

St Benedict's CofE VA Junior School – Whole School Computing Long Term Planning Units and National Curriculum Objectives



Year Group	Autumn	Spring	Summer
Year 3	<p>Computing systems and networks 3.1 Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.</p>	<p>Creating Media 3.2 Stop-frame animation Capturing and editing digital still images to produce a stop-frame animation that tells a story. (using USB camera)</p> <p><i>Cross-curricular link –history – Ancient Egyptians</i></p>	<p>Programming A 3.3 Sequencing sounds Creating sequences in a block-based programming language (Scratch) to make music.</p> <p><i>Cross-curricular link - Music</i></p>
	<p>Device-Free Moments <i>Why is it important that we have device-free moments in our lives?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Recognise the ways in which digital devices can be distracting. Identify how they feel when others are distracted by their devices. Identify ideal device-free moments for themselves and others. 	<p>Who Is in Your Online Community? <i>How are we all part of an online community?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Compare and contrast how they are connected to different people and places, in person and on the internet. Demonstrate an understanding of how people can connect on the internet 	<p>That's Private <i>What kinds of information should I keep to myself when I use the internet?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Recognise the kind of information that is private. Understand that they should never give out private information online
	<p>Data and Information 3.4 Branching Databases Building and using branching databases to group objects using yes/no questions.</p>	<p>Creating Media 3.5 Desktop Publishing Creating documents by modifying text, images, and page layouts for a specified purpose.</p>	<p>Programming B 3.6 Events and Actions Writing algorithms and programs that use a range of events to trigger sequences of actions. (Scratch)</p>
	<p>Putting a STOP to Online Meanness <i>What should you do if someone is mean to you online?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Understand what online meanness can look like and how it can make people feel. Identify ways to respond to mean words online, using "S-T-O-P". 	<p>Let's Give Credit <i>How can you give credit for other people's work?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Explain how giving credit is a sign of respect for people's work Learn how to give credit in their schoolwork for content they use from the internet. 	<p>We, the Digital Citizens <i>How can we be good digital citizens</i></p> <p>Digital Trails <i>What information is OK to have in your digital footprint?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Learn that the information they share online leaves a digital footprint or "trail". Explore what information is OK to be shared online

Year 4	<p>Computing systems and networks</p> <p>4.1 The Internet</p> <p>Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.</p>	<p>Data and Information</p> <p>4.4 Data Logging</p> <p>Recognising how and why data is collected over time, before using data loggers to carry out an investigation.</p> <p><i>Cross-curricular link - Science – States of matter – evaporation</i></p>	<p>Programming B</p> <p>4.6 Repetition in games</p> <p>Using a block-based programming language (Scratch) to explore count-controlled and infinite loops when creating a game.</p>
	<p>Your Rings of Responsibility</p> <p><i>How do digital citizens take responsibility for themselves, their communities and their world?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Examine both online and in-person responsibilities. Describe the "Rings of Responsibility" as a way to think about how our behaviour affects ourselves and others. Identify examples of online responsibilities to others 	<p>Our Digital Citizenship Pledge</p> <p><i>What makes a strong online community?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Define what a community is, both in person and online. Explain how having norms helps people in a community achieve their goals. Create and pledge to adhere to shared norms for being in an online community. 	<p>Password Power-Up</p> <p><i>How can a strong password help protect your privacy?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Define the term "password" and describe its purpose. Understand why a strong password is important. Practise creating a memorable and strong password.
	<p>Creating Media</p> <p>4.2 Audio Editing</p> <p>Capturing and editing audio to produce a podcast, ensuring that copyright is considered.</p> <p><i>Cross-curricular link - English - Pod casts about "The Whale"</i></p>	<p>Programming A</p> <p>4.3 Repetition in shapes</p> <p>Using a text-based programming language (Turtle Playground) to explore count-controlled loops when drawing shapes.</p>	<p>Creating Media</p> <p>4.5 Photo editing</p> <p>Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.</p> <p><i>Cross-curricular link - Science – Living Things and Habitats -create a new minibeast</i></p>
	<p>The Power of Words</p> <p><i>What should you do when someone uses mean or hurtful language on the internet?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Understand that it's important to think about the words we use, because everyone interprets things differently. Identify ways to respond to mean words online, using S-T-O-P. Decide what kinds of statements are OK to say online and which are not. 	<p>Is Seeing Believing?</p> <p><i>Why do people alter digital photos and videos?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Recognise that photos and videos can be altered digitally. Identify different reasons why someone might alter a photo or video. 	<p>We, the Digital Citizens</p> <p><i>How can we be good digital citizens?</i></p> <p>This is Me</p> <p><i>How does what I post online affect my identity?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Consider how posting selfies or other images will lead others to make assumptions about them. Reflect on the most important parts of their unique identities. Identify ways they can post online to best reflect who they are

Year 5	<p>Computing systems and networks</p> <p>5.1 Sharing Information Identifying and exploring how information is shared between digital systems.</p>	<p>Creating Media</p> <p>5.2 Video editing Planning, capturing, and editing video to produce a short film.</p>	<p>Programming B</p> <p>5.6 Selection in quizzes Exploring selection in programming to design and code an interactive quiz. (Scratch)</p>
	<p>My Media Choices <i>What makes a healthy media choice?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Learn the "What? When? How Much?" framework for describing their media choices. Use this framework and their emotional responses to evaluate how healthy different types of media choices are. Begin to develop their own definition of a healthy media balance. 	<p>Keeping Games Fun and Friendly <i>How can I help myself and others be positive and have fun while playing online games?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Define "social interaction" and give an example. Describe the positives and negatives of social interaction in online games. Create an online video game cover that includes guidelines for positive social interaction 	<p>Private and Personal Information <i>What information about you is OK to share online?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Identify the reasons why people share information about themselves online. Explain the difference between private and personal information. Explain why it is risky to share private information online.
	<p>Programming A</p> <p>5.3 Selection in physical computing Exploring conditions and selection using a programmable microcontroller.(Crumble)</p>	<p>Data and Information</p> <p>5.4 Flat-file databases Using a database to order data and create charts to answer questions.</p>	<p>Creating Media</p> <p>5.5 Vector drawing Creating images in a drawing program by using layers and groups of objects.</p>
	<p>Be a Super Digital Citizen <i>How can we be upstanders when we see cyberbullying?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Reflect on the characteristics that make someone an upstanding digital citizen. Recognise what cyberbullying is Show ways to be an upstander by creating a digital citizenship superhero comic strip. 	<p>A Creator's Rights and Responsibilities <i>What rights and responsibilities do you have as a creator?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Define "copyright" and explain how it applies to creative work. Describe their rights and responsibilities as creators. Apply copyright principles to real-life scenarios 	<p>We, the Digital Citizens <i>How can we be good digital citizens?</i></p> <p>Our Online Tracks <i>How does our online activity affect the digital footprints of ourselves and others?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Define the term "digital footprint" and identify the online activities that contribute to it. Identify ways they are -- and are not -- in control of their digital footprint. Understand what responsibilities they have for the digital footprints of themselves and others

Year 6	<p>Creating media</p> <p>6.5 3D modelling Planning, developing, and evaluating 3D computer models of physical objects.</p>	<p>Creating media</p> <p>6.2 Web page creation Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.</p> <p><i>Cross-curricular link – favourite authors</i></p>	<p>Programming A</p> <p>6.3 Variables in games Exploring variables when designing and coding a game. (Scratch)</p>
	<p>Finding My Media Balance <i>What does media balance mean for me?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> • Reflect on how balanced they are in their daily lives. • Consider what "media balance" means and how it applies to them. • Create a personalised plan for healthy and balanced media use. 	<p>Digital Friendships <i>How do you keep online friendships safe?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> • Compare and contrast different kinds of online-only friendships. • Describe the benefits and risks of online-only friendships. • Describe how to respond to an online-only friend if the friend asks something that makes them feel uncomfortable. 	<p>You Won't Believe this! <i>What is clickbait and how can you avoid it?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> • Define "the curiosity gap". • Explain how clickbait uses the curiosity gap to get your attention. • Use strategies for avoiding clickbait.
	<p>Computing systems and networks</p> <p>6.1 Internet communication Recognising how the WWW can be used to communicate and be searched to find information.</p>	<p>Data and information</p> <p>6.4 Introduction to Spreadsheets Answering questions by using spreadsheets to organise and calculate data.</p> <p><i>Cross-curricular link - maths</i></p>	<p>Programming B</p> <p>6.6 Sensing Designing and coding a project that captures inputs from a physical device. (Micro:bit)</p>
	<p>Is it Cyberbullying? <i>What is cyberbullying and what can you do to stop it?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> • Recognise similarities and differences between in-person bullying, cyberbullying and being mean. • Empathise with the targets of cyberbullying • Identify strategies for dealing with cyberbullying and ways they can be an upstander for those being bullied. 	<p>Reading News Online <i>What are the important parts of an online news article?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> • Understand the purposes of different parts of an online news page. • Identify the parts and structure of an online news article. • Learn about things to watch out for when reading online news pages, such as sponsored content and advertisements. 	<p>We, the Digital Citizens <i>How can we be good digital citizens?</i></p> <p>Beyond Gender Stereotypes <i>How do gender stereotypes shape our experiences online?</i></p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> • Define "gender stereotypes" and describe how they can be present online. • Describe how gender stereotypes can lead to unfairness or bias. • Create an avatar and a poem that show how gender stereotypes impact who they are.

****KEY
SUBJECT
SKILLS TO BE
DELIVERED
THROUGHOUT
THE YEAR BY
ALL KS2 YEAR
GROUPS:**

- 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

Online Safety

- Media Balance & Well-being
- Cyberbullying, Digital Drama & Hate Speech
- Relationships & Communication
- News and Media Literacy
- Privacy & Security
- Digital Footprint & Identity