

Knights Templar Community Church School and Nursery

*Work at it with all your heart*



# Computing

*(subject progression)*

*Intent, Implementation and Impact*



# Knights Templar Community Church School and Nursery



## Curriculum Area: Computing

### Intent

*Our intent is to inspire learners to be curious about the constantly evolving digital world and strive to develop their awareness of it. We intend for the learners to become responsible and considerate digital citizens who respond to challenges and situations empathetically and logically. We want our learners to feel excited with the possibilities of technology and challenge themselves to think outside the box with their approach. Through our computing curriculum, our objective is to enable the learners to develop a skills set which empowers them to be able to succeed in all aspects of the digital world now and in the future.*

*We aim to promote:*

- curiosity with the new software and technologies that are becoming accessible to investigate and apply their skills in new contexts*
- questioning skills to enable the learners to question the information they are looking at and decide if it is from a reliable source and can be trusted*
- making new connections between what they already know and what they are learning*
- work collaboratively to decompose a problem and value all contributions and ideas*
- apply problem solving skills in different contexts and be willing to take risks, adopting a “have-a-go” attitude*
- be willing to create a variety of algorithms and debug them where necessary and evaluate their suitability to the task*
- sensitivity to issues relating to key messages including online safety, plagiarism and the roles of responsible citizens*
- inspiring learners to have the aspiration to become the next generation of digital leaders*
- awareness of how much of a role technology plays in our lives and its importance*

*At Knights Templar Community Church School we subscribe to and follow the Somerset eLim Computing programme which is split into five main areas which frame our **Linear Links** between year groups. These are:*

- Online Safety*
- Technology in our lives*
- Multimedia*

- Handling data
- Programming

We intend to link our curriculum with learners individual passion and interest and show how technology impacts and links to their everyday lives. We want the learners and young people at Knights Templar Community Church School to have a love for learning and a thirst for knowledge. We want them to be inquisitive and creative and develop an enhanced picture of 'self'; where they develop a better understanding about their own enthusiasms and abilities.

## Implementation

Through our use of the eLim Computing Programme, we implement discreet lessons which focus on our five linear links; Online Safety, Programming, Handling Data, Multimedia and Technology in our Lives. We have a two-year rolling cycle for the computing curriculum to ensure that we have an even coverage of the required skills. These are created so they are exciting, sequenced and progressive by building on technological skills and knowledge. We also ensure that the resources being used reflect the changes in the wider world particularly with the issues we are discussing in online safety.

Where possible we encourage cross-curricular concepts and opportunities. Through revisiting and consolidating of skills, our lessons and resources help learners and young people build on prior knowledge alongside introducing new skills and challenge. The revision and introduction of key vocabulary is built into lessons and opportunities are given to repeat and revise this knowledge.

Every half term there is an explicit online safety lesson which addresses up to date issues for the learners to develop their awareness. Throughout the topics in the year there are references made to the key online safety messages in different contexts to enable the learners to apply and consolidate their skills. Every class has two Digital Leaders who are elected by their peers. These learners support their teacher and peers in lessons and have the opportunities to share their skills. This provides a weekly opportunity to raise awareness of online safety and discuss any worries/issues the learners have and problem solve what can be done to solve them.

We participate in Safer Internet Day and our Digital Leaders encourage learners and their families to engage with online safety as well throughout the year. We also have an Online Safety Committee consisting of a variety of stakeholders to ensure a wide range of opinions and skills are incorporated. It is the committee's responsibility to check that the school is following up to date advice regarding online safety, both with regards to policy and education of the staff and learners.

We ensure that teachers and any adult working with the learners receive appropriate online safety training from Somerset County Council so their knowledge has the depth and coverage that is needed. Through our eLim subscription, teachers are able to access support materials and resources to enable them to deliver the curriculum effectively.

### **Assessment**

The assessment for learning agenda within each class generates the evidence that then informs the overall teaching assessments. Teacher assessments are formed at the end of each unit of work. Work may be recorded in the class curriculum portfolio.

## **Impact**

**By the end of their time at Knights Templar, our Computing learners will be:**

- **Confident individuals** who are enthused to encounter new programmes and technology and feel confident to apply their skills in different contexts, including using a range of hardware and software.
- **Successful learners** who can use digital and technological vocabulary accurately, alongside their technical skills and will produce high-quality purposeful products.
- **Responsible citizens** who have a love of the digital world and will see the digital world as part of their world, extending beyond school, and will understand that they have choices to make to be respectful digital citizens going on to lead happy and healthy digital lives.

# Knights Templar Community Church School and Nursery



## Statutory Expectations:

Early Years Foundation Stage Framework:			
ELG	Personal, Social and Emotional Development	Building Relationships	<ul style="list-style-type: none"> <li>• Work and play cooperatively and take turns with others</li> </ul>
		Managing Self	<ul style="list-style-type: none"> <li>• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge</li> </ul>
	Understanding the World	Past and Present	<ul style="list-style-type: none"> <li>• Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class.</li> <li>• Understand the past through settings, characters and events encountered in books read in class and storytelling</li> </ul>
		The Natural World	<ul style="list-style-type: none"> <li>• Explore the natural world around them, making observations and drawing pictures of animals and plants.</li> </ul>
National Curriculum			
KS1	<p>Key stage 1</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>• create and debug simple programs</li> <li>• use logical reasoning to predict the behaviour of simple programs</li> <li>• use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>• recognise common uses of information technology beyond school</li> <li>• 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</li> </ul>		

## Key stage 2

Learners should be taught to:

- 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
- 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
- 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

KS2

## Knights Templar Community Church School Long Term Overview:

	Autumn	Spring	Summer
<b>EYFS</b>	<b>E-Safety:</b> Can I follow rules when I use technology?	<b>E-Safety:</b> Can I log in to access devices?	<b>E-Safety:</b> Can I safely use apps, games and websites?
Through continuous provision the following is covered:	<b>Technology in our Lives:</b> Can I talk about technology that is used at home and in school?	<b>Multimedia:</b> Can I make things move on screen?	<b>Programming:</b> Can I make a simple programme?
<b>KS1 Year A</b>	<p><b>E-safety:</b> Am I kind and responsible online?</p> <p><b>Programming:</b> Can I create a Code-a-pillar adventure?</p> <p><b>Data Handling:</b> Can I add information to a pictograph?</p>	<p style="text-align: center;"><b>E-safety:</b> Am I safe?</p> <p><b>Multimedia</b> Can I create an animation?</p> <p><b>Handling Data:</b> Can I sort data using a branching database?</p> <p><b>Technology in our lives:</b> Can I recognise how technology is used in my community?</p>	<p style="text-align: center;"><b>E-safety:</b> Am I healthy?</p> <p><b>Programming:</b> Can I use programming to make objects move?</p> <p><b>TIOL:</b> Can I identify the benefits of using technology?</p> <p><b>TIOL:</b> Can I trust internet searches?</p>
<b>KS1 Year B</b>	<p><b>E-safety:</b> Am I kind and responsible?</p> <p><b>Programming:</b> Can I make a Beebot move?</p> <p><b>Data Handling:</b> Can I use a block graph to present data?</p> <p><b>Multimedia:</b> Can I present information to be shared with others?</p>	<p style="text-align: center;"><b>E-safety:</b> Am I safe?</p> <p><b>Multimedia:</b> Can I upload pictures?</p> <p><b>Programming:</b> Can I programme an online car?</p> <p><b>Technology in our lives:</b> Can I identify technology in my local area?</p>	<p style="text-align: center;"><b>E-safety:</b> Am I healthy?</p> <p><b>Data handling:</b> Can I use a Venn diagram to sort information?</p> <p><b>Multimedia:</b> Can I record a news report?</p>

<p>KS2 Year A</p>	<p><i>On Line Safety: Can I be kind and responsible?</i></p> <p><i>Multimedia: Can I create an e-book using Book Creator?</i></p> <p><i>TIOL: Can I search the world wide web safely?</i></p> <p><i>Programming: Can I create an algorithm in Scratch?</i></p>	<p><i>On Line Safety: Can I be safe?</i></p> <p><i>Handling Data: Can I collect data and present it using 2Graph?</i></p> <p><i>TIOL: Can I create a hyperlink?</i></p> <p><i>Multimedia: Can I create a presentation on Powerpoint?</i></p>	<p><i>On Line Safety: Can I be healthy?</i></p> <p><i>Programming: Can I programme a Micro:bit?</i></p> <p><i>Handling Data: Can I use a datalogger?</i></p>
<p>KS2 Year B</p>	<p><i>On Line Safety: Can I be kind and responsible?</i></p> <p><i>Programming: Can I use Hopscotch?</i></p> <p><i>Programming: Can I create a game in Kodu?</i></p> <p><i>TIOL: Can I share my ideas on Padlet?</i></p>	<p><i>On Line Safety: Can I be safe?</i></p> <p><i>Handling Data: Can I investigate sounds?</i></p> <p><i>TIOL: Can I scan and create a QR code?</i></p> <p><i>Multimedia: Can I use effects to change images?</i></p>	<p><i>On Line Safety: Can I be healthy?</i></p> <p><i>Handling Data: Can I make a branching database?</i></p> <p><i>Multimedia: Can I combine text, graphics and sounds?</i></p>
<p><b>Open Ended Challenges:</b></p>	<p>Each term, learners are provided with an <b>Open-Ended Challenge (OEC)</b> which provides opportunities to:</p> <ul style="list-style-type: none"> <li>• Use computational thinking to plan, develop and evaluate their use of technology</li> <li>• Have a differentiated learning experience including developing mastery</li> <li>• Demonstrate attainment in computing based on knowledge and skills acquired</li> </ul>		

## Linear Links across EYFS/KS1/KS2:

Online Safety	Programming	Handling Data
Multimedia	Technology in our Lives	

### Reception End of Year Outcomes

Online Safety	Programming	Handling Data	Multimedia	Technology in Our Lives
<ul style="list-style-type: none"> <li>• I use rules given to me by a trusted adult when I use technology.</li> <li>• I am kind to my friends</li> <li>• I use a safe part of the Internet to play and learn.</li> <li>• I make sure a trusted adult is with me.</li> <li>• I use a log in to access devices.</li> <li>• I tell you the things that are the same about my friend and me.</li> <li>• I use apps, games and websites that trusted adults show me.</li> <li>• I use a device for a limited time.</li> </ul>	<ul style="list-style-type: none"> <li>• I can make a floor robot move.</li> <li>• I can use simple software to make something happen.</li> <li>• I make choices about buttons and icons I press, touch or click</li> </ul>	<ul style="list-style-type: none"> <li>• I can tell you about different kinds of information such as pictures, video, text and sound.</li> </ul>	<ul style="list-style-type: none"> <li>• I can move objects on a screen.</li> <li>• I can create shapes and text on a screen.</li> <li>• I can use technology to show my learning.</li> </ul>	<ul style="list-style-type: none"> <li>• I can tell you about technology that is used at home and in school.</li> <li>• I can operate simple equipment.</li> <li>• I can use a safe part of the Internet to play and learn.</li> </ul>

## KS1 and KS2 Knowledge and Skills

### Year A

#### KS1 – Basic Skills to support learning across the curriculum

- Use passcode on a tablet and log in on laptop/PC.
- Use home button on a tablet.
- Develop coordination and motor skills in operation a mouse or roller pad on a laptop or PC.
- Open a document or other file on a laptop/PC.
- Open appropriate App or Home screen link on a tablet.
- Take a photo and open camera roll on a tablet.
- Follow a hyperlinked image to a website using a laptop or PC.
- Follow links to find information
- Use keyboard to find the letters of your name or basic spellings. (Encourage use of left and right hands.)
- Use uppercase key for a capital letter.
- Use space bar between words.

### Year B

#### KS1 – Basic Skills to support learning across the curriculum

- Use personal log in for online resources
- Open Apps and software
- Save and Open files and images
- Insert images within apps and software
- Use simple children's search engine eg Kiddle
- Use keyboard to enter text (index fingers left and right hand)
- Know when and how to use the RETURN/ENTER key.
- Use SHIFT and CAPS LOCK to enter capital letters
- Use DELETE and BACKSPACE buttons to correct text

Year A KS1	Autumn	Spring	Summer
<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p><i>Online Safety – Am I kind and responsible online?</i></p> <p><b><u>Knowledge</u></b> To know how to use technology safely and respectfully; To know where to go for help and support when they have concerns about material on the internet or other online technologies</p> <p><b><u>Skills</u></b> To tell a trusted adult what I want to use a device for To use links to websites to find information To show a trusted adult when something worrying or unexpected happens when I am using a device To be careful about the icons I click or tap when I use technology devices</p>	<p><i>Online Safety – Am I safe?</i></p> <p><b><u>Knowledge</u></b> To know how to keep personal information private; To know that something I put online can be seen by others</p> <p><b><u>Skills</u></b> To use different technologies, with a trusted adult, to communicate responsibility with others To check the icons I click or tap when I use technology devices</p> <p><b>Multimedia – Upload Pictures</b></p> <p><b><u>Knowledge</u></b> To know how to use technology to create and present information</p>	<p><i>Online Safety – Am I healthy?</i></p> <p><b><u>Knowledge</u></b> To know how to keep personal information private; To know that something I put online can be seen by others</p> <p><b><u>Skills</u></b> To select from a list of apps, games and websites that a trusted adult gives me To use links to websites to find information To check the icons I click or tap when I use technology devices</p> <p><b>Technology in our lives – Retrieve information from a website</b></p> <p><b><u>Knowledge</u></b> To know how to use technology to retrieve information</p>

	<p><b>Programming – Code-a-pillar adventure?</b></p> <p><u>Knowledge</u> To know how to create and debug a program</p> <p><u>Skills</u> To give instructions to my friend and follow their instructions to move around; To describe what happens when I press buttons on a robot; To describe what actions I need to do to make something happen; To predict what will happen for a short sequence of instructions; To use the word debug when I correct mistakes when I program.</p> <p><b>Data Handling – 2Count to record data</b></p> <p><u>Knowledge</u> To know how to use technology to organise information</p> <p><u>Skills</u></p>	<p><u>Skills</u> To use technology to create and present my ideas; To be creative with different technology tools</p> <p><b>Technology in our lives – Technology at home and school</b></p> <p><u>Knowledge</u> To recognise common uses of information technology beyond school.</p> <p><u>Skills</u> To recognise ways that technology is used in my home and community; To begin to identify some of the benefits of using technology</p> <p><b>Data Handling – Pictograph</b></p> <p><u>Knowledge</u> To know how to use technology to organise information</p> <p><u>Skills</u> To add information to a pictogram and talk to you about what I have found out;</p>	<p><u>Skills</u> To recognise ways that technology is used in my home and community; To begin to identify some of the benefits of using technology..</p> <p><b>Programming- Can I use programming to make objects move?</b></p> <p><u>Knowledge</u> To know that an algorithm needs to be used to make something happen</p> <p><u>Skills</u> To program software to do a particular task; To click on the buttons to draw a particular shape; To explain the sequence that is needed</p>
--	--	---	--

	<p><i>To talk to you about the different ways in which information can be shown;</i></p> <p><i>To add information to a pictograph and talk to you about what I have found out;</i></p> <p><i>To sort different kinds of information and present it to others;</i></p> <p><i>To use technology to collect information, including photos, video and sound</i></p>	<p><i>To sort different kinds of information and present it to others;</i></p> <p><i>To use technology to collect information, including photos, video and sound</i></p>	
--	---	--	--

<b>Year B KS1</b>	<b>Autumn</b>	<b>Spring</b>	<b>Summer</b>
<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p><b>Online Safety – Am I kind and responsible online?</b></p> <p><u>Knowledge</u> To know how to use technology safely and respectfully; To know where to go for help and support when they have concerns about material on the internet or other online technologies</p> <p><u>Skills</u> To tell a trusted adult what I want to use a device for To use links to websites to find information To show a trusted adult when something worrying or unexpected happens when I am using a device To be careful about the icons I click or tap when I use technology devices</p>	<p><b>Online Safety – Am I safe?</b></p> <p><u>Knowledge</u> To know how to keep personal information private; To know that something I put online can be seen by others</p> <p><u>Skills</u> To use different technologies, with a trusted adult, to communicate responsibility with others To check the icons I click or tap when I use technology devices</p> <p><b>Multimedia – Upload pictures</b></p> <p><u>Knowledge</u> To know how to use technology to create and present information</p>	<p><b>Online Safety – Am I healthy?</b></p> <p><u>Knowledge</u> To know how to keep personal information private; To know that something I put online can be seen by others</p> <p><u>Skills</u> To select from a list of apps, games and websites that a trusted adult gives me To use links to websites to find information To check the icons I click or tap when I use technology devices</p> <p><b>Multimedia – News Report</b></p> <p><u>Knowledge</u> To know how to use technology to create and present information</p>

<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p style="text-align: center;"><b>Programming – Bee Bot</b></p> <p><u>Knowledge</u> To know how to create and debug a program</p> <p><u>Skills</u> To give instructions to my friend and follow their instructions to move around; To describe what happens when I press buttons on a robot; To describe what actions I need to do to make something happen; To predict what will happen for a short sequence of instructions; To use the word debug when I correct mistakes when I program.</p> <p><b>Data Handling</b> – Can I use pictograph and 2Count for data collection?</p> <p><u>Knowledge</u> To know how to use technology to organise information</p> <p><u>Skills</u></p>	<p><u>Skills</u> To talk about the different ways I collect information; To make and save a graph using the data I collect; To talk about the data that is shown in my chart or graph.</p> <p><b>Technology in our lives</b> – Can I identify technology in my local area?</p> <p><u>Knowledge</u> To know how to use technology to retrieve information</p> <p><u>Skills</u> To explain why I used technology in my home and community; To identify benefits of using technology including finding information and communicating with others; To start to understand that other people have created the information I use; To explain why I use technology in the classroom.</p> <p><b>Programming-</b> Can I programme an online car?</p>	<p><u>Skills</u> To use technology to organise and present my ideas in different ways; To save and open files on the device I use.</p> <p><b>Data Handling</b> – Can I use a Venn diagram to present information?</p> <p><u>Knowledge</u> To know how to use technology to organise information</p> <p><u>Skills</u> To talk about the different ways I use technology to collect information; To make and save a graph using the data I collect; To talk about the data that is shown in my chart or graph; To explain what kind of information I could use to help me investigate a question.</p>
---	--	---	---

	<p>To make and save a chart or graph using the data I collect;</p> <p>To talk about the data that is shown in my chart or graph;</p> <p>To starting to understand a branching database;</p> <p>To tell you what kind of information I could use to help me investigate a question.</p> <p><b>Multimedia-</b> Can I present information to be shared with others?</p> <p><b>Knowledge</b> Know how to organise and present my ideas, including adding text and images</p> <p><b>Skills</b> To present information we have researched about our current topic; To develop key board skills of creating a capital letter, enter to move to next line and space bar; To share the information with others using a class blog, school website, etc</p>	<p><b>Knowledge</b> Know that software can be used to create movement and patterns on a screen.</p> <p><b>Skills</b> To describe what actions are needed to make something happen; To press the buttons in the correct order to make a robot do what is wanted; To begin to predict what will happen for a short sequence of instructions; To begin to use the word debug when I correct mistakes when I program.</p>	
--	---	---	--



### Year A

#### KS2 – Basic Skills to support learning across the curriculum

- Navigate public drive to save and retrieve files
- Connect peripheral devices using USB lead
- Use images saved to camera roll within a variety of Apps
- Use Save and Save As on laptops and PCs
- Copy and rename files to edit on tablets
- Use safe search engine eg Primary ICT / Swiggle
- Use individual fingers to input text and use SHIFT key to type characters.
- Amend text by highlighting and using SELECT/DELETE and COPY/PASTE
- Swap between letters and symbol input on a tablet
- Add shapes and word art to documents and presentations

### Year B

#### KS2 – Basic Skills to support learning across the curriculum

- Securely log on to tablet, laptop and PC devices
- Rename documents and other files
- Browse to a specified website
- Create hyperlink to a website
- Recognise appropriate online sources for clipart and images
- Acknowledge source of information / images
- Use a keyboard effectively, including the use of numbers
- Know how to use a spellcheck
- Be aware of keyboard shortcuts on laptops and PCs.
- Change font sizes and colour of text
- Use appropriate screen capture and insert in document or presentation

KS2 <i>Year A</i>	Autumn	Spring	Summer
<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p><i>Online Safety – Can I be kind and responsible?</i></p> <p><b><u>Knowledge</u></b> To use technology safely, respectfully and responsibly; To recognise acceptable/unacceptable behaviour; To identify a range of ways to report concerns about content and contact.</p> <p><b><u>Skills</u></b> To contribute to shared online safety rules and use them to make good choices; To use the safety features of apps, games and websites as well as reporting concerns to an adult.</p>	<p><i>Online Safety – Can I be safe?</i></p> <p><b><u>Knowledge</u></b> To use technology safely, respectfully and responsibly; To recognise acceptable/unacceptable behaviour; To identify a range of ways to report concerns about content and contact.</p> <p><b><u>Skills</u></b> To use a secure password and explain why they are important; To protect my personal information when I do different things online.</p>	<p><i>Online Safety – Can I be healthy?</i></p> <p><b><u>Knowledge</u></b> To use technology safely, respectfully and responsibly; To recognise acceptable/unacceptable behaviour; To identify a range of ways to report concerns about content and contact.</p> <p><b><u>Skills</u></b> To identify images which have been digitally altered; To identify adverts online, including those within Google searches.</p>

<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p><b>Multimedia</b> – Can I create an ebook using Book Creator?</p> <p><u>Knowledge</u> To know the best digital resource for designing, creating and presenting information.</p> <p><u>Skills</u> To combine a mixture of text, graphics and sound to share my ideas and learning; To use appropriate keyboard commands to amend text on my device; To evaluate my work and improve its effectiveness.</p> <p><b>Programming</b> – Can I create an algorithm in Scratch?</p> <p><u>Knowledge</u> To know how to design, write and debug programs that accomplish specific goals.</p> <p><u>Skills</u> To break an open-ended problem up into smaller parts; To put programming commands into a sequence to achieve a specific outcome;</p>	<p><b>Handling Data</b>– Can I collect data and present it?</p> <p><u>Knowledge</u> To know the best digital software to present data.</p> <p><u>Skills</u> To collect data to help me answer a question; To explain the different ways data can be organised; To search a ready-made database to answer questions; To add to a database; To use a data logger to monitor changes and can talk about the information collected.</p> <p><b>Multimedia</b> – Can I create a presentation on Powerpoint?</p> <p><u>Knowledge</u> To know how to use software to present information effectively.</p> <p><u>Skills</u></p>	<p><b>Programming</b> – Can I programme a Micro:bit?</p> <p><u>Knowledge</u> To know how to design, write and debug programs that accomplish specific goals.</p> <p><u>Skills</u> To break an open-ended problem up into smaller parts; To put programming commands into a sequence to achieve a specific outcome; To detect a problem in an algorithm which could result in unsuccessful programming; To keep testing my program and can recognise when I need to debug it; To use repeat commands; To describe the algorithm I will need for a simple task.</p> <p><b>Handling Data:</b> Can I use a datalogger?</p> <p><u>Knowledge</u> To know how a data logger can be used to monitor changes.</p> <p><u>Skills</u></p>
---	--	--	---

	<p>To detect a problem in an algorithm which could result in unsuccessful programming;          To keep testing my program and can recognise when I need to debug it;          To use repeat commands;          To describe the algorithm I will need for a simple task.</p> <p><b>Tech in our lives</b> – Can I search the world wide web safely?</p> <p><u>Knowledge</u>          To know and understand search technologies and appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p><u>Skills</u>          To describe the World Wide Web as the part of the Internet that contains websites;          To use search tools to find and use an appropriate website;          To think about whether I can use images that I find online in my own work.</p>	<p>To change the appearance of text to increase its effectiveness;          To create, modify and present documents for a particular purpose;          To use an appropriate tool to share my work; To give constructive feedback to my friends to help them improve their work and consider my own work in the same way;          To explore new media to extend what I can achieve.</p> <p><b>TIOL: Can I create a hyperlink?</b></p> <p><u>Knowledge</u>          Know whether a resource being use is on the school network, on the internet or on a personal device.</p> <p><u>Skills</u>          To identify key words to use when searching safely on the World Wide Web          To create a hyperlink to a resource on the World Wide Web</p>	<p>To collect data to help answer a question;          To talk about the different ways data can be organised;          To search a ready-made database to answer questions;          To add to a database;          To talk about information collected.</p>
--	--	---	---

KS2 <u>Year B</u>	Autumn	Spring	Summer
<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p><i>Online Safety – Can I be kind and responsible?</i></p> <p><b><u>Knowledge</u></b> To use technology safely, respectfully and responsibly;</p> <p>To recognise acceptable/unacceptable behaviour;</p> <p>To identify a range of ways to report concerns about content and contact.</p> <p><b><u>Skills</u></b> To describe the ways that people get bullied when they use different technologies and consider what I post;</p> <p>To use search tools to find appropriate information and decide whether I can trust it.</p> <p><b><u>Programming – Can I use Hopscotch?</u></b></p> <p><b><u>Knowledge</u></b> To know how to design, write and debug programs that accomplish specific goals.</p> <p><b><u>Skills</u></b> To use a variety of tools to create a program;</p>	<p><i>Online Safety – Can I be safe?</i></p> <p><b><u>Knowledge</u></b> To use technology safely, respectfully and responsibly;</p> <p>To recognise acceptable/unacceptable behaviour;</p> <p>To identify a range of ways to report concerns about content and contact.</p> <p><b><u>Skills</u></b> To participate safely and responsibly in a secure online community.</p> <p><b><u>TOIL – Can I scan and create a QR Code?</u></b></p> <p><b><u>Knowledge</u></b> To 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</p> <p><b><u>Skills</u></b></p>	<p><i>Online Safety – Can I be healthy?</i></p> <p><b><u>Knowledge</u></b> To use technology safely, respectfully and responsibly;</p> <p>To recognise acceptable/unacceptable behaviour;</p> <p>To identify a range of ways to report concerns about content and contact.</p> <p><b><u>Skills</u></b> To use age-appropriate apps, games and websites from a list I have agreed with others</p> <p>To make good choices about when and why I use devices.</p> <p><b><u>Multimedia – Can I combine text, graphic and sounds?</u></b></p> <p><b><u>Knowledge</u></b> To know how to use software to present information effectively.</p> <p><b><u>Skills</u></b></p>

<p>Knowledge statements = National Curriculum</p> <p>Skills statements = ELiM plans</p>	<p>To recognise an error in a program and debug it;</p> <p>To use an efficient procedure to simplify a program;</p> <p>To use logical thinking to solve a problem by breaking it up into smaller parts;</p> <p>To use a sensor to detect a change which can select an action in a program;</p> <p>To recognise that an algorithm will help me sequence more complex programs.</p> <p><b>Programming-</b> Can I create a game in Kodu?</p> <p><u>Knowledge</u> Know that you need to keep testing my program while I am putting it together. Know how to use logical thinking to solve an open-ended problem by breaking it up into smaller parts.</p> <p><u>Skills</u> To use a variety of tools to create a program; To recognise an error in a program and debug it; To recognise that an algorithm will help me sequence more complex programs.</p> <p><b>TOIL:</b> Can I share my ideas on Padlet?</p>	<p>To save and retrieve work on the Internet, the school network or my own device;</p> <p>To explain ways to communicate with others online.</p> <p><b>Handling Data –</b> Can I create a soundscape?</p> <p><u>Knowledge</u> Know the difference between data and information.</p> <p><u>Skills</u> To organise data in different ways; To collect data and identify where it could be inaccurate; To use a datalogger to record and share my readings with my friends</p> <p><b>Multimedia-</b> Can I use effects to change images?</p> <p><u>Knowledge</u> Know that technology can be used to create text, images and sounds.</p> <p><u>Skills</u></p>	<p>To give constructive feedback to my friends to help them improve their work and refine my own work;</p> <p>To use media to extend what I can achieve;</p> <p>To use photos, video and sound to create an atmosphere when presenting to different audiences;</p> <p>To explore new media to extend what I can achieve;</p> <p>To give constructive feedback to my friends to help them improve their work and refine my own work;</p> <p>To use an appropriate tool to share my work and collaborate online.</p> <p><b>Handling Data-</b> Can I make a branching database?</p> <p><u>Knowledge</u> Know a database can be used to collect, organise and sort information.</p> <p><u>Skills</u> To talk about the different ways data can be organised; To search a ready-made database to answer questions;</p>
---	--	--	---

	<p><b><u>Knowledge</u></b>  <i>Know that information on the world wide web needs to be checked for reliability,</i></p> <p><b><u>Skills</u></b>  <i>To tell you whether a resource I am using is on the Internet, the school network or my own device;</i>  <i>To identify key words to use when searching safely on the World Wide Web</i>  <i>To check who owns photos, text and clipart.</i></p>	<p><i>To create different effects with different technology tools;</i>  <i>To combine a mixture of text, graphics and sound to share my ideas and learning;</i>  <i>To evaluate my work and improve its effectiveness.</i></p>	<p><i>To collect data to help me answer a question;</i>  <i>To add to a database;</i>  <i>To make a branching database.</i></p>
--	---	--	---

## Progression Maps

Our progression maps are organised by our identified Linear Links.

Online Safety	
EYFS	<ul style="list-style-type: none"> <li>Children follow rules provided by a trusted adult when using technology. They begin to understand how to log in to access devices.</li> <li>Children begin to understand that devices should only be used for a limited time. They begin to use devices with others and talk about what is being done; they are careful with technological devices.</li> </ul>
KS1	<p>Key stage 1</p> <ul style="list-style-type: none"> <li>Learners can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</li> <li>Learners begin to consider their activity on the internet and learn about ways to keep themselves safe and why it is important to do so. They also compare appropriate and inappropriate activity on the internet and decide what to do next.</li> </ul>
KS2	<p>Key stage 2</p> <ul style="list-style-type: none"> <li>Learners use technology safely, respectfully and responsibly. They recognize acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact.</li> <li>Learners become more aware of their digital footprint by reflecting on their experience on the internet. They are able to understand more about age-appropriate websites and adverts and how adverts are used by companies.</li> <li>Learners are also introduced to the concept of plagiarism and citation. Learners are encouraged to identify online risks and share their knowledge of the risks and consequences for people online. They begin to think more critically about what they see online and look at the concept of fake news and false photographs.</li> </ul>
Programming	

EYFS	<p><b>Self confidence and self awareness</b></p> <ul style="list-style-type: none"> <li>Children explore the buttons of a floor robots and remote control toys. They are guided to discover ways to make the object move. Adults talk about what has been achieved by the children.</li> </ul> <p><b>Building relationships</b></p> <ul style="list-style-type: none"> <li>Children have opportunities to build environments for floor robots. They work together to navigate the robot or remote control toy around obstacles.</li> </ul> <p><b>Communication and language</b></p> <ul style="list-style-type: none"> <li>Children follow sets of instructions. They communicate instructions to each other and to supporting adults.</li> </ul> <p><b>Numerical Patterns</b></p> <ul style="list-style-type: none"> <li>Children use appropriate language to describe position and distance of floor robots.</li> </ul> <p><b>Number</b></p> <ul style="list-style-type: none"> <li>Children count steps and movement of floor robots.</li> </ul> <p><b>Self regulation/ Speaking / Numerical Patterns</b></p> <ul style="list-style-type: none"> <li>Children explore apps such as BeeBot / Kodable to make things happen. They talk about solving problems as they work at the low levels in the apps. Adults support them to be willing to make mistakes and learn from them.</li> </ul> <p><b>Managing self</b></p> <ul style="list-style-type: none"> <li>Children explore appropriate software, such as 2Go (Simple level) or Poisson Rouge, to make things happen. They are supported to be willing to make mistakes and to find out what they can make happen.</li> </ul>
KS1	<ul style="list-style-type: none"> <li>Learners understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. They create, debug and use logical reasoning to predict the behaviour of simple programs.</li> <li>Learners begin to understand their influence on technology by developing their programming skills to determine output. They begin to understand that an algorithm is a series of steps for solving problems and a code is a series of steps that machines can execute. They begin to explore debugging, predicting when codes may not work and changing them.</li> </ul>

<b>KS2</b>	<ul style="list-style-type: none"> <li>Learners design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>Learners build on their programming skills by solving problems and programming commands to achieve a specific outcome. They begin to write programs, explain algorithms and identify errors in their work. They are able to explain the outcome of an algorithm with confidence and accuracy.</li> </ul>
------------	---

**Handling Data**

<b>EYFS</b>	<p><b>Speaking / Building Relationships</b></p> <ul style="list-style-type: none"> <li>Children take photos and video to capture learning. They know where it is stored to go back and reflect on their learning and the learning of their friends. They talk about what they can learn from photos and video online or photos in books.</li> </ul> <p><b>Past and Present</b></p> <ul style="list-style-type: none"> <li>Children use QR codes to select information they want to find out. Aurasma can be used to recall information that has been collected.</li> </ul> <p><b>Communication and Language</b></p> <ul style="list-style-type: none"> <li>Children collect sounds to provide evidence in an investigation. They record interviews to collect information from adults or other experts. They know where the information is stored and replay it.</li> </ul> <p><b>Select and use technology</b></p> <ul style="list-style-type: none"> <li>Children use digital microscopes or Magniscope app or a visualiser to examine objects they have collected. They capture the image to label what they have found out.</li> </ul> <p><b>Number</b></p> <ul style="list-style-type: none"> <li>Children use software such as 2Count and apps such as DoodleBuddy to count information and to talk about what they have found out. They sort photos of things they have investigated.</li> </ul> <p><b>Managing self / speaking</b></p> <ul style="list-style-type: none"> <li>Children are supported to know their own important information. They use talking tins or sound recorder apps to practise their information. Adults rehearse who they can tell this information.</li> </ul>
-------------	--

KS1	<ul style="list-style-type: none"> <li>Learners begin to understand what data is and explore collecting data relating to different investigative questions in topic-based contexts. They explore expressing information in tables, sorting and organising information for others to be able to understand.</li> </ul>
KS2	<ul style="list-style-type: none"> <li>Learners 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.</li> <li>Learners begin to explore expressing information in tables, sorting and organising information for others to be able to understand.</li> </ul>

## Multimedia

EYFS	<p><b>Writing</b></p> <ul style="list-style-type: none"> <li>Children have a variety of experiences to type their name or label images using 2Publish or other simple software/apps. They are given opportunities to use a tablet and laptop keyboard and a mouse.</li> </ul> <p><b>Being imaginative and Expressive</b></p> <ul style="list-style-type: none"> <li>Children are taught skills to take a photo. They ask permission before taking photos of friends. Children photograph artifacts and scenery that are part of learning. These are added to software and apps for labelling.</li> </ul> <p><b>Being imaginative and Expressive</b></p> <ul style="list-style-type: none"> <li>Children use video to retell and create stories. Green screening is used for children to imagine themselves in different places.</li> </ul> <p><b>The Natural World / Speaking</b></p> <p>Children record sounds on a wellie walk or during exploration of musical instruments. Actions are imagined around the sound when it is played back. Children record phrases to describe feelings and objects.</p> <p><b>Creating with materials</b></p> <ul style="list-style-type: none"> <li>Children use 2Paint or other simple software/apps to make marks and to paint a picture.</li> </ul> <p><b>Gross and Fine Motor Skills</b></p> <ul style="list-style-type: none"> <li>IWB is used to encourage big arm movements. Apps and paint software used to develop fine motor control.</li> </ul> <p><b>Creating with materials</b></p> <ul style="list-style-type: none"> <li>2Simple Music Toolkit, Music Sparkles or Tap a Tune App used to create music.</li> <li>Simple apps and websites used to create animations eg ABCYA.</li> </ul>
------	--

KS1	<ul style="list-style-type: none"> <li>Learners use technology purposefully to create, organise, store, manipulate and retrieve digital content.</li> <li>Learners begin to develop their creativity using technology through recording sound. Learners will also begin to develop their editing skills and control of the tools.</li> </ul>
KS2	<ul style="list-style-type: none"> <li>Learners 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. They 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.</li> <li>Learners develop their editing skills further by cropping, organising and arranging film clips. They are able to share work and offer feedback and ideas for improvement with animation and film, giving their opinion on which software to use. Learners begin to look more into multimedia broadcasting, learning new skills including recording jingles, podcasts and narration. They become more confident in post-production with editing, trimming and refining their work based on plans they have made.</li> </ul>
<p><b>Technology in our Lives (TIOL)</b></p>	

EYFS	<ul style="list-style-type: none"> <li>Children see adults use simple search engines such as Kiddle and Kidrex to find information. They are given opportunities to explore information sites such as Infant Encyclopedia, CBeebies Topics and Glossopedia.</li> </ul>
	<p><b>Listening, Attention and Understanding</b></p> <ul style="list-style-type: none"> <li>Children share conversations with experts and other classes using video chat such as Facetime. The classes could be within their own school or in other schools, nationally and internationally.</li> </ul>
	<p><b>People, Culture and Communities</b></p> <ul style="list-style-type: none"> <li>Children help their teacher to make decisions about photos that show their learning experiences to a global audience via school website, a blog or Twitter. They are supported to show their learning to family beyond school.</li> </ul>
	<p><b>Speaking</b></p> <ul style="list-style-type: none"> <li>Children offer explanations for why things happen as they use different technologies such as a printer, photocopier, microwave and a range of computing devices such as tablets, laptops and interactive whiteboards.</li> </ul> <p><b>People, Culture and Communities</b></p> <p>Children use play technology and junk models to role play work environments such as vets, builders, shop, hospital etc. They have opportunities to explore old technology such as phones, keyboards, old PCs etc.</p> <p><b>Understanding the world</b></p> <ul style="list-style-type: none"> <li>Children experience travelling the world using Google Earth software or app. They see photos and visit 3d buildings. Teachers model safe use of Youtube to view videos of places around the globe.</li> </ul>
KS1	<ul style="list-style-type: none"> <li>Learners recognise common uses of technology beyond school. They use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</li> <li>Learners begin to make links to how they use technology outside of the classroom. They begin to think about the benefits of using technology in their lives, making links to learning about online safety.</li> </ul>

KS2	<ul style="list-style-type: none"><li>• Learners recognise common use of technology beyond school. Learners 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. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content.</li><li>• Learners refer to online safety rules when discussing technology in their lives. They are able to navigate between websites and use safe search terms on trusted search engines. They become more confident in using email for communication, including attaching and saving files from emails. Learners can use safe search terms on trusted search engines, and evaluate websites based on layout and information. They become more confident in understanding Google rankings, adverts and the reliability of websites.</li></ul>
-----	--

## Vocabulary Progression

### New Wessex Computing Vocabulary

Progression in computing language Year 1 – Year 6



*Using vocabulary*

**Using and understanding vocabulary**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Programming</b>	<i>Algorithm</i> <b>Backward</b> <b>Button</b> <b>Clear</b> <i>Code</i> <i>Debug</i> <b>Distance</b> <b>Floor robot</b> <b>Forward</b> <b>Go</b> <i>Instructions</i> <b>Mistake</b> <b>Move</b> <b>Pause / Wait</b> <i>Predict</i> <i>Program</i> <i>Quarter turn / right-angle</i> <i>Turn left</i> <i>Turn right</i> <i>Sequence</i> <b>Stop</b>	<b>Algorithm</b> <b>Backward</b> <b>Button</b> <b>Clear</b> <b>Code</b> <b>Debug</b> <b>Distance</b> <b>Execute</b> <b>Floor robot</b> <b>Forward</b> <b>Go</b> <i>Half turn</i> <b>Instructions</b> <b>Mistake / Error</b> <b>Move</b> <b>Pause / Wait</b> <b>Predict</b> <i>Program</i> <b>Quarter turn / right-angle</b> <b>Turn left</b> <b>Turn right</b> <b>Sequence</b> <b>Stop</b> <b>Symbol</b>	<b>Algorithm</b> <b>Background</b> <b>Block</b> <b>Collaboration</b> <i>Control</i> <i>Costume</i> <b>Debug</b> <i>Event</i> <i>Forever</i> <b>Imagine</b> <i>Implement</i> <i>Input</i> <b>Make mistakes</b> <b>Movement</b> <b>Pattern</b> <i>Output</i> <b>Persevere</b> <b>Repeat</b> <i>Rotation</i> <b>Sequence</b> <b>Sprite</b> <b>Stage</b> <b>Wait / Pause</b>	<b>Algorithm</b> <b>Background</b> <b>Block</b> <b>Collaboration</b> <i>Computational thinking</i> <b>Control</b> <b>Costume</b> <b>Debug</b> <b>Design</b> <b>Effect</b> <b>Event</b> <b>Forever</b> <b>Imagine</b> <b>Implement</b> <b>Input</b> <b>Make mistakes</b> <b>Movement</b> <b>Pattern</b> <b>Output</b> <b>Persevere</b> <b>Repeat</b> <b>Rotation</b> <i>Selection (If Then)</i> <b>Sequence</b> <b>Sprite</b> <b>Stage</b> <b>Wait / Pause</b>	<b>Algorithm</b> <b>Block</b> <i>Broadcast</i> <b>Collaboration</b> <i>Computational thinking</i> <b>Control</b> <b>Debug</b> <i>Decomposition</i> <b>Design</b> <b>Effect</b> <b>Event</b> <b>Forever</b> <b>Imagine</b> <b>Implement</b> <b>Input</b> <b>Make mistakes</b> <b>Pattern</b> <b>Output</b> <b>Persevere</b> <b>Repeat</b> <b>Rotation</b> <b>Selection (If Then)</b> <b>Sequence</b> <b>Sprite</b> <i>Variable</i> <b>X position / Y position</b>	<i>Abstraction</i> <b>Algorithm</b> <i>Broadcast</i> <b>Collaboration</b> <b>Computational thinking</b> <b>Control</b> <b>Debug</b> <b>Decomposition</b> <b>Design</b> <b>Effect</b> <b>Event</b> <b>Forever</b> <b>Imagine</b> <b>Implement</b> <b>Input</b> <b>Make mistakes</b> <b>Pattern</b> <b>Output</b> <b>Persevere</b> <b>Repeat</b> <b>Rotation</b> <b>Selection (If Then)</b> <b>Sequence</b> <b>Sprite</b> <b>Variable</b> <b>X position / Y position</b>

# New Wessex Computing Vocabulary

Progression in computing language Year 1 – Year 6

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Multimedia</b>	<i>Animate</i>	<i>Animate / Animation</i>	<b>Animate</b>	<b>Animate</b>	<b>Animate</b>	<b>Animate</b>
	<b>App</b>	<b>App</b>	<b>Animation</b>	<b>Animation</b>	<b>Animation</b>	<b>Animation</b>
	<b>Backspace</b>	<b>Backspace</b>	<b>App</b>	<b>App</b>	<b>App</b>	<b>App</b>
	<b>Camera</b>	<b>Clipart</b>	<b>Backspace</b>	<i>Audience</i>	<b>Audience</b>	<b>Audience</b>
	<b>Delete</b>	<i>Copy</i>	<b>Clipart</b>	<b>Backspace</b>	<b>Bullet points</b>	<b>Bullet points</b>
	<i>Insert</i>	<b>Delete</b>	<b>Copy</b>	<b>Clipart</b>	<b>Clipart</b>	<b>Clipart</b>
	<b>Keyboard</b>	<b>Enter</b>	<b>Delete</b>	<b>Comic strip</b>	<b>Comic strip</b>	<b>Comic strip</b>
	<i>Open</i>	<i>Folder</i>	<b>Document</b>	<b>Document</b>	<b>Document</b>	<b>Document</b>
	<b>Photo(graph)</b>	<i>Image</i>	<b>Edit</b>	<b>Edit</b>	<b>Edit</b>	<b>Edit</b>
	<b>Print</b>	<b>Insert</b>	<b>Enter</b>	<b>Enter</b>	<b>Folder</b>	<b>Folder</b>
	<b>Right click</b>	<b>Keyboard</b>	<b>Folder</b>	<b>Folder</b>	<b>Font</b>	<b>Font</b>
	<i>Save</i>	<b>Open</b>	<b>Font</b>	<b>Font</b>	<b>Greenscreen</b>	<b>Greenscreen</b>
	<i>Shift</i>	<b>Photo(graph)</b>	<b>Greenscreen</b>	<b>Greenscreen</b>	<b>Insert</b>	<b>Insert</b>
	<b>Sound</b>	<b>Print</b>	<b>Image</b>	<b>Image</b>	<b>Heading / sub-heading</b>	<b>Heading / sub-heading</b>
	<b>Space bar</b>	<b>Right click</b>	<b>Insert</b>	<b>Insert</b>	<b>Hyperlink</b>	<b>Hyperlink</b>
	<b>Video / Film</b>	<b>Save</b>	<b>Hyperlink</b>	<b>Heading</b>	<b>Layout</b>	<b>Layout</b>
		<i>Select</i>	<b>Keyboard</b>	<b>Hyperlink</b>	<b>Narration</b>	<b>Narration</b>
		<b>Shift</b>	<i>Layout</i>	<i>Layout</i>	<b>Persuasive</b>	<b>Persuasive</b>
		<b>Software</b>	<b>Narration</b>	<b>Narration</b>	<b>Right click</b>	<b>Production</b>
		<b>Sound</b>	<b>Open</b>	<i>Persuasive</i>	<b>Select</b>	<b>Right click</b>
	<b>Space bar</b>	<b>Photo(graph)</b>	<b>Presentation</b>	<b>Screen shot</b>	<b>Select</b>	
	<b>Video / Film</b>	<b>Right click</b>	<b>Right click</b>	<b>Shift</b>	<b>Screen shot</b>	
		<b>Save</b>	<b>Select</b>	<b>Slides</b>	<b>Shift</b>	
		<b>Select</b>	<i>Screen shot</i>	<b>Software</b>	<b>Slides</b>	
		<b>Shift</b>	<b>Shift</b>	<b>Sound effect</b>	<b>Software</b>	
		<b>Slides</b>	<b>Slides</b>	<b>Sound recording</b>	<b>Sound effect</b>	
		<b>Software</b>	<b>Software</b>	<b>Storyboard</b>	<b>Sound recording</b>	
		<b>Sound</b>	<b>Sound effect</b>	<b>Style</b>	<b>Storyboard</b>	
		<b>Space bar</b>	<b>Space bar</b>	<b>Tab</b>	<b>Style</b>	
		<i>Style</i>	<b>Storyboard</b>	<i>Template</i>	<b>Tab</b>	
		<b>Text</b>	<i>Style</i>	<i>Theme</i>	<b>Template</b>	
		<b>Video / Film</b>	<i>Template</i>		<b>Theme</b>	
			<b>Text</b>			

# New Wessex Computing Vocabulary

Progression in computing language Year 1 – Year 6



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Technology in Our Lives</b>	Communicate QR Code Search Technology / Computing devices World Wide Web / Internet	Communicate QR Code Search engine Technology / Computing devices Website World Wide Web / Internet	Communicate Computing devices Copyright email Filter Internet QR Code Reliability Search engine Search result Webpage Website World Wide Web	Blog Citation Communicate Computing devices Copyright email Filter Hyperlink Internet QR Code Reliability Search engine Search result Search query Vlog Webpage Website World Wide Web	Blog Citation Communicate Computing devices Copyright Email Digital content Digital advertising Filter Hyperlink Internet Internet Services QR Code Reliability Search engine Search result Search query Vlog Webpage Website World Wide Web	Blog Citation Client Copyright Digital content Digital advertising Domain Filter Hyperlink Internet Service Provider LAN Local Area Network Packets Protocol Router QR Code Reliability Search engine Search result Search query Vlog Webpage Website WAN Wider Area Network

# New Wessex Computing Vocabulary

Progression in computing language Year 1 – Year 6

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Handling Data	<b>Collect</b> <i>Data</i> <b>Found out</b> <b>Pictograph</b> <b>Questions</b> <b>Record</b> <b>Sort</b> <i>Venn diagram</i>	<i>Branching database</i> <b>Collect</b> <i>Data</i> <i>Decision tree</i> <b>Found out</b> <b>Graph</b> <b>Investigate</b> <b>Pictograph</b> <b>Questions</b> <b>Record</b> <b>Sort</b> <b>Venn diagram</b>	<b>Branching database</b> <b>Chart</b> <b>Collect</b> <i>Data</i> <b>Database</b> <b>Data logger</b> <b>Decision tree</b> <b>Graph</b> <i>Information</i> <i>Interpret</i> <b>Investigate</b> <b>Questions</b> <b>Record</b> <b>Results</b> <b>Tally</b> <b>Sort</b> <b>Venn diagram</b>	<b>Branching database</b> <b>Chart</b> <b>Collect</b> <b>Data</b> <b>Database</b> <b>Data logger</b> <b>Decision tree</b> <i>Field</i> <b>Graph</b> <i>Hypothesis</i> <b>Information</b> <b>Interpret</b> <b>Investigate</b> <b>Predict</b> <b>Questions</b> <b>Record</b> <b>Results</b> <b>Tally</b> <b>Sort</b> <b>Venn diagram</b>	<i>Anomaly</i> <i>Average</i> <b>Chart</b> <b>Collect</b> <b>Complex questions</b> <b>Data</b> <b>Database</b> <b>Data logger</b> <b>Decision tree</b> <i>Formulae</i> <b>Field</b> <b>Graph</b> <b>Hypothesis</b> <b>Information</b> <b>Interrogate</b> <b>Interpret</b> <b>Investigate</b> <b>Model</b> <i>Plausible</i> <b>Predict</b> <b>Questions</b> <b>Record</b> <b>Results</b> <b>Tally</b> <b>Sort</b> <b>Venn diagram</b>	<b>Analyse</b> <i>Anomaly</i> <b>Average</b> <b>Chart</b> <b>Collect</b> <b>Complex questions</b> <b>Data</b> <b>Database</b> <b>Data logger</b> <b>Decision tree</b> <i>Formulae</i> <b>Field</b> <b>Graph</b> <b>Hypothesis</b> <b>Information</b> <b>Interrogate</b> <b>Interpret</b> <b>Investigate</b> <b>Knowledge</b> <b>Model</b> <b>Plausible</b> <b>Predict</b> <b>Process</b> <b>Questions</b> <b>Record</b> <b>Results</b> <b>Tally</b> <b>Sort</b> <b>Venn diagram</b>

## Glossary of terms

Term	Definition
<b>Abstraction</b>	Take out the essence of the problem
<b>Algorithm</b>	A set of instructions needed to complete the task
<b>Apps/application</b>	Can be any program that runs on a computer. They are associated with smartphones/tablets
<b>Cloud computing</b>	Let's you keep information on a remote server (the cloud), instead of trapped in a computer. You can access your data from a smartphone, a tablet, a laptop, or a desktop—wherever you have an Internet connection
<b>Collaboration</b>	Working with others to solve problems/tasks
<b>Computer</b>	Has to have an input/output with processing and programming
<b>Cookies</b>	Information to target sales to people
<b>Country code</b>	are short alphabetic or numeric geographical codes which are developed to represent countries
<b>CPU</b>	Central Processing Unit
<b>Decomposition/ decomposing</b>	Breaking down a problem and work out the first/second step
<b>Debug</b>	Identify if the program is working how it should be and if not identify areas which need to be altered so they are successful
<b>Digitally literate</b>	Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills
<b>Disinformation</b>	Deliberate lies
<b>Domain name</b>	The name of a person's or organization's website on the internet
<b>Firewall</b>	Security for the network by checking the traffic coming in
<b>Generalisation</b>	Making links to previous problems/learning
<b>Hard drive</b>	Stores information in computers
<b>http</b>	Hypertext transfer protocol- it is the data transmission format for the web
<b>Internet</b>	The internet is made of computers connected to each other around the world. Words and pictures can be sent from one computer to another. ... When you use websites and some apps, you are using the internet.

<b>Input</b>	Something that goes in
<b>Input device</b>	A device used for inputting
<b>IP Address</b>	Internet protocol- 12 or 18 digit address for device
<b>Misinformation</b>	Mistake lies
<b>Network</b>	An arrangement, system or group of connected devices
<b>Packets</b>	Information on the internet is sent around in packets which are labelled with: Source sender IP Destination recipient IP Number of packets Number of the packet
<b>RAM</b>	Type of computer storage where the information can be accessed in any order
<b>Router</b>	Turns data into packets and sends it round/brings it back
<b>Search engines</b>	Are websites that make it easy for you to find a website or page in an instant
<b>Server</b>	Computer systems configured to provide services to a network
<b>Switch</b>	Connects devices together and internet via the router and firewall
<b>TCP</b>	Transmission control protocol
<b>URL</b>	Uniform resource locator
<b>WAP</b>	Wireless access point- routes data across a wireless connection.
<b>Wired device</b>	Any device connected to the school's network using a cable
<b>WWW</b>	One system that uses the internet to send information from one device to another. It needs the internet to work.

## Computing Non-negotiables

Planning:	Resources:	Presentation:	Assessment:	Inclusion for All:
<ul style="list-style-type: none"> <li>• School format for planning will be used and will identify: Learning Objective, Skills Progression, identified knowledge outcomes, Teacher input, Practise It and Review It sections</li> <li>• Planning will be shared on p/drive with Key Stage Team</li> <li>• Resources will be identified on the planning</li> <li>• Links to other curriculum areas will be made where appropriate</li> <li>• References to devices required for the lesson</li> </ul>	<ul style="list-style-type: none"> <li>• Computing long and medium-term plans</li> <li>• Knowledge organisers</li> <li>• eLim</li> <li>• Chromebooks</li> <li>• PCs</li> <li>• iPads</li> <li>• Code-a-pillars</li> <li>• Micro:bits</li> <li>• iPads</li> </ul>	<ul style="list-style-type: none"> <li>• Curriculum Portfolios</li> <li>• Wall displays</li> <li>• Digital formats</li> <li>• Evidence of work in other curriculum books where links have been made</li> </ul>	<ul style="list-style-type: none"> <li>• Prior learning revisit</li> <li>• Now I know...</li> <li>• Oral quizzes to recap learning</li> <li>• Lesson plenary- what have we learnt today? What do we now know?</li> <li>• End of unit retrieval quizzes- using Kahoot, Blooket or Quizizz</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-teaching of key vocabulary</li> <li>• Teacher modelling and scaffolding of language and ideas</li> <li>• Use of scribes/partnered work</li> <li>• Use of Digital Leaders to support</li> <li>• Simplified log ins</li> <li>• Use of dictation</li> <li>• Plug blue tooth hearing aids into devices</li> <li>• Paired work</li> <li>• Use of small group delivery to focus learners</li> <li>• Use of switches and assistive technology</li> </ul>