorithms need to be precise, simple, clear and limited. Understand that an algorithm is implemented as program on a digital device.</p> <p>Skills - Give simple instructions on everyday devices to make things happen Make choices to control simple models or simulations. Understand what an algorithm is (a sequence of instructions or set of rules for performing a specific task) (out of the context of programming).</p> | | <p>Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following a sequence of instructions. Use logical reasoning to predict the behaviour of simple programs. Follow and predict the outcome of an program. Write/input and test a simple a program/ code to achieve a desired outcome (ensuring it is precise, simple, clear and limited) Identify a bug in a programme/code (where the algorithm has gone wrong/not achieved the desired outcome). Debug a program (fix it by changing algorithm)</p> <p>Knowledge - Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following a sequence of instructions. Know I can use logical reasoning to predict the behaviour of simple programs. I know what a bug is I know that to fix a bug I have to debug it.</p> <p>Skills - Use logical reasoning to predict the behaviour of simple programs. Follow and predict the outcome of an program. Write/input and test a simple a program/ code to achieve a desired outcome (ensuring it is precise, simple, clear and limited) Identify a bug in a programme/code (where the algorithm has gone wrong/not achieved the desired outcome). Debug a program (fix it by changing algorithm)</p> | |

St John's C of E Infant School
Knowledge, Skills and Vocabulary Progression Map



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| | | Input simple instructions (into programmable device or coding program) to see what happens. | | | |
| Key Vocab | Equipment Operate Software Push Buttons Movements | Instructions Devices Control Models | Simulations Algorithm Input | Algorithm Implemented Digital devices Execute Logical reasoning Behaviour Simple programs | Test Code Outcome Identify Bug Debug |
| Technology in Our Lives | <p>Recognise purposes for using technology in school and at home. Understand that things they create belong to them and can be shared with others using technology. Recognise that they can use the Internet to play and learn.</p> <p>Knowledge – Know that technology can be used at school and at home. Know that things I create belong to me. Know that things I create can be shared with others. Know that I can use the internet to play and learn.</p> <p>Skills - Recognise purposes for using technology in school and at home. Recognise what that they can use on the Internet to play and learn.</p> | <p>Recognise the way we use technology in the classroom. Recognise ways that technology is used at home and in the community. Use links to websites to find information. Begin to identify some of the benefits of using technology.</p> <p>Knowledge - Recognise the way we use technology in the classroom. Recognise ways that technology is used at home and in the community. Know that I can use links to find information.</p> <p>Skills - Use links to websites to find information. Begin to identify some of the benefits of using technology.</p> | | <p>Explain why we use technology in the classroom. Explain why we use technology in our homes and in the community. Begin to understand that other people have created the information we use. Identify benefits of using technology including finding information, creating and communicating. Discuss the differences between the internet and things in the physical world. Knowledge – Begin to understand that other people have created the information we use. Know that there are benefits of using technology including finding information, creating and communicating.</p> <p>Skills - Explain why we use technology in the classroom. Explain why we use technology in our homes and in the community. Identify benefits of using technology including finding information, creating and communicating. Discuss the differences between the internet and things in the physical world.</p> | |
| Key Vocab | Created Shared internet | Community Website benefits | | Community Created Benefits | Communicating Internet Physical world. |

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Knowledge, Skills and Vocabulary Progression Map



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| When I am computing I can | <ul style="list-style-type: none">• identify technology and the uses• know how to switch items on• know how to use the internet safely• know how to find out information• program a simple robot | <ul style="list-style-type: none">• identify technology and the benefits• know how to stay safe online• know how to behave online• use the internet to find out information• use a keyboard to type• create a simple program | <ul style="list-style-type: none">• recognise technology in the world around us• know how to stay safe when online• know how to behave online• gather information from the internet• use a keyboard with increasing speed• know what an algorithm is• create a simple program and solve a problem in the program. |
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