4	Autumn Term		Spring term		Summer term	
Year 7	1	2	3	4	5	6
Topic Summary	Digital literacy/ Computing Skills	Digital literacy/ Computing Skills	Scratch Programming 1	Introduction to Spreadsheets	Using AI	Scratch Programming 2
Thinking Hard	Knowing the correct icons for saving, undo, copy/paste, print, formating text. Keyboard short-cuts for basic manipulation of text.	Identify the key features of branding and marketing.	Use Scratch to make loops to repeat sections of code and variables to create sub-routines.	Write a variety of functions and formulas	Ask Copilot and/or Gemini detailed questions to get suitable responses.	Use Scratch to make loops to repeat sections of code and variables to create sub-routines.
Developing Character	**Mindfulness and self-control:** Online responsibility & staying secure online ***Grit/optimism:*** *Collaborating online in lessons.* ***Self control*** *- Using the school LAN* ***Self assurance:*** *Presenting to an audience - can you adjust how you speak depending on who you are talking to?*	**Self assurance/awareness/optimism**: Do you rely on the Internet? What would lockdown be like without the Internet? How can you use technology to make your life easier?	**Mindfulness/grit** - Developing stuckability, debugging your code. **Independence/SA/Creativity** - creating your own program Helping others, paired programming **Grit**: How easily do you give up? Can you predict outcomes?	**Grit** - writing your own formulas **Self awareness/self assurance/curiosity**: How could you use a spreadsheet in your life? **Mastery**: Why use a spreadsheet instead of a calculator?	**Mindfulness & Grit:** not fearing failure - developing resiliance when using AI.	**Mindfulness/grit** - Developing stuckability, debugging your code. **Independence/SA/Creativity** - creating your own program Helping others, paired programming **Grit**: How easily do you give up? Can you predict outcomes?
Understanding Diversity	Understanding environmental diversity/respecting human rights. Understanding mental and physical diversity/Optimism	Understanding environmental diversity/respecting human rights. Understanding mental and physical diversity/Optimism	**Mastery:** take an idea and create your own programme/game.	**Self assurance/kindness**: Different programming languages for different purposes, ages, experiences.	How do computers and humans work differently?	**Mastery:** take an idea and create your own programme/game.
Literacy Reading, Oracy	Computer **literacy** and fluency - logging on to school's network, using search engines, using Microsoft programmes.	Computer **literacy** and fluency - logging on to school's network, using search engines, using Microsoft programmes.	Key programming vocabulary	Literacy - keyword vocabulary pertaining to spreadsheet (functions, conditional formatting, data validation. use of spell check, find and replace)	Literacy - keyword vocabulary, The importance of spelling punctuation and grammar when using AI.	Sequential ordering of algorithms and programming - why is order important?
Gatsby, Careers	Understand how computers are used to aid working processes in various industries.	Identify the key features of branding and marketing as a career option.	Understand how programming is used in a variety of industries.	Understand the role of spreadsheets and data analysis in the workplace.	Understand how different careers using AI to support them in efficiency?	Understand how programming is used in a variety of industries.
Mental and Physical Well-being	Privacy and security I can explain how my internet use is often monitored (e.g. by my school or internet service provider) Mindful mountain	Screen breaks - physical well-being	Mindful mountain	How can spreadsheets reduce workload in other areas of life?	Mindfulness - how can AI support us?	Digital wellbeing and your Digital footprint - video
Cross-Curricular Links	PD (online safety & responsibility) Literacy- Comprehension, SPAG, Persuasive writing History - Hidden Figures **National curriculum links** - Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems	Geography/Science: Environmental impacts/climate change.	Presenting and sharing ideas with one another (oracy)	Maths - surveys and collecting data	Using AI to find out information about specific topics including climate change and influencers.	Presenting and sharing ideas with one another (oracy)
Extra-Curricular Links	Networks in your home. Careers in computing	Environmental impacts/climate change.	Use computers for sequencing and inequalities (comparison)	Data representation	Photo manipulation	Use computers for sequencing and inequalities (comparison)
Specific Learning Endpoints	**What we want students to learn/be able to:** 1. Turning on computers, logging on, signing out. 2. Accessing Google Classroom, ClassCharts, Google Drive, (including downloading to Mcrosoft), user area. 3. Use Google as a browser/search engine to safely and effectively find information form credible sources (internet safety). 3. Use Microsoft programmes to display information, format, edit, save, screen clipping. 4. Use GMail to send/open emails, add attachments.	**What we want students to learn/be able to:** 1. What are brands and how does colour contrasting work as part of an advertising campaign? 2. Design, create and present a campaign for a environmental project using Microsoft software.	**What we want students to learn/be able to:** 1. Define a sequence and predict the outcome of a simple sequence 2. Modify a sequence 3. Define a variable as a name that refers to data being stored by the computer 4. Make a sequence that includes a variable 5. Define a condition as an expression that will be evaluated as either true or false 6. Identify where selection statements can be used in a program 7. Create conditions that use logic operators (and/or/not) 8. Identify where selection statements can be used in a program that include comparison and logical operators 9. Describe the need for iteration	**What we want students to learn/be able to:** 1. Identify columns, rows, cells, and cell references in spreadsheet software 2. Use formatting techniques in a spreadsheet 3. Use basic formulas with cell references to perform calculations in a spreadsheet (+, -, *, /) 4. Use the autofill tool to replicate cell data 5. Understand the different types of information and data. 6. Collect data 7. Analyse data 8. Create appropriate charts in a spreadsheet 9. Use the functions SUM, COUNTA, MAX, and MIN in a spreadsheet to Analyse data 10. Use a spreadsheet to sort and filter data 11. Use the functions AVERAGE, COUNTIF, and IF in a spreadsheet	**What we want students to learn/be able to:** 1. Receive information based on specific enquiries 2. Use AI to create formal letters/emails 3. Use AI to generate recipes, journey plans, revision materials. 4. Use AI to research social activities/events (e.g. holidays)	**What we want students to learn/be able to:** 1. Define a sequence and predict the outcome of a simple sequence 2. Modify a sequence 3. Define a variable as a name that refers to data being stored by the computer 4. Make a sequence that includes a variable 5. Define a condition as an expression that will be evaluated as either true or false 6. Identify where selection statements can be used in a program 7. Create conditions that use logic operators (and/or/not) 8. Identify where selection statements can be used in a program that include comparison and logical operators 9. Describe the need for iteration

Computing	Autumn Term		Spring term		Summer term	
Year 8	1	2	3	4	5	6
Topic Summary	Digital literacy/ Computing Skills	Animation	Representations - from clay to silicon	Augmented Reality	Vector Graphics	Developing for the web
Thinking Hard	Knowing the correct icons for saving, undo, copy/paste, print, formating text. Keyboard short-cuts for basic manipulation of text. Understand the Internet of Everything.	Design characters to meet the requirements of a situation. Understand colour theory in society	Convert between binary and decimal numbers.	Understand the real-world uses and applications of AR in the workplace.	Know the differences between vector and Bitmaps. Know that vector graphics are scalable. Know that vector graphics are made of lines and curves.	**Identifying how to format text suitably for given scenario.** **Make formatting more effiencit using CSS**
Developing Character	**Mindfulness and self-control:** Online responsibility & staying secure online **Grit/optimism:** Collaborating online in lessons. **Self control** - Using the school LAN **Self assurance:** Presenting to an audience - can you adjust how you speak depending on who you are talking to?	Independence and creativity	**Mastery/creating independence**: Moore's law: How much storage do you need? Can we keep expanding storage capacity and processing power? What are the consequences of this?	Independence and creativity	**Mastery/creating independence**: Independently problem solve to design and manipulate vector graphis.	**Mindfulness/being a world citizen/awareness of where you live:** Students consider the effects of our consumption of technology on the environment. Where does your ewaste go? Who is responsible for ewaste? **Respecting human rights/understanding democracy**: poor working conditions..
Understanding Diversity	Understanding environmental diversity/respecting human rights. Understanding mental and physical diversity/Optimism	**Self assurance/being a world citizen**: Use of universal software language	**Self assurance/being a world citizen**: Ascii v Unicode - the need for character sets that represent all languages	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal keywords for designing vector graphics	**Being a world citizen/PD**: Digital divide lack of internet in countries and poor connectivity **Curiosity/respecting human rights:** Access to knowledge and public services **Understanding environmental diversity**: What happens when resources run out? Does tech create more problems than it solves?
Literacy Reading, Oracy	Computer **literacy** and fluency - logging on to school's network, using search engines, using Microsoft programmes.	Sequencing and planning - using subject specific terminology. Story-telling.	Oracy - explain the need for Unicode	Narative, story-telling and sequencing of ideas.	Literacy and keywords for learning vector graphics	Literacy - Building blocks for the work wide web. Kaywords and terminology
Gatsby, Careers	Understand how technology is expanding and consider how the workplace needs to adapt for this.	To know the variety of job roles within the annimation industry.	Understand the impact of networks in industries.	Have an awarenes of the uses of AR in the workplace, including simulation and testing/training.	Appreciate how visual elements are important to the promotion of any business.	Research website design companies. Could this be a career to aspire to?
Mental and Physical Well-being	Privacy and security I can explain how my internet use is often monitored (e.g. by my school or internet service provider) Mindful mountain	Engagement	Keeping up appearances - the selfie v yourself	Engagement with a new form of technology	Mindfulness - online design in silence	Mindfulness - Respect individuals and be responsible what is posted online via websites

Cross-Curricular Links	PD (online safety & responsibility) Literacy- Comprehension, SPAG, Persuasive writing History - Hidden Figures **National curriculum links -** Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems.	Art & Design: Use of visual elements, creative experimentation. Design & Technology: Problem-solving, designing for a purpose. English: Narrative writing, dialogue, and character development.	History - the development of character sets from ASCII to Unicode. Art - the advancement of images in video games from 8 bit and up Maths - different number bases, place values, comparing with denary. **National curriculum links** Understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits	Art/Design: 3D modelling, creativity, digital art Geography: interactive maps English: story telling and narratives Science: visualisation of systems	Art - 3D Design graphics and shapes Maths - shape and space. **National curriculum links** undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users create, reuse, revise, and repurpose digital artefacts for a given audience, with attention to trustworthiness, design, and usability	Maths - logical operators PD - the environment **National curriculum links** Create, reuse, revise, and repurpose digital artefacts for a given audience, with attention to trustworthiness, design, and usability.
Extra-Curricular Links	Networks in your home. Careers in computing	Creating digital content and understanding how digital systems work.	Creating ambition/not fearing failure: The Turing Cryptology Competition Scatch - External after School club January - National Technology Day Feb - Safer Internet Day - R Time activities, all year groups."	AR - Extenernal after school club	Scratch - Extenernal after school club	Scratch - Extenernal after school club
Specific Learning Endpoints	**What we want students to learn/be able to:** 1. Turning on computers, logging on, signing out. 2. Accessing Google Classroom, ClassCharts, Google Drive, (including downloading to Mcrosoft), user area. 3. Use Google as a browser/search engine to safely and effectively find information form credible sources (internet safety). 3. Use Microsoft programmes to display information, format, edit, save, screen clipping. 4. Use GMail to send/open emails, add attachments 5. Create information leaflet/PPT: Future of technology - what is happening now and what does our future look like? https://www.youtube.com/watch?v=FTRJlmN6jeU	**What we want students to learn/be able to:** 1. Understand the Princples of Animation 2. Storytelling and Nattatice structure 3. Introduction of animation software 4. Visual design and creativity 5. Evaluation and refltection	**What we want students to learn/be able to:** 1. List examples of representations 2. Recall that representations are used to store, communicate, and process information 3. Provide examples of how different representations are appropriate for different tasks 4. Recall that characters can be represented as sequences of symbols and list examples of character coding schemes 5. Describe how natural numbers are represented as sequences of binary digits 6. Convert a decimal number to binary and vice versa 7. Convert between different units and multiples of representation size	**What we want students to learn/be able to:** 1. Understanding what AR is (including examples in everyday life, such as Pokemon Go, Snapchat filters and Ikea Place app) 2. Explore AR tools and platforms 3. Creative Design and Visual Thinking 4. Dgital content creation 5. Collaboration and Project Work 6. Evaluation and testing of projects	**What we want students to learn/be able to:** 1. Use tools to draw and modify shapes 2. Change the position and rotation shapes 3. Use tools to align and distribute objects to create uniformity 4. Explain how grouping can be used to work with several objects at once 5. Combine two shapes using union, intersection, and difference 6. Explain that vector graphics are made up of paths 7.Create and modify straight and curved paths 8. Choose a project and plan a design 9. Combine tools and techniques to create a vector image 10.Evaluate the project against its given purpose 11.Plan improvements and implement them to develop a project 12.Explain key differences between vector and bitmap images 13. Evaluate their image against a rubric	**What we want students to learn/be able to:** 1. Describe what HTML is 2. Use HTML to structure static web pages 3. Modify HTML tags using inline styling to improve the appearance of web pages 4.- Display images within a web page 5. Describe what CSS is 6. Use CSS to style static web pages 7. Describe what a search engine is 8. Explain how search engines 'crawl' through the World Wide Web and how they select and rank results 9. Analyse how search engines select and rank results when searches are made 10. Use search technologies effectively
Computer Science	**Autumn Term**		**Spring term**		**Summer term**	
Year 9	**1**	**2**	**3**	**4**	**5**	**6**
Topic Summary	**Introduction to Spreadsheets**	**IT in the Digital World**	**Augmented Reality**	**Cybersecurity**	**Data Science**	**Spreadsheets - Advanced**
Thinking Hard	Write a variety of functions and formulas in real world sitiuations. Using these skills independently to be able to prepare for NEA task in year 10.	Apply knowledge and understanding of how technology is adapting in the world and the advantages/disadvantages of the software we can use.	Understand the real-world uses and applications of AR in the workplace.	**Acquiring knowledge / curiosity**: This unit takes the students on an eye-opening journey of discovery about techniques used by cybercriminals to steal data, disrupt systems, and infiltrate networks.	**Acquiring knowledge / curiosity**: In this unit, learners will be introduced to data science, and by the end of the unit they will be empowered by knowing how to use data to investigate problems and make changes to the world around them.	**Acquiring knowledge**/ Spreadsheet Formula, Design Tools - □ Flow charts □ Mind maps □ Story board □ Visualisation diagram □ Wireframe **Changing the world:** What happens if the Internet goes down. Permanently. Not fearing failure/creating independence/mastery: developing Spreadsheets
Developing Character	**Grit** - writing your own formulas **Self awareness/self assurance/curiosity**: How could you use a spreadsheet in your life? **Mastery**: Why use a spreadsheet instead of a calculator?	Self-awareness of how our lives are impacted by the digital world.	Independence and creativity	**Self control/Being a world citizen**: Computer Misuse Act and Fraud Act **Mindfulness**: Be a good digital citizen	**Grit:** Demonstrate determination by analysing complex data and drawing conclusions	**Grit/self-assurance** - developing VB code/formulae independently Considering secondary storage - cost v capacity & performance. Protocols - what protocols are there in society? What new protocols appeared during lockdown?x Which have we adopted? **Curiosity**: What's in a data packet? **Mindfulness**: Can you imagine a world without computers?
Understanding Diversity	**Self assurance/kindness**: Different programming languages for different purposes, ages, experiences.	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal software	**Understanding democracy**: Data protection act and the right to keep information secure? Consequences of breaking the law **Being a world citizen/awareness** of where you live: How to protect youself and your data on the internet. Manage security software (e.g. anti-virus, security patches, adware blockers) on my devices and understand why regular updates are important	**Understanding democracy**: Freedom of information Act **Being a world citizen: -** Anaylse data and global trends that effect citizens such as the environment	How spreadsheets can be used in a variety of business situations.
Literacy Reading, Oracy	Literacy - keyword vocabulary pertaining to spreadsheet (functions, conditional formatting, data validation. use of spell check, find and replace)	Analysing techniques	Narrative, story-telling and sequencing of ideas.	Literacy - Comprehension and presentation skills	Literacy - Comprehension and report writing	Literacy - keyword vocabulary pertaining to spreadsheet (functions, conditional formatting, data validation. use of spell check, find and replace)
Gatsby, Careers	How can spreadsheets reduce workload in other areas of life?	Recognising how different careers are impacted by the technology we use.	Have an awarenes of the uses of AR in the workplace, including simulation and testing/training.	Understand how cyber security is one of the fastest growing areas of the computing world.	Recognise careers that will have analysts as job roles and the importance of these roles to the business	How can spreadsheets reduce workload in other areas of life?
Mental and Physical Well-being	How can spreadsheets reduce workload in other areas of life?	How can technology be used to enhance our lives?	Engagement with a new form of technology	Digital well-being: Using computers ethically and legally	Digital well-being: Select data that does not overwhelm you.	How can spreadsheets reduce workload in other areas of life?
Cross-Curricular Links	Maths - surveys and collecting data	Science - experiment process (problem, plan, test, analyse)	Art/Design: 3D modelling, creativity, digital art Geography: interactive maps English: story telling and narratives Science: visualisation of systems	Business - Legislation impacting business **National curriculum links** 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	Maths - Data and statistics, graphsBusiness - Data and re	PD - protocols in society
Extra-Curricular Links	Data representation	Creating digital content and understanding how digital systems work.	AR - External after school club	Careers Week	Work Experience	Careers Fair

Specific Learning Endpoints	**What we want students to learn/be able to:** 1. Identify columns, rows, cells, and cell references in spreadsheet software 2. Use formatting techniques in a spreadsheet 3. Use basic formulas with cell references to perform calculations in a spreadsheet (+, -, *, /) 4. Use the autofill tool to replicate cell data 5. Understand the different types of information and data 6. Collect data 7. Analyse data 8. Create appropriate charts in a spreadsheet 9. Use the functions SUM, COUNTA, MAX, and MIN in a spreadsheet to Analyse data 10. Use a spreadsheet to sort and filter data 11. Use the functions AVERAGE, COUNTIFS, and IF, MIN, MAX in a spreadsheet 12. Use pivot tables 13. Excel forms - adapt the VB code for a given scenario.	**What we want students to learn/be able to:** 1. Understand and apply various design tools such as flow charts, mind maps, wire frames and visualisation diagrams to plan IT solutions. 2. Human-Computer Interface in everyday life - explore types of display devices and explore advantages/disadvantages of input devices. 3. Data and Testing - recognise the importance of data in IT systems and understand testing methods to ensure reliability and acuracy. 4. Understand various forms of digital communication and their applications in different contexts 5. Explote the concept of IOE and its impact on connectivity and data exhanges across devices.	**What we want students to learn/be able to:** 1. Understanding what AR is (including examples in everyday life, such as Pokemon Go, Snapchat filters and Ikea Place app) 2. Explore AR tools and platforms 3. Creative Design and Visual Thinking 4. Dgital content creation 5. Collaboration and Project Work 6. Evaluation and testing of projects	**What we want the students to learn/be able to:** 1. Explain the difference between data and information 2. Critique online services in relation to data privacy 3. Identify what happens to data entered online 4. Explain the need for the Data Protection Act 5. Recognise how human errors pose security risks to data 6. Define hacking in the context of cyber security 7. Explain how a DDoS attack can impact users of online services 8. Identify strategies to reduce the chance of a brute force attack being successful 9. Explain the need for and implications of the Computer Misuse Act and Data Protection Act, GDPR and Freedom of Information, RIPA 10.List the common malware threats 10 - Examine how different types of malware causes problems for computer systems 12 - Question how malicious bots can have an impact on societal issues 13 - Explain how networks can be protected from common security threats 15- Identify the most effective methods to prevent cyberattacks	**What we want students to learn/be able to:** 1.- Define data science 2.Explain how visualising data can help identify patterns and trends in order to help us gain insights 3. Use an appropriate software tool to visualise data sets and look for patterns or trends 4. Recognise examples of where large data sets are used in daily life 5.- Select criteria and use data set to investigate predictions 6. Evaluate findings to support arguments for or against a prediction 7. Define the terms 'correlation' and 'outliers' in relation to data trends 8. Identify the steps of the investigative cycle 9.Solve a problem by implementing steps of the investigative cycle on a data set 10.Use findings to support a recommendation 11. Identify the steps of the investigative cycle 12. Identify the data needed to answer a question defined by the learner 13.Create a data capture form 14. Describe the need for data cleansing 15.Apply data cleansing techniques to a data set 16. Visualise a data set 17. Analyse visualisations to identify patterns, trends, and outliers 18. Draw conclusions and report findings	**What we want the students to learn/be able to:** 1. Analyse a problem and chose appropriate formulae and layout to present outcomes. 2. Planning - mind maps, structured diargams and flow-diagrams. 3. Design the visual, queries and pivot tables. 4. Test solutions and alalyse suitability for the needs of the scenario.
	12					
Computer Science	Autumn Term		**Spring term**		Summer term	
Topic Summary	**1**	**2**	**3**	**4**	**5**	**6**
Year 10	**IT in the Digital World**	**Spreadsheets - Advanced**	**Spreadsheets - NEA**	**IT in the Digital World**	**Augmented Reality**	**Augmented Reality**
Thinking Hard	Apply knowledge and understanding of how technology is adapting in the world and the advantages/disadvantages of the software we can use.	**Acquiring knowledge**/ Spreadsheet Formula, Design Tools - □ Flow charts □ Mind maps □ Story board □ Visualisation diagram □ Wireframe **Changing the world:** What happens if the Internet goes down. Permanently. Not fearing failure/creating independence/mastery: developing Spreadsheets	**Acquiring knowledge**/ Spreadsheet Formula, Design Tools - □ Flow charts □ Mind maps □ Story board □ Visualisation diagram □ Wireframe **Changing the world:** What happens if the Internet goes down. Permanently. Not fearing failure/creating independence/mastery: developing Spreadsheets	Apply knowledge and understanding of how technology is adapting in the world and the advantages/disadvantages of the software we can use.	Understand the real-world uses and applications of AR in the workplace.	Understand the real-world uses and applications of AR in the workplace.
Developing Character	Self-awareness of how our lives are impacted by the digital world.	**Grit/self-assurance** - developing VB code/formulae independently Considering secondary storage - cost v capacity & performance. Protocols - what protocols are there in society? What new protocols appeared during lockdown?x Which have we adopted? **Curiosity**: What's in a data packet? **Mindfulness**: Can you imagine a world without computers?	**Grit/self-assurance** - developing VB code/formulae independently Considering secondary storage - cost v capacity & performance. Protocols - what protocols are there in society? What new protocols appeared during lockdown?x Which have we adopted? **Curiosity**: What's in a data packet? **Mindfulness**: Can you imagine a world without computers?	Self-awareness of how our lives are impacted by the digital world.	Independence and creativity	Independence and creativity
Understanding Diversity	**Self assurance/being a world citizen**: Use of universal software	How spreadsheets can be used in a variety of business situations.	How spreadsheets can be used in a variety of business situations.	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal software
Literacy Reading, Oracy	Analysing techniques	Literacy - keyword vocabulary pertaining to spreadsheet (functions, conditional formatting, data validation. use of spell check, find and replace)	Literacy - keyword vocabulary pertaining to spreadsheet (functions, conditional formatting, data validation. use of spell check, find and replace)	Analysing techniques	Narrative, story-telling and sequencing of ideas.	Narrative, story-telling and sequencing of ideas.
Gatsby, Careers	Recognising how different careers are impacted by the technology we use.	How spreadsheets can be used in a variety of business situations. (Marketing, data scientists, etc)	How spreadsheets can be used in a variety of business situations. (Marketing, data scientists, etc)	Recognising how different careers are impacted by the technology we use.	Have an awarenes of the uses of AR in the workplace, including simulation and testing/training.	Have an awarenes of the uses of AR in the workplace, including simulation and testing/training.
Mental and Physical Well-being	How can technology be used to enhance our lives?	How can spreadsheets reduce workload in other areas of life?	How can spreadsheets reduce workload in other areas of life?	How can technology be used to enhance our lives?	Engagement with a new form of technology	Engagement with a new form of technology
Cross-Curricular Links	Science - experiment process (problem, plan, test, analyse)	PD - protocols in society	PD - protocols in society	Science - experiment process (problem, plan, test, analyse)	Art/Design: 3D modelling, creativity, digital art Geography: interactive maps English: story telling and narratives Science: visualisation of systems	Art/Design: 3D modelling, creativity, digital art Geography: interactive maps English: story telling and narratives Science: visualisation of systems
Extra-Curricular Links	Creating digital content and understanding how digital systems work.	Careers Fair	Careers Fair	Creating digital content and understanding how digital systems work.	AR - External after school club	AR - External after school club
Specific Learning Endpoints	**What we want students to learn/be able to:** 1. Understand and apply various design tools such as flow charts, mind maps, wire frames and visualisation diagrams to plan IT solutions. 2. Human-Computer Interface in everyday life - explore types of display devices and explore advantages/disadvantages of input devices. 3. Data and Testing - recognise the importance of data in IT systems and understand testing methods to ensure reliability and acuracy. 4. Understand various forms of digital communication and their applications in different contexts 5. Explote the concept of IOE and its impact on connectivity and data exhanges across devices.	**What we want the students to learn/be able to:** 1. Analyse a problem and chose appropriate formulae and layout to present outcomes. 2. Planning - mind maps, structured diargams and flow-diagrams. 3. Design the visual, queries and pivot tables. 4. Test solutions and alalyse suitability for the needs of the scenario.	**What we want the students to learn/be able to:** 1. Analyse a problem and chose appropriate formulae and layout to present outcomes. 2. Planning - mind maps, structured diargams and flow-diagrams. 3. Design the visual, queries and pivot tables. 4. Test solutions and alalyse suitability for the needs of the scenario.	**What we want students to learn/be able to:** 1. Understand and apply various design tools such as flow charts, mind maps, wire frames and visualisation diagrams to plan IT solutions. 2. Human-Computer Interface in everyday life - explore types of display devices and explore advantages/disadvantages of input devices. 3. Data and Testing - recognise the importance of data in IT systems and understand testing methods to ensure reliability and acuracy. 4. Understand various forms of digital communication and their applications in different contexts 5. Explote the concept of IOE and its impact on connectivity and data exhanges across devices.	**What we want students to learn/be able to:** 1. Understanding what AR is (including examples in everyday life, such as Pokemon Go, Snapchat filters and Ikea Place app) 2. Explore AR tools and platforms 3. Creative Design and Visual Thinking 4. Dgital content creation 5. Collaboration and Project Work 6. Evaluation and testing of projects	**What we want students to learn/be able to:** 1. Understanding what AR is (including examples in everyday life, such as Pokemon Go, Snapchat filters and Ikea Place app) 2. Explore AR tools and platforms 3. Creative Design and Visual Thinking 4. Dgital content creation 5. Collaboration and Project Work 6. Evaluation and testing of projects
Extended learning checkpoints		**Mock NEA R060 - Spreadsheets**	**NEA ASSESSMENT R060 - Spreadsheets w/c 19/1/26** **Submit coursework 14/05/26**			**Mock Exam: IT in Digital World R062**
Computer Science	**Autumn Term**		**Spring term**			**Summer term**
Year 11	**1**	**2**	**3**	**4**	**5**	**6**
Topic Summary	**Spreadsheets - NEA**	**Augmented Reality**	**Augmented Reality - NEA**	**IT in the Digital World**	**IT in the Digital World**	

Thinking Hard	**Acquiring knowledge**/ Spreadsheet Formula, Design Tools - □ Flow charts □ Mind maps □ Story board □ Visualisation diagram □ Wireframe **Changing the world:** What happens if the Internet goes down. Permanently. Not fearing failure/creating independence/mastery: developing Spreadsheets	Understand the real-world uses and applications of AR in the workplace.	Understand the real-world uses and applications of AR in the workplace.	Apply knowledge and understanding of how technology is adapting in the world and the advantages/disadvantages of the software we can use.	Apply knowledge and understanding of how technology is adapting in the world and the advantages/disadvantages of the software we can use.	
Developing Character	**Grit/self-assurance** - developing VB code/formulae independently Considering secondary storage - cost v capacity & performance. Protocols - what protocols are there in society? What new protocols appeared during lockdown?x Which have we adopted? **Curiosity**: What's in a data packet? **Mindfulness**: Can you imagine a world without computers?	Independence and creativity	Independence and creativity	Self-awareness of how our lives are impacted by the digital world.	Self-awareness of how our lives are impacted by the digital world.	
Understanding Diversity	How spreadsheets can be used in a variety of business situations.	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal software	**Self assurance/being a world citizen**: Use of universal software	
Literacy Reading, Oracy	Literacy - keyword vocabulary pertaining to spreadsheet (functions, conditional formatting, data validation. use of spell check, find and replace)	Narrative, story-telling and sequencing of ideas.	Narrative, story-telling and sequencing of ideas.	Analysing techniques	Analysing techniques	
Gatsby, Careers	How spreadsheets can be used in a variety of business situations. (Marketing, data scientists, etc)	Have an awarenes of the uses of AR in the workplace, including simulation and testing/training.	Have an awarenes of the uses of AR in the workplace, including simulation and testing/training.	Recognising how different careers are impacted by the technology we use.	Recognising how different careers are impacted by the technology we use.	
Mental and Physical Well-being	How can spreadsheets reduce workload in other areas of life?	Engagement with a new form of technology	Engagement with a new form of technology	How can technology be used to enhance our lives?	How can technology be used to enhance our lives?	
Cross-Curricular Links	PD - protocols in society	Art/Design: 3D modelling, creativity, digital art Geography: interactive maps English: story telling and narratives Science: visualisation of systems	Art/Design: 3D modelling, creativity, digital art Geography: interactive maps English: story telling and narratives Science: visualisation of systems	Science - experiment process (problem, plan, test, analyse)	Science - experiment process (problem, plan, test, analyse)	
Extra-Curricular Links	Careers Fair	AR - External after school club	AR - External after school club	Creating digital content and understanding how digital systems work.	Creating digital content and understanding how digital systems work.	
Specific Learning Endpoints	**What we want the students to learn/be able to:** 1. Analyse a problem and chose appropriate formulae and layout to present outcomes. 2. Planning - mind maps, structured diargams and flow-diagrams. 3. Design the visual, queries and pivot tables. 4. Test solutions and alalyse suitability for the needs of the scenario.	**What we want students to learn/be able to:** 1. Understanding what AR is (including examples in everyday life, such as Pokemon Go, Snapchat filters and Ikea Place app) 2. Explore AR tools and platforms 3. Creative Design and Visual Thinking 4. Dgital content creation 5. Collaboration and Project Work 6. Evaluation and testing of projects	**What we want students to learn/be able to:** 1. Understanding what AR is (including examples in everyday life, such as Pokemon Go, Snapchat filters and Ikea Place app) 2. Explore AR tools and platforms 3. Creative Design and Visual Thinking 4. Dgital content creation 5. Collaboration and Project Work 6. Evaluation and testing of projects	**What we want students to learn/be able to:** 1. Understand and apply various design tools such as flow charts, mind maps, wire frames and visualisation diagrams to plan IT solutions. 2. Human-Computer Interface in everyday life - explore types of display devices and explore advantages/disadvantages of input devices. 3. Data and Testing - recognise the importance of data in IT systems and understand testing methods to ensure reliability and acuracy. 4. Understand various forms of digital communication and their applications in different contexts 5. Explote the concept of IOE and its impact on connectivity and data exhanges across devices.	**What we want students to learn/be able to:** 1. Understand and apply various design tools such as flow charts, mind maps, wire frames and visualisation diagrams to plan IT solutions. 2. Human-Computer Interface in everyday life - explore types of display devices and explore advantages/disadvantages of input devices. 3. Data and Testing - recognise the importance of data in IT systems and understand testing methods to ensure reliability and acuracy. 4. Understand various forms of digital communication and their applications in different contexts 5. Explote the concept of IOE and its impact on connectivity and data exhanges across devices.	
Extended Learning Checkpoints	**NEA ASSESSMENT R060 - Spreadsheets w/c 22/9/25** **Submit coursework 31/10/25**		**Mock Exam - It in the Digitial World** **NEA ASSESSMENT R061 - AR** **w/c 23/2/26** **Submit coursework 14/5/26**			