Subject: Computing Year: 7 Term: 1.2

Title of Scheme of Learning:	Overview of topic: *Digital Citizenship Introduction to ICT & safety* This unit requires to learn how to think critically, develop an awareness of the necessary standards of behaviour expected in online environments, and an understanding of the shared social issues created by digital technologies. Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns. Key Skills to be covered: • Word processing software • Use of headings • Formatting techniques (Bold, underline) • Import images/wrapping them • Internet research skills • Use of external sources to find information SMSC/PSHE/CV/Catholic Social Teaching Overview: • Express themselves creatively through designing and making with a variety of materials. Aspire to create a high-quality product (S) • Distinguish between right and wrong – safety online. Recognise that their values and attitudes may change over time. Trolling and their impact on others (M) • Talk about the role that Britain has played in computing (CC) *PSHE (P):* *Cultural Capital (CC)* *Spiritual, Moral, Social, Cultural (S/M/S/C)* *Catholic Social Teaching (CST)*	How does this SOL relate to previous schemes? • Covered e-safety in primary school • Basic knowledge about the risks posed by the Internet e.g. privacy, social networks, cyber-bullying • Some experience of using Microsoft Office package e.g PowerPoint, Word, Outlook • Worked in groups during their Core lessons Next topic: Computer Systems Links to Future Learning This topics links to KS4 Computer Science – Cyber Security	Common Misconceptions in the unit: Social media content is always accurate –Reality: Information on social media can be misleading or false, and it is important to verify sources before accepting content as true **Social Media is a Good Indicator of Reality**: Social media often presents a curated version of reality, where users share highlights and positive moments, not the full picture of their lives. **All Social Media Platforms are Safe**: Different platforms have varying levels of security, and some may be more susceptible to privacy issues and cyber threats. **Everything on the Internet is True**: The internet contains a mix of accurate and false information, so it's essential to verify sources and cross-check facts. **Public Wi-Fi is Safe to Use for Anything**: public Wi-Fi networks are often unsecured, making it easy for hackers to intercept data. It's important to avoid accessing sensitive information on public networks.

Learning episodes (*inc nu of lessons*)	Learning Question(s) & Key Vocabulary	Content (*To include: What should be covered and planned time for students to carry out a response to feedback*)	Feedback & Assessment Points (*To include specific detail about what the assessments are & length of time for assessments etc*)
Social Media 1	How can you demonstrate responsible behaviour when creating and sharing digital video content? <u>Vocabulary</u> • Social media • Virtual communities • Digital footprint • Cyber bullying	Students work through Three scenarios related to different social media platforms and identify the risks in each one. • **Scenario 1: TikTok** Emily, a 12-year-old girl, is an avid user of TikTok. She enjoys creating and sharing dance videos, participating in challenges, and connecting with friends on the platform. Emily has created a blog to record events that have occurred on her TikTok profile each day. • **Scenario 2: Instagram** Alex, a 14-year-old boy, is an active user of Instagram. He enjoys sharing photos of his hobbies, connecting with friends, and following his favourite influencers on the platform. Alex has created a blog to record events that have occurred on his Instagram profile each day. • **Scenario 3: YouTube** Sophie, a 12-year-old girl, is an enthusiastic user of YouTube. She enjoys watching videos about her favourite hobbies, learning new skills, and sharing her own content on her channel. Sophie has created a blog to record events that have occurred on her YouTube channel each day. *This is available as a printable worksheet* • Create a word-processed document that outlines the risks associated with social media platforms and how to use	

		them responsibly. See modelled example of snapchat on classnotebook, task 2. • Create an infographic for a social media platform that identifies risks and how to avoid them.	
Digital Literacy 2	How can you use digital technologies effectively? <u>Vocabulary</u> • Fake news • Misinformation • Source • Reliability • Credible • Bias	• learners are presented with a series of news headlines and asked to guess which are fake and which are real. • What is the purpose of fake news? - ask your learners why fake news is created and who it is created by (slide 7). It is important that learners understand that fake news is often targeted based on a person's interests, and that they may read fake news stories that seem true and that support their world view. Show slide 8, which shows some historical examples of fake news. • The anti-vaxxer movement (slide 9), which shows that fake news can have huge impacts if enough people believe it • Birther propaganda (slide 10), which shows that fake news can be deliberately created in order to try and hurt people • The American refugee headline (slide 11), which shows that fake news can evolve through bad journalism and that misinterpretations can be blown out of proportion • Create a fake news story - You must pick an unhealthy item of food and make your own claims as to why this food is now considered a super-food. (i.e. really good for you) You must include: • The date • The author • A big bold headline • Three facts about this new super-food. (One must be true and two must be fake!) An article template has been provided for students.	

		• Find an article from one of the fake news sources (Slide 5 has examples of websites) and find some evidence to prove this is fake. When deciding if each website is 'real' or 'fake', encourage pupils to use the 5 W's (***Where, What, When Why, Who***) **5 W's:** **Where** is the article / website located? • Where is the website located? Is it a personal site e.g. Wix or Weebly or is it part of a reputable company e.g. BBC or Discovery Network? • What is the domain (.com, .org, .net, .edu, etc.)? **What** information are you getting? • Is the information bias or does the information explore multiple points of view? • Can the information be verified by other sources? **When** was the article created / last updated? • Is the information current / up-to-date? • Has the information / website been updated recently? **Why** would you use the article / website as a source of information? • Can the information be verified? • What is the purpose of the website e.g. to entertain, inform, sell etc.?	

		Who is the source of information? • Is there an "about us" section? • Is there contact information? • Who is the target audience?	
Cyber Security 3	What measures can you take to protect yourself and others from online threats while using digital technologies? <u>Vocabulary</u> • Scams • Phishing • Confidential • Sensitive • Suspicious	• Students look at phishing text messages and spot what could be suspicious about them. • Complete the three activities. There are three websites required to complete this. All links provided at the end of the document. • Create their own phishing email and make it as believable as possible. They must include some clues that make it look suspicious based on what they have learnt in the lesson.	
Practical Project (Digital Media Product) **4**,5,6	How can you create an interactive digital media product using presentation software? <u>Vocabulary:</u> • Kiosk • Hyperlinks • Ribbon • Stock images	• Students complete the case study on McDonalds self-service/checkout facility which uses the underpinning knowledge from Slide 5. By completing this initial kiosk example using the walkthrough guide provided students will be able to produce an interactive kiosk to promote online safety as part of their practical assessment at the end of this unit. • Students create a Kiosk for Gourmet Delights. There is a walkthrough guide however, this is dependent on students' current knowledge of using PowerPoint so this could be adapted accordingly.	

Practical Project (Digital Media Product) 4,**5**,6	How to create an interactive digital media product using presentation software to promote online safety? <u>Vocabulary:</u> • Client • Brief • Main menu • Navigation • Kiosk • Export • Wireframe • PPS (PowerPoint Show)	• Read through the client brief on Slide 4 and go through any vocabulary students may be unsure of. You could make this into a comprehension activity. • Some students may struggle on how to structure the product, so some suggested wireframe designs are provided on slide 5. • Students create the interactive kiosk. They can add content from the notes/worksheets completed in Lessons 1-3. If present, students will have also gained the necessary skills required in Lesson 4. • Add interactive quiz to the interactive kiosk. This requires the student to create a five-question multiple choice quiz with answers that users can play to test their online safety knowledge	Complete the interactive product for a client (2 lessons) Practical Project - The creation of an interactive kiosk using presentation software to promote online safety
Practical Project (Digital Media Product) 4,5,**6**	How to create an interactive digital media product using presentation software to promote online safety and export into a suitable file format?	Read through the client brief on Slide 4 as a re-cap. Read through Slide 5 to introduce students to the concept of exporting a digital file. • The example provided is to show the editable version and final version of a kiosk, which is what they're expected to do at the end. • Complete interactive kiosk, set to kiosk mode and export as a PowerPoint show.	Peer feedback using assessment rubric provided on OneNote Explain to the learners that they are about to give each other feedback on their work, and show them the example feedback on the board. Ask them to briefly discuss with each other which comment would be the most appropriate, and take answers from the class. ● The answer is A because it is positive and constructive. It mentions a specific image and suggests an improvement. ● B is negative and could be improved by indicating which image is unsuitable and why. ● C is helpful as it highlights a feature that is missing, but the feedback could be improved by specifying where, ie, which paragraph they

			think should have bullet points. Ask the learners to think about what they should be looking for when reviewing each other's work — they should be looking for everything in the assessment criteria
	End of unit assessment	• To complete the end of unit assessment. • To complete any missing work from previous lessons. • Ask learners to reflect on the lessons of this unit and give them two minutes to write down at least one thing that they didn't know at the start of the unit and at least one thing that they can now do – record answers on Padlet – display to class and spend five minutes discussing responses.	complete the end of unit assessment (1 Lesson) Theoretical knowledge – A multiple-choice assessment **Student version** https://forms.office.com/e/HM3BJHVPkG Teacher version to duplicate

Subject: Computing Year: 7 Term: 2

Title of Scheme of Learning:	Overview of topic: *Modelling Data – Exploring Data through MS Excel* This unit focuses on the use of spreadsheets to model and manipulate data. Students will learn essential skills for working with spreadsheet software, including data entry, formatting, using formulas and functions, and creating visual representations of data through charts. By the end of the unit, students will have completed a practical project, demonstrating their ability to model data for real-world applications. Key Skills to be covered: • Basic spreadsheet operations: entering data and navigating cells • Formatting cells and data presentation • Using simple formulas and functions (SUM, AVERAGE, MAX, MIN) • Creating charts (bar, pie, and line) to visualise data • Applying conditional formatting to highlight important data trends • Understanding how to filter and sort data • Creating a data-driven project using all learned skills SMSC/PSHE/CV/Catholic Social Teaching Overview: Encourage responsible handling of data and respect for privacy (M) Develop creative solutions to data problems using digital tools (S) Explore how data-driven decisions impact society and how technology supports common goals (CST)	How does this SOL relate to previous schemes? • Covered e-Builds on basic ICT skills developed in previous lessons. • Students will apply knowledge of digital citizenship, extending their understanding of responsible use of digital tools to data handling and modelling. Next topic: Digital Graphics Links to Future Learning This topics links to KS4 Computer Science • More advanced data manipulation in KS4, including data structures and algorithms • Application of data modelling in other subjects, such as Business Studies or Economics • Data analysis in real-world scenarios (e.g., financial planning, scientific data collection)	Common Misconceptions in the unit: **Misconception:** Spreadsheets are just like tables in Word. Reality: Spreadsheets are dynamic and allow for data manipulation using formulas and functions. **Misconception:** Formatting is only for appearance. **Reality:** Formatting helps to organise data visually, making it easier to understand and interpret. **Misconception:** All formulas in spreadsheets are complicated. **Reality:** Many useful formulas (like SUM and AVERAGE) are simple and easy to use. **Misconception:** Any chart will do for visualising data. **Reality:** Different types of charts serve different purposes, and it's important to select the right one for the data **Misconception:** Only experts can model data in spreadsheets. **Reality:** Anyone can model data with basic spreadsheet skills.

Learning episodes (*inc nu of lessons*)	Learning Question(s) & Key Vocabulary	Content (*To include: What should be covered and planned time for students to carry out a response to feedback*)	Feedback & Assessment Points (*To include specific detail about what the assessments are & length of time for assessments etc*)
1	What are cells, rows, and columns in a spreadsheet, and how can you navigate them? <u>Vocabulary</u> • Spreadsheet • Cell • Row • Column	Present a scenario about Rhys, who runs a fresh fruit and vegetable stall, recording sales on paper. Ask students to discuss the issues with this method (e.g., disorganisation, difficulty in retrieving data, risk of loss) Define what a spreadsheet is and explain its use in organizing, analysing, and storing data. Introduce the basic layout: rows, columns, and cells Show students how to select individual cells, cell ranges (e.g., A2 , A3), and how to enter data. Teach them how to adjust column width by double-clicking between column headers Students will open a spreadsheet file, "Fresh Picks Market," and update it by adding and deleting data. They will practice formatting cells and adjusting column width	Students add a screenshot of their updated spreadsheet to their online workbook for lesson 1
2	What How can you format data in a spreadsheet to make it clear and easy to read? <u>Vocabulary</u> • Formatting • Alignment • Cell Borders • Number Formats	Compare two spreadsheets with the same data. Ask students to identify the formatting differences (e.g., title size, colours, borders, alignment) Explain how formatting helps make data easier to read and organise. Discuss how formatting can improve the clarity of spreadsheets, including font size, borders, and cell shading Show how to use the fill handle, merge cells, and apply different number formats (e.g., currency) Students will format a pre-populated payroll spreadsheet for DC Auto Garages, applying different fonts, borders, and column width adjustments. They will also add staff IDs and wages	Students update their spreadsheet and upload a screenshot to their online workbook for lesson 2.

3	How do you use basic formulas and functions to perform calculations in a spreadsheet? <u>Vocabulary</u> • Formula • Function • Sum • Average • Max • Min	Present a set of numbers and ask students what the total, highest, lowest, and average values are Explain the difference between formulas and functions. Formulas are user-defined, while functions are built-in commands (e.g., SUM, AVERAGE) Show students how to create simple formulas (e.g., adding values from different cells) and use functions like MAX, MIN, and AVERAGE to quickly calculate key figures Students will work on the "Gourmet Express" spreadsheet, where they must calculate the revenue, driver fees, and profits. They will also determine the highest, lowest, and average sales	Students upload the updated spreadsheet to their online workbook for lesson 3.
4	How can you use charts to represent and interpret data in a meaningful way? <u>Vocabulary</u> • Chart • Bar Chart • Pie Chart • Data Range	Present a pre-made chart. Ask students to evaluate its clarity: "What makes this chart easy to read and understand?" Discuss key elements (e.g., title, labels, colour-coded key) Explain the purpose of charts and how they visually represent data to highlight patterns, trends, and relationships. Discuss different types of charts (bar, pie, line) and when each is most useful Show students how to create bar charts, pie charts, and line charts using data in Excel. Explain how to label charts appropriately, add axis labels, and choose the correct chart type for a data set Students will update the “StrideElite Athletics Club” spreadsheet, calculating the athletes' average running times and representing this data through bar, pie, and line charts	Students upload screenshots of their updated spreadsheet with charts to their online workbook for lesson 4
5 Practical Project	How can you apply your spreadsheet skills to solve a real-world problem? <u>Vocabulary:</u> • Model • Data • Client Brief	Explain that students will be completing a practical project using the skills developed throughout the unit. The project is based on a real-world client brief (e.g., "Cocoa Haven Confections," a chocolate factory managing production using spreadsheets) Students are provided with a partial spreadsheet and are tasked with using formulas, functions, and charts to complete it. They will	Students create a mind map summarising what they’ve learned about spreadsheets over the past four lessons Teacher assesses the project based on a rubric evaluating technical skills, data accuracy, and chart effectiveness

		need to update the spreadsheet by tracking weekly production numbers and visualising data with charts	Students upload the final version of their spreadsheet to their online workbook for lesson 5
	How can you demonstrate your knowledge and understanding of spreadsheet skills? <u>Vocabulary:</u> Cell Chart Formula MAX MIN Merge Cells	Display a sample spreadsheet with deliberate errors or poor practices (e.g., incorrect formulas, missing labels in charts, poor formatting) and ask students to identify and correct the mistakes. Students work in pairs or small groups to identify what is wrong and how they would fix it. Students will complete a multiple-choice assessment that tests both practical and theoretical knowledge of spreadsheets.	End of unit assessment Assessment Format: Multiple choice, single choice, and ranking questions with a time limit of 50 minutes. The assessment consists of 40 marks and is automatically timed

Subject: Computing Year: 7 Term: 3

Title of Scheme of Learning:	Overview of topic: *Digital Graphics – This unit focuses on **digital graphics**, where students will explore raster and vector graphics, learn how to manipulate images using industry-standard software, and create their own digital artefacts. By the end of the unit, students will have used a variety of tools and techniques to produce a professional-looking video game cover design.* Key Skills to be covered: • Understanding the difference between raster and vector graphics • Using graphic design software • Applying selection tools for precise editing • Retouching images to enhance quality • Using painting tools to add detail to graphics • Managing layers and compositions effectively • Creating a digital graphic suitable for print SMSC/PSHE/CV/Catholic Social Teaching Overview: Develop creative solutions to data problems using digital tools (S) Understanding the ethical use of digital imagery and its impact on society (M) Encouraging problem-solving and independent learning through project work (P) Exploring how digital media can be used to inform and inspire others (CST)	How does this SOL relate to previous schemes? • Builds on basic ICT skills developed in previous lessons. • Introduces more advanced creative applications of computing • Develops design thinking, which will be useful for future coursework and creative computing projects Next topic: Programming (Scratch) Links to Future Learning • KS4 Computer Science: Understanding digital image representation and file formats • Vocational ICT: Advanced graphic design and digital publishing • Career pathways: Graphic design, media production, digital marketing	Common Misconceptions in the unit: Misconception: Digital graphics are only used for entertainment. Reality: Digital graphics are used in marketing, education, web design, and more. Misconception: All digital images are the same. Reality: Raster and vector images serve different purposes and are used differently. Misconception: Image editing is only about adding effects. Reality: Editing is also about correcting errors, improving clarity, and ensuring accessibility. Misconception: More layers make a better design. Reality: Effective use of layers is about organisation, not quantity.

Learning episodes (*inc nu of lessons*)	Learning Question(s) & Key Vocabulary	Content (*To include: What should be covered and planned time for students to carry out a response to feedback*)	Feedback & Assessment Points (*To include specific detail about what the assessments are & length of time for assessments etc*)
1	What are digital graphics, and how are they used? <u>Vocabulary</u> • Raster • Vector • Pixel • Resolution • Graphic Design	Pupils will learn the difference between raster and vector graphics, including their use cases and advantages/disadvantages. They will then be tasked with creating two different graphics based on what they have learnt. a simple raster graphic using Excel by manually colouring cells to form an image. Create a basic vector graphic, using Photopea demonstrating how vector images maintain quality at any size.	
2	How can we use graphic design software effectively? <u>Vocabulary</u> • Layers • Canvas • Selection • Tools	Pupils will be introduced to the basics of photoshop using Photopea. They will then have an opportunity to practice using layers and selection tools through demonstrations and guided tutorials.	
3	How can selection tools improve digital graphics? <u>Vocabulary</u> • Marquee Tool • Lasso Tool • Quick Selection	Pupils will be introduced to selection tools using Photopea. They will then have an opportunity to practice using different selection tools to edit an image. Complete two image editing tasks to practice using the different selection tools.	
4	How is image retouching used in digital graphics?	Pupils will be introduced to retouching tools using Photopea. They will then have an opportunity to practice using retouching tools to	

	<u>Vocabulary</u> • Retouching • Clone Stamp • Healing Brush	enhance an image. Complete two retouching tasks to practice using the different retouching tools.	
5	How can digital painting enhance graphics? <u>Vocabulary:</u> • Brush Tool • Opacity • Blending	Pupils will be introduced to painting tools using Photopea. They will then have an opportunity to practice using digital brushes to enhance an image. Complete two painting tasks to practice using the different painting tools.	
6-7 Practical Project	How can we apply digital graphics skills to a project? <u>Vocabulary:</u> • Composition • Branding • Exporting	Explain that pupils will be completing a practical project using the skills developed throughout the unit. The project involves them having to design a **video game cover** using all learned techniques. The final design will then be exported as a TIFF and uploaded to their online notebook.	
8	How well do I understand digital graphics?	Students will complete a multiple-choice assessment that tests both practical and theoretical knowledge of digital graphics unit.	End of unit assessment Assessment Format: Multiple choice, single choice, and ranking questions with a time limit of 50 minutes. The assessment consists of 40 marks and is automatically timed

Subject: Computing Year: 7 Term: 3

Title of Scheme of Learning:	Overview of topic: *Programming in Scratch – This unit introduces students to the fundamentals of programming using **Scratch**. Students will develop key computational thinking skills by learning how to create sequences, use selection and repetition, and apply events to control sprites. By the end of the unit, students will have created their own interactive game, applying all the skills they have learned.* Key Skills to be covered: • Understanding **events** and how they trigger actions in a program • Creating **sequences** of instructions to control a sprite • Using **selection** (if statements) to make decisions • Implementing **repetition** (loops) to make code more efficient • Creating **custom assets** such as backgrounds and sprites • Combining all skills to develop a playable game SMSC/PSHE/CV/Catholic Social Teaching Overview: Developing problem-solving skills through computational thinking (S) Encouraging creativity in digital design (M) Understanding the ethical use of digital media (CST) Working collaboratively to solve programming challenges (P)	How does this SOL relate to previous schemes? • Builds on basic ICT skills developed in earlier topics. • Introduces fundamental programming concepts that will be expanded upon in later units using text-based programming. • Develops logical thinking, debugging, and problem-solving skills essential for future computing courses. Next topic: Introduction to Python Programming Links to Future Learning • KS4 Computer Science: Transitioning from block-based to text-based programming (Python) • GCSE and A-Level Programming: Understanding algorithms, problem decomposition, and debugging • Career pathways: Game development, software engineering, robotics	Common Misconceptions in the unit: **Misconception:** Events only happen when the program starts. **Reality:** Events can be triggered at any time based on user input or conditions. **Misconception:** Sequences must always be long and complex. **Reality:** Simple, well-structured sequences are often more efficient. **Misconception:** Loops and repetition are the same thing. **Reality:** Repetition can occur without loops, but loops provide a structured way to repeat actions. **Misconception:** Scratch is just for making animations. **Reality:** Scratch is a powerful tool for learning core programming concepts.

Learning episodes (*inc nu of lessons*)	Learning Question(s) & Key Vocabulary	Content (*To include: What should be covered and planned time for students to carry out a response to feedback*)	Feedback & Assessment Points (*To include specific detail about what the assessments are & length of time for assessments etc*)
1	How do events control the actions of a sprite? <u>Vocabulary</u> • Event • Action • Trigger • Broadcast	Pupils will be given an explanation of events in programming, such as "when green flag clicked". They will have an opportunity to practice using events in programming by making sprite move using event blocks Changing a sprite's costume when an event is triggered Using a random number generator to make the sprite move unpredictably	
2	Why is sequence important in programming? <u>Vocabulary</u> • Sequence • Order • Algorithm	Introduce the concept of sequences in Scratch – instructions must be in the correct order or it can lead to logical errors/runtime errors. Practice using sequencing by programming a sprite to perform a simple sequence of movements. Use math operations in Scratch (addition, subtraction, multiplication, division).	
3	How can repetition make code more efficient? <u>Vocabulary</u> • Loop • Repeat • Efficiency	Introduction to repeating actions using loops in Scratch. Practice using repetition (loops) by making a sprite move in a loop a certain number of times. Introduce different loops "forever" loops and "repeat until" blocks. Allow pupils to create an animation repeats in a continues loop.	

		Pupils complete a reflection on how loops improved their code.	
4	How do computers make decisions? <u>Vocabulary</u> • Selection • If Statement • Condition	Discuss real-life decision-making (e.g., "if it's raining, take an umbrella"). Introduction to if statements and how they allow programs to make choices. Practice using if statements by programming a sprite to respond to key presses. Program a sprite to change appearance when it touches another object. Adapt an existing program by adding new conditions.	
5	How can I create custom graphics in Scratch? <u>Vocabulary:</u> • Sprite • Backdrop • Design	Discussion on the importance of visual design in games before demonstrating how to create custom backdrops and sprites. Practice by designing a racetrack background for a racing game. Pupils to create custom racing car sprites and experiment with different artistic styles for the game.	
6-7 Practical Project	How can I bring all my skills together to create a game? <u>Vocabulary:</u> • Game Design • Interaction • Debugging	Introduction to programming a racing game using Scratch. Explain that pupils will be completing a practical programming project which entails programming a racing game using Scratch. 1)They will need to start by coding the basic movement mechanics 2) Implement collision detection and scoring. 3) Add multiplayer functionality.	Students present and play-test their games before giving feedback using an assessment rubric.
8	How well do I understand programming in Scratch?		End of unit assessment Assessment Format: Multiple choice, single choice, and ranking questions with a time limit of 50 minutes. The

		Students will complete a multiple-choice assessment that tests both practical and theoretical knowledge of programming in Scratch unit.	assessment consists of 40 marks and is automatically timed