

Year 7						
	HT1 Topic/Unit: 7.1 - Introduction to Computing/ ESafety	HT2 Topic/Unit: 7.2 - Presenting Information	HT3 Topic/Unit: 7.3 – Computational Thinking	HT4 Topic/Unit 7.4 – Scratch Programming	HT5 Topic/Unit 7.5 - 3D Printing	HT6 Topic/Unit 7.6 Digital Graphics
Key Content: - Grooming, Trolling, Cyberbullying, Catfishing Phishing, Hacking, Spam Online Predator, Identity Theft, Scamming - Online safety – Groomers E-Safety What is E-Safety? Explain what social media is? What is email? What is a PEGI rating on a game? Identify and explain the dangers of social media, email, and online gaming. Identify and explain ways to stay safe online when using social media, email, and online gaming	Grooming, Trolling, Cyberbullying, Catfishing Phishing, Hacking, Spam Online Predator, Identity Theft, Scamming - Online safety – Groomers E-Safety What is E-Safety? Explain what social media is? What is email? What is a PEGI rating on a game? Identify and explain the dangers of social media, email, and online gaming. Identify and explain ways to stay safe online when using social media, email, and online gaming	Application, Edit, Efficient, Ms Word, Word Processing, Excel, Calculations, Formula, Column, Cell, Cell Reference, Row, Spreadsheet, VLOOKUP, IF, Count If, Min, Max Database, record, primary key, flat file, table, field, data type, value, Query Presenting Information What is application software? How does application software make tasks on a computer efficient? What is MS Word and what is it used for? What is Excel? What can it be used for? How can document be formatted? Wrap text is an option which can be applied to cell to do what? What term describes changing the horizontal or vertical position of text? What is Conditional formatting? What is a database? What is a primary key? What is validation in a database?	Computational Thinking, Algorithms, Problem Solving, Pattern Matching, Decomposition, Abstraction, Sequence, Cipher, Instructions, Pseudocode, Flowchart, Debug Computational Thinking What is an algorithm? What are instructions? What is Decomposition? What is abstraction? Is there more than one way to solve a problem? What is pattern matching? What is a decision in an algorithm represented as? What two ways can an algorithm be represented?	Scratch, Sequence, Selection, Repetition, Blocks, Costume, Sensing, Variable, Sprite, Operators, Loops, Forever Loop Game Development What is Scratch? What is a sprite? What are variables? What blocks are used for selection in scratch? What are operators? What blocks can be used for iteration? What is a loop?	Tinker CAD, Work plane, object, moving objects, resizing, sizing, grouping, hiding, Duplicating, Aligning, 3D Design, CAD 3D Printing What do you think 3D printing is? What do you already know about 3D Printing? What is the difference between 2D and 3D? What does Slicing mean in 3D printing? What does bed refer to in 3D printing? What are the different materials used in 3D printing? What is Tinkercad used for? What are the file formats for 3DPrinting?	Bitmap, Vector, Pixels, Photo Editing, Image manipulation, Meta Data, Shapes, Lines, Curves Digital Graphics What is a bitmap image? How are they created? Where do we usually see them? How can a bitmap image be edited? What is a vector image? How are they created? Where do we usually see them? Which image takes up more space on a computer and why? What is resolution? What does it mean if an image has low resolution? How can we tell? How does resolution dpi and colour depth impact file size? When stretched which image type does not lose its quality, vector, or bitmap? What is compression? What is lossy compression? What is lossless compression? What is the difference between lossy and lossless compression?

Year 8						
	HT1 Topic/Unit: ESafety	HT2 Topic/Unit: HTML	HT3 Topic/Unit: Python	HT4 Topic/Unit Computer Architecture	HT5 Topic/Unit: Networks	HT6 Topic/Unit Multimedia
Key Content:	Fake News, Bias, Biased, Credible, Fact, Source, Information, Misinformation, Viral, Society, Political, Cyberbullying, Flaming, Harassment, Cyberstalking, Outing and Trickery, Sexting, Sexually Explicit, Sextortion, Peer Pressure, Social Engineering, Shouldering, Phishing, Pharming, Deep fake	HTML, Tags, Opening Tags, Closing Tags, Browser, Notepad, Header, Body, Footer, Website, Webpage, URL, GIF, Source, Folders, Website Features, Page Layout, Site Structure, Homepage, Navigation, Consistency, Background, Banner, White space, animated banner, interactive banner, roll over buttons.	Python, IDLE, Variable, Print, Input, Output, Interpreter, Compiler, Parenthesis, Integer, Iteration, Function, Exterior angles, interior angles, angles,	Architecture, Input, Output, Process, Computer System, Component, embedded system, software, Peripheral, Internal, External, Fetch, Decode, Execute, Processor, Cache Memory, Data bus, Gigahertz, RAM, ROM, Volatile, Non-Volatile, Memory, Address bus, Registers.	Networks, LAN, WAN, WI-FI, VPN, Ethernet, Router, Bluetooth, Cables, Switch, Packet Switching, Hardware, Bandwidth, Data Transfer, Packets, Layers, Network Protocols, TCP, HTTP, IMAP, POP3, Hub, Server, Interference, IP, IP address, Masking IP, Topologies, Threats	Multi-media, text, images, sound, video, animation, navigation, background, purpose, audience, triggers, transition, master slide,
	E-Safety What is fake news? How can fake news be a problem? What are the consequences on society of fake news spreading? What is cyberbullying? How can cyberbullying be prevented? Who does it impact? What are the consequences of cyberbullying? What is sexting? How can sexting be avoided? Does sexting break the law? What does the law say about sexting? What are the consequences of sending a sext? What are the legal consequences of sexting? What laws protect against sexting. What is social engineering? What is shouldering? Give an example of how shouldering might happen?	Websites What is a website? How are websites created? How can a website be viewed? Give an example of a browser that can be used to view a website? Explain what site structure on a website means. Why is consistency important in a website? What is HTML 5 and why is it used?	Python What do you think the problem is? What is input used for? What is print used for? How do you run the program? What happens if you didn't include the brackets would it still work?	Computer Architecture What does architecture mean? What might a computers architecture be? What parts of a computer make up its architecture? What is a computer system? Give an example of one type of storage system used in a computer system. What does CPU stand for?	Networks What is a network? Can you think of any devices that connect to a network in your house? What is a virtual private network? What is the purpose of a virtual private network? Give an example of a LAN. Give an example of a WAN. Compare wired to wireless connections and list examples of specific technologies currently used to implement such connections. Define 'bandwidth', using the appropriate units for measuring the rate at which data is transmitted, and discuss familiar examples where bandwidth is important.	Multimedia What is multi-media? What does multimedia consist of? What is the purpose of multimedia products? Who is the audience for specific multimedia products? How are multimedia products used in everyday life?

Year 9						
	HT1 Topic/Unit: E-Safety	HT2 Topic/Unit: Data Representation	HT3 Topic/Unit: Digital World	HT4 Topic/Unit: Advanced Website Development	HT5 Topic/Unit: Animation	HT6 Topic/Unit : Digital Graphics
Key Content:	Netiquette, Inappropriate, Anonymous, Oversharing, Permanent, Online Reputation, Digital Footprint, Reputation, Body Image, Portrayed, Self-esteem, Self-confidence, Influence, Objectified, Perception, Ethical, Hacker, Cybercrime, Malware, Piracy, Computer Misuse, Cyber-attack, DDOS attack, Worm, Virus, Ethical Hacking, Ransomware, Brute force, Encryption, Decryption, Security, E-Safety What is online reputation? What is a digital footprint? What is a positive digital footprint? What is a negative digital footprint? What is body image? What does perception mean? Who influences your body image? How can a positive body image be created? How can image manipulation have an impact on how people perceive their own body image? What is a hacker? What does unauthorised mean? What does authorise mean? What is ransomware? How does ransomware work? What is bitcoin? Why would a hacker request to use bitcoin? How does a DDOS attack work? What do ethical hackers get paid to do? What is penetration testing? What does black hat hacker do?	Data representation, data, binary, base 2 number system, Denary, Convert, base 10 number system, Bit, Byte, Nibble, 8-bit binary numbers, Image representation, Binary images, Pixels, Resolution, Colour depth, Bitmap image, File Size, File Types, Hexadecimal, base 16 number system, RGB Colour system, Hex Code, ASCII code, Unicode, Characters, Character Set, Encode, Decode, Data Representation How are images represented by the computer? What is binary? What base system is binary and why? What is a bit? What is half of a byte called? How has the converter been created? If the computer has to store information about a detailed image what does this mean for file size? How does colour depth and resolution impact file size? How do you know if an image has low resolution? How is a bitmap image created? Who uses binary? How are images represented by binary? What is colour depth? Who uses hexadecimal? Why is hexadecimal a base 16 number system? What does RGB stand for? What does Ascii stand for? Explain how Ascii is used by the computer? What is the difference between Ascii cod and Unicode? What is extended Ascii? How many characters can Ascii code represent?	Digital World, AI, Artificial, Intelligence, Ethical, CAPTCHA, Turing Test, Algorithms, Sensors, Thermostat, Future, Machine Learning, Autonomy, Adaptivity, Artificial Intelligence, Machine Learning, Deep Learning, Decision Tree, Chatbot, bot, Imitation, Digital World What does AI stand for? How do you think AI is the future? Are computers smarter than humans? How are the two bots similar? How are they different? Which seemed more like you were talking to a human? Do you think it would pass the Turing test? What did the bots do "wrong" in terms of passing as a human? Were the chatbots intelligent or did they behave intelligently? What is a bot? Data Science: Lesson 1: What is Ai. Lesson 2: Machine Learning Lesson 3: Create a Machine learning program. Lesson 4: Turing Test Lesson 5: Ai and ethics	Dreamweaver, Website, Header, body, footer, Tags, Images, Folder, Navigation, Drop down menu, Photoshop, Table, Frames, Alt Tags, HTML, Content, Consistency Advanced Website Development (Dreamweaver) What are roll over buttons? How are roll over buttons created? How can a website use a table? Why are folders important in a website? What does CSS stand for? How has CSS been applied on the website?	Frames, key frames, Animate, Timeline, Properties, Action Script, Remove Keyframes, Layers, Object, Rotate, Transform, Edit, Motion Tweens, Classic Tweens, Shape Tweens, Modify, Frame Rate, Scale, Skew, Rotation, File Format, Animation Software Animation What is animation? Where are animations used? Give examples of where you have seen animation being used? What is frame rate? How does frame rate effect an animation? What is a timeline? Why is a timeline important when using animation?	Photoshop, Move Tool, Page Layout, Double Page Spread, Border, Layers, Layer effects, Masks, Blending, Professional, Transparent, Filters, Image Adjustments, Image File Types Digital Graphics – Annual Creation What are digital graphics? Give an example of a type of digital graphics? Where do you see digital graphics? How are they created? What is page layout? What is a double page spread? What does transparent mean?

Year 10						
	HT1 Topic/Unit: R094 – Visual Identity and Digital Graphics R093 – Exam Theory	HT2 Topic/Unit: R094 – Visual Identity and Digital Graphics R093 – Exam Theory	HT3 Topic/Unit: R094 – Visual Identity and Digital Graphics R093 – Exam Theory	HT4 Topic/ R094 – Visual Identity and Digital Graphics R093 – Exam Theory	HT5 Topic/ R094 – Visual Identity and Digital Graphics R093 – Exam Theory	HT6 Topic/ R093 – Exam Theory
Key Content: -	Product, Pre-Production, Audience, Influence, Text, Images, Background, Bold, Bright, JPEG, PDF, PNG, PSD, GIF, Print, Web, Age, Gender, Ethnicity, Location, Income, Defamation, Libel, Slander Copyright, Privacy, Project, Work plan, Contingency, Milestone, Asset, Re-purpose. R094 - Specification Purpose of visual identity ☐ Recognition/familiarity ☐ Establish a brand ☐ Develop brand loyalty ☐ Visual communication with audiences/consumers Component features of visual identity ☐ Name ☐ Logo ☐ Slogan/strap line Elements of visual identity ☐ Graphics shape/symbol ☐ Typography ☐ Colour palette and meaning ☐ Layout/complexity Visual identity design style ☐ Business type ☐ Brand values ☐ Brand positioning economy mid-range high-end Practice Project -R094 – (Midnight Games, Meta Moda, Choco Indulgence) 2.1 Graphic design and conventions Concepts of graphic design ☐ Application of visual identity ☐ Alignment ☐ Typography ☐ Use of colour and colour systems ☐ Use of white space Layout conventions for different graphic products and purposes ☐ Additional information ☐ Headlines and copy ☐ Image content ☐ Titles and mastheads 2.2 Properties of digital graphics and use of assets technical properties of images and graphics ☐ Bitmap/raster properties colour depth colour mode compression settings overall quality transparency ☐ Vector graphic properties compatibility file size scalability software support Licences and permissions to use assets sourced from: Client images Internet Logos	Image, Editing, Software, Manipulation, Re-purpose, Filter, Tools, Techniques, Brush Tool, Clone Tool, Background removal tool, Selection Tools, Text Tools, Brightness, Contrast, Eraser, Shapes, Filters, Fonts, Extracting Files, Download, Levels, Curves, Layers, Blending, Stroke, Fill, Gradient, Layer Masks. Practice Project – R094 November mock R093 Specification: Media industry sectors and products Traditional media Film Television Radio print publishing. ☐ New media computer games interactive media internet Digital Publishing digital publishing Products in the media industry ☐ Video ☐ Audio ☐ Music ☐ Animation ☐ Special effects (SFX, VFX) ☐ Digital imaging and graphics ☐ Social media platforms/apps ☐ Digital games ☐ Comics and graphic novels ☐ Websites ☐ Multimedia ☐ eBooks ☐ AR/VR 1.2 Job roles in the media industry Creative animator content creator copy writer graphic designer illustrator/graphic artist photographer script writer web designer ☐ Technical camera operator games programmer/developer sound editor audio technician video editor web developer ☐ Senior roles campaign manager creative director director editor production manager. How style, content and layout are linked to the purpose Purpose advertise/promote educate entertain inform influence ☐ Style, content, and layout colour conventions of genre formal/informal language positioning of elements style of audio representation style of visual representation tone of language. Client requirements and how they are defined. Client requirements type of product purpose audience client ethos content genre style theme timescales Client brief formats	R094 – Controlled Assessment	R094 – Controlled Assessment R093 - March Mock	R094 – Controlled Assessment	R093 Official Exam – First Attempt (June) Year 10

	Photographs Stock library 2.3 Techniques to plan visual identity and digital graphics Pre-production and planning documentation used to generate ideas and concepts for visual identity and digital graphics. Mood board Mind map Concept sketch Visualisation diagram Wireframe Flowchart Script 3.1 Tools and techniques of imaging editing software used to create digital graphics Software tools and techniques used to create digital graphics □ Image/canvas size □ Layout tools □ Drawing tools □ Adjustments to brightness/contrast and colour □ Use of selections □ Use of layers and layer styles □ Retouching □ Typography □ Filters and effects 3.2 Technical skills to source, create and prepare assets for use within digital graphics Source assets for use in digital graphics. □ Images □ Graphics Creating assets using drawing tools □ Editing sourced assets □ Creating Assets Modify images and other assets to make sure the technical compatibility for use within print graphics. □ Resize and resample □ Modifying image properties Store assets for use □ Storage location □ Changing the file format 3.3 Techniques to save and export visual identity and digital graphics Save and export □ Proprietary format master files □ Repurpose and export in appropriate file formats	Commissioned briefs formal briefs informal briefs meeting/discussion brief negotiated brief. written brief. Audience demographics and segmentation Categories of audience segmentation □ Age □ Gender □ Occupation □ Income □ Education □ Location □ Interests □ Lifestyle Research methods, sources, and types of data Primary research methods focus groups interviews online surveys questionnaires □ Secondary research sources books and journals internet sites/research magazines and newspapers television □ Research data qualitative information quantitative information. Media codes used to convey meaning, create impact and/or engage audiences. Media codes □ Technical □ Symbolic □ Written Ways that meaning, impact and/or engagement are created using □ Animations □ Audio dialogue music genre silence sound effects vocal intonation □ Camera techniques angles shots movement □ Colour □ Graphics □ Interactivity □ Lighting intensity/levels position □ Mise-en-scene □ Movement □ Transitions □ Typography emphasis font size font types. 3.1 Work planning Components of workplans phases pre-production production post-production tasks activities workflow timescales milestones contingencies resources - o hardware - o people - o software 3.2 Documents used to support ideas generation. Mind map digital hand drawn. □ Mood board digital physical 3.3 Documents used to design and plan media products.				
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		Asset log □ Flow chart □ Script □ Storyboard □ Visualisation diagram □ Wireframe layout 3.4 The legal issues that affect media. Privacy and permissions rights for recording images/taking photographs in public places permissions for recording images/taking photographs on private property permissions for publishing and commercial use of images and photographs taken harassment and invasion of privacy □ Defamation libel slander □ Data protection rights of data subjects in the collection, use and storage of personal data. 3.4.2 Intellectual property rights □ Protecting intellectual property (IP) copyright ideas patents trademarks □ Using copyrighted materials creative common licence(s) fair dealing permissions, fees, and licences watermarks and symbols. 3.4.3 Regulation, certification, and classification □ Organisations responsible for regulation ASA (Advertising Standards Authority) Ofcom (The Office of Communications) □ Classification systems and certifications BBFC (British Board of Film Classification) certifications PEGI (Pan European Game Information) certifications 3.4.4 Health and safety □ Health and safety risks and hazards in all phases of production □ Actions to mitigate health and safety risks and hazards □ Risks assessments □ Location recces 4.1 Distribution platforms and media to reach audiences. Online apps multimedia web □ Physical platforms computer interactive tv kiosks mobile devices □ Physical media CD/DVD memory stick paper based. 4.2 Properties and formats of media files 4.2.1 Image Files □ The properties of digital static image files DPI/PPI resolution pixel dimension □ Static image file formats raster/ bitmap vector uncompressed compressed 4.2.2 Audio Files □ The properties of digital audio files bit depth sample rate □ Audio file formats uncompressed compressed 4.2.3 Moving Image Files □ The properties of digital moving image files frame Rate resolution (SD, HD, UHD, 4K, 8K) □ Moving image files formats animation video uncompressed compressed 4.2.4 File compression □ Lossy compression □ Lossless compression				
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Year 11						
	HT1 Topic/Unit: Architecture of Stories	HT2 Topic/Unit: Architecture of Stories	HT3 Topic/Unit:	HT4 Topic/Unit	HT5 Topic/Unit	
Key Content: -	R094 –Multi-media Practice Project – DayzOut	R097 – Interactive Digital media – Controlled assessment.	R097 – Interactive Digital media – Controlled assessment. R093 – Official Exam (Jan)	R097 – Interactive Digital media – Controlled assessment.	R097 – Interactive Digital media – Controlled assessment.	