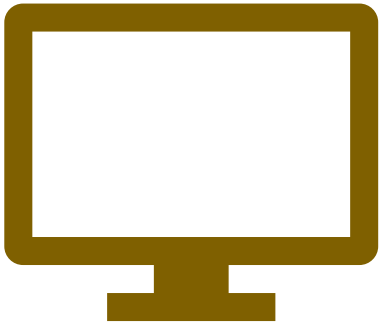
*Updated November 2022

Skills and Progression Map

Computing

'Spirituality is the bitter-sweet yearning for beauty, truth, love and wonder beyond ourselves. It is a longing we pursue together and a treasure we glimpse in ourselves and one another and seek beyond us into eternity. It is life in all its fullness.'

Nebula Spirituality Statement



Frettenham PRIMARY SCHOOL

Hainford VC PRIMARY SCHOOL

ST FAITHS' PRIMARY SCHOOL

Nebula
where stars are born

	Computing: National Curriculum Curriculum	
EYFS	**Key Stage One**	**Key Stage Two**
• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes	• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • Recognise common uses of information technology beyond school • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the Internet or other online technologies	• 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

Nebula
where stars are born

SKILLS

The National Curriculum has been divided up into three areas: Information Technology, Digital Literacy and Computer Science. Within each of these areas, **Core Skills** have then been identified and allocated to each iLearn2 unit and are covered throughout an academic year.

Information Technology	Digital Literacy	Computer Science
• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school **Audio/Visual Design** **Text and Images**	• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. **E-Safety**	• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs **Programming**
• 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 **Audio/Visual Design** **Text and Images** **Data Handling**	• 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 • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact **Internet Research** **E-Safety**	• 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 **Programming**

Skills Map – Computing	
EYFS	
Information Technology Skills	
Audio and Visual Creation: • To use technology to explore and access digital content. • To operate a digital device with support to fulfil a task. • To create simple digital content. • To choose media to create content.	**Text and Images:** • To use the keyboard to enter letter strings. • To begin to use the space bar to break letter strings into groups of letters. • To use the Back Space key to delete. • To use a word bank or word list to enter text.
Computer Science Skills	
Programming: • To explore technology. • To repeat an action with technology to trigger a specific outcome. • To recognise the success or failure of an action.	• To follow simple instructions to control a digital device. • To recognise that people control computers. • To input a short sequence of instructions to control a device.
Digital Literacy Skills	
E-Safety: Online Relationships: • To recognise some ways in which the Internet can be used to communicate. • To give examples of how technology might be used to communicate with known people. • To describe ways that some people can be unkind online. • To offer examples of how this can make others feel. **E-Safety:** Online Reputation: • To identify ways that information can be put on the Internet. **E-Safety:** Managing Online Information: • To talk about how the Internet can be used to find things out. • To identify devices that could be used to access information on the Internet. • To give simple examples of how to find information.	**E-Safety:** Health, Well-Being and Lifestyle: • To identify rules that help keep people safe and healthy in and beyond the home when using technology. • To give some simple examples. • To recognise that people can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks them to do something that makes them feel sad, embarrassed, or upset. • To explain how this could be either in real life or online. **E-Safety:** Privacy and Security: • To identify some simple examples of personal information. • To describe the people who this information can be shared with and to explain why they can be trusted. **E-Safety:** Copyright and Ownership: • To know that work someone creates belongs to them. • To name work so that others know who it belongs to.

Key Vocabulary		Greater Depth
• Instructions • Camera • Robot • Sequence • Share • Technology • Control • Google • Information • Internet • Algorithm	• Computer • iPad/Tablet • App (application) • Keyboard • Button • Printer • Save • Zoom • Computer Screen • Mouse	**Information Technology:** • What are you making? **Computer Science:** • Which one did you choose? **Digital Literacy:** • When do you use technology?

Skills Map – Computing	
Year 1	
Information Technology Skills	
Audio and Visual Creation: • To create digital content. • To choose media from a selection to create content. • To recognise that digital content can be edited and select basic tools/options to achieve this. • To combine media with support.	**Text and Images:** • To access and open a document. • To use upper- and lower-case letters, the space bar, the Return key, the Shift key to create a capital letter and the delete/backspace key for mistyped or repeated letters. • To write short texts using word lists. • To move the cursor and insert text.
Computer Science Skills	
Programming: • To recognise that computers don't have a brain. • To explain that computers are controlled by being given instructions. • To create a simple program. • To create a simple algorithm.	• To predict the outcome of a simple algorithm or program. • To explain what an algorithm is. • To recognise that the order of instructions in an algorithm is important. • To debug an error in a simple algorithm or program.
Digital Literacy Skills	
E-Safety: Online Relationships: • To use the Internet with adult support to communicate with known people. • To explain why it is important to be considerate and kind to people online. • To describe how to behave online in ways that do not upset others and can give examples. **E-Safety:** Online Reputation: • To recognise that information can stay online and could be copied. • To describe what information should not put online without asking a trusted adult first. **E-Safety:** Managing Online Information: • To use the Internet to find things out.	**E-Safety:** Health, Well-Being and Lifestyle: • To explain rules to keep people safe when they are using technology both in and beyond the home. • To give examples of some of these rules. • To recognise that there may be people online who could make others feel sad, embarrassed or upset. • To know that if something happens that makes someone feel sad, worried, uncomfortable or frightened they can give examples of when and how to speak to an adult they can trust. **E-Safety:** Privacy and Security: • To recognise more detailed examples of information that is personal. • To explain why someone should always ask a trusted adult before they share any information about themself online. • To explain how passwords can be used to protect information and

<table>
<tr><td colspan="3">

- To use simple keywords in search engines.
- To describe and demonstrate how to get help from a trusted adult or helpline if content is found that makes someone feel sad, uncomfortable worried or frightened.

</td><td>

devices.

<u>**E-Safety:** Copyright and Ownership:</u>

- To explain why work someone creates using technology belongs to them.
- To say why it belongs to them.
- To save work so that others know who it belongs to.

</td></tr>
<tr><td colspan="3">Key Vocabulary</td><td>Greater Depth</td></tr>
<tr><td>

- 3D
- Program
- Debug
- Design
- Emoji
- Search
- Selection
- Website
- Personal information
- Link
- Menu

</td><td>

- Icon
- Trusted adult
- Online
- Sign in
- Game
- Wireless (Wifi)
- Online bullying
- Landscape
- Portrait
- Bluetooth
- Download

</td><td>

- Frame
- Processor
- Green screen
- Hard drive
- Illustration
- Log in
- Tool
- Send
- Follow
- Digital
- Communicate

</td><td>

Information Technology:

- How did you make that?

Computer Science:

- Describe what happens when your code runs.

Digital Literacy:

- Who can you tell if you don't like something you see online?

</td></tr>
</table>

Skills Map – Computing		
Year 2		
Information Technology Skills		
Audio and Visual Creation: • To create simple digital content for a purpose. • To apply edits to digital content to achieve a particular effect. • To create content by combining media. • To plan digital content and identify common features.	**Text and Images:** • To understand how text can be saved and retrieved. • To change the font style, size and colour. • To use the cursor arrow keys for simple on-screen editing. • To import graphics and add text with support.	**Data Handling:** • To independently plot data as a pictogram, block chart or bar graph. • To know that graph types can be changed. • To interpret the graphs by discussing them and answering simple questions. • To use the search tools in a prepared database to answer simple questions.
Computer Science Skills		
Programming: • To explain that computers have no intelligence and we have to program them to do things. • To create a program with multiple steps. • To predict the outcome of an algorithm or program with multiple steps.	• To recognise that the instructions in an algorithm need to be clear and unambiguous. • To identify and correct errors in a given algorithm or program, and recognise the term debugging. • To explain what an algorithm is, and that when inputted on a computer it is called a program. • To plan out a program by creating an algorithm and evaluate its success.	
Digital Literacy Skills		
Internet Research: • To complete a search using a child friendly search engine independently. • To use the Internet to find information for a topic with support. **E-Safety:** Online Relationships: • To give examples of how technology might be used to communicate with others they don't know well. • To give examples of bullying behaviour and how it could look online. • To understand how bullying can make someone feel. • To talk about how someone can/would get help about being bullied online	**E-Safety:** Health, Well-Being and Lifestyle: • To explain simple guidance for using technology in different environments and settings. • To explain how other people's identity online can be different to their identity in real life. • To describe ways in which people might make themselves look different online. • To give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened and give examples of how they might get help.	

or offline.

E-Safety: Online Reputation:

- To explain how information put online about someone can last for a long time.
- To know who to talk to if someone thinks they have made a mistake about putting something online.

E-Safety: Managing Online Information:

- To use keywords in search engines.
- To demonstrate how to navigate a simple webpage to get needed information.
- To explain what voice activated searching is and how it might be used.
- To explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real' and explain why some information found online may not be true.

E-Safety: Privacy and Security:

- To describe how online information about someone could be seen by others.
- To describe and explain some rules for keeping information private.
- To explain what passwords are and can use passwords for accounts and devices.
- To explain how many devices in a home could be connected to the Internet and can list some of those devices.

E-Safety: Copyright and Ownership:

- To describe why other people's work belongs to them.
- To recognise that content on the Internet may belong to other people.

Key Vocabulary

- Browser
- Computer networks
- Data
- Computational thinking
- Execute/Run
- Input
- Output
- Software
- World Wide Web (WWW)
- Password
- Username
- Interact
- Images
- Facts
- Scan
- Chat
- Post/ Re-post
- Copyright
- Backdrop
- Repeat/ Loop
- Characters
- Avatars
- Fictitious/Fake
- Evaluation
- Publish
- Trust
- Stroke
- Template

Greater Depth

Information Technology:

- How can you describe your end result?

Computer Science:

- How would you identify if your code was working?

Digital Literacy:

- What could happen if you told a stranger online your phone number?

Skills Map – Computing		
Year 3		
Information Technology Skills		
Audio and Visual Creation: • To create content by combining media independently. • To design and create simple digital content for a purpose and audience. • To edit digital content to improve it. • To identify features of a good piece of digital content.	**Text and Images:** • To select text and change the font style, size, colour, Bold and Underline. • To confidently use the cursor arrow keys for on screen editing and use the scroll bars to view different parts of the document. • To justify/align text. • To import graphics and add text.	**Data Handling:** • To collect information using a questionnaire. • To use the search tools to answer simple questions relevant to an investigation and to sort and organise information to use in other ways. • To enter data in a prepared spreadsheet with support and to select data to produce a graph with support. • To recognise which information is suitable for a topic.
Computer Science Skills		
Programming: • To predict the outcome of a block or text-based program. • To successfully modify an existing program. • To identify repeated steps in a program or algorithm. • To create examples of algorithms containing count-controlled loops and use a count-controlled loop to make a program more efficient.	• To recognise that an algorithm can be created to help plan out a program. • To recognise a forever loop in a program or algorithm and to use a forever loop in a program to keep something happening. • To identify errors in a block or text-based program and correct them. • To recognise that different inputs can be used to control a program.	
Digital Literacy Skills		
Internet Research: • To type in a URL to find a website. • To add websites to favourites. • To use a search engine to find a range of media. • To understand Internet safety rules.	**E-Safety:** Health, Well-Being and Lifestyle: • To explain why spending too much time using technology can sometimes have a negative impact on a person. • To give some examples of activities where it is easy to spend a lot of time engaged. • To explain what is meant by the term 'identity'. • To explain how a person can represent themself in different ways	

E-Safety: Online Relationships:

- To describe ways people who have similar likes and interests can get together online and give examples of technology-specific forms of communication.
- To explain some risks of communicating online with others someone doesn't know well and how their and other people's feelings can be hurt by what is said or written online.
- To explain why someone should be careful who they trust online and what information they can trust them with and why they can take back their trust in someone or something if they feel nervous, uncomfortable or worried.
- To explain what it means to 'know someone' online and why this might be different from knowing someone in real life and explain what is meant by 'trusting someone online' and why this is different from 'liking someone online'.

E-Safety: Online Reputation:

- To search for information about a person online.
- To recognise the need to be careful before someone shares anything about themself or others online.
- To know who someone should ask if they are not sure if they should put something online.

E-Safety: Managing Online Information:

- To use key phrases in search engines.
- To explain what autocomplete is and how to choose the best suggestion.
- To explain how the Internet can be used to sell and buy things.
- To explain the difference between a 'belief', an 'opinion' and a 'fact'.

online and why they might change their identity depending on what they are doing online.

E-Safety: Privacy and Security:

- To give reasons why someone should only share information with people they choose to and can trust and can explain that if someone is not sure or they feel pressured, they should ask a trusted adult.
- To understand and can give reasons why passwords are important.
- To describe simple strategies for creating and keeping passwords private.
- To describe how connected devices can collect and share someone's information with others.

E-Safety: Copyright and Ownership:

- To explain why copying someone else's work from the Internet without permission can cause problems.
- To give examples of what those problems might be.

Key Vocabulary			Greater Depth
• Block • Palette • Code/Coding • Command • Decomposition • Sprite • Stage • Condition • Control • Block • Costume • Digital content • Simulation	• Hyperlink • Attachment • URL • Blog/Blogging • Consequences • Illustrator • Untrusted • Cyberbully • Cyberbullying • Reliable • MegaByte • GigaByte • Report	• Sceptical • Verify • Fake • News • Soundtrack • VR (virtual reality) • Font • Shortcut • Shots • 360º Video • Authenticate • Multimedia	**Information Technology:** • How could you improve you end result? **Computer Science:** • How would you fix a bug in your code? **Digital Literacy:** • What could the result be if someone told others their password?

Skills Map – Computing		
Year 4		
Information Technology Skills		
Audio and Visual Creation: • To create content using a range of media. • To design and create digital content for a specific purpose. • To edit digital content to improve it according to feedback and identify the features of a good piece of digital content and apply these to an original design. • To know where to find copyright-free content.	**Text and Images:** • To import graphics and use a tool for text wrapping. • To choose a portrait or landscape page as appropriate. • To learn how to insert and use a simple table. • To use a zoom tool to view the whole page, and a spell checker tool.	**Data Handling:** • To create a database from selected information and use the database to carry out an investigation. • To present data in different ways. • To start to amend errors. • To enter data in a prepared spreadsheet and select data to produce a graph independently.
Computer Science Skills		
Programming: • To create a program using a range of events/inputs to control what happens. • To recognise that a problem can be decomposed into smaller parts to help solve it. • To explain when to use forever loops and count-controlled loops and use them in programs. • To recognise selection in a program or algorithm.	• To use selection in algorithms in programs to alter what happens when a condition changes. • To design a program for a purpose. • To decompose into parts and create an algorithm for each one. • To recognise common mistakes in programs and how to correct them.	
Digital Literacy Skills		
Internet Research: • To think of search terms to use linked to questions that need answering. • To talk about the reliability of information on the Internet. • To use Internet safety rules.	**E-Safety:** Health, Well-Being and Lifestyle: • To explain how using technology can distract someone from other things they might do or should be doing. • To identify times or situations when someone might need to limit the amount of time they use technology and suggest strategies to help with this. • To explain how someone's online identity can be different to the	

E-Safety: Online Relationships:

- To describe strategies for safe and fun experiences in a range of online social environments and give examples of how to be respectful to others online.
- To identify some online technologies where bullying might take place.
- To describe ways people can be bullied through a range of media.
- To explain why someone needs to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them.

E-Safety: Online Reputation:

- To describe how others can find out information about someone by looking online.
- To explain ways that some of the information about someone online could have been created, copied or shared by others.

E-Safety: Managing Online Information:

- To analyse information and differentiate between 'opinions', 'beliefs' and 'facts' and understand what criteria have to be met before something is a 'fact', and why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true.
- To describe how someone can search for information within a wide group of technologies.
- To describe some of the methods used to encourage people to buy things online and can recognise some of these when they appear online.
- To explain that some people someone 'meets online' may be computer programmes pretending to be real people.

identity they present in 'real life'.

- To describe the right decisions about how someone interacts with others and how others perceive them.

E-Safety: Privacy and Security:

- To explain what a strong password is.
- To describe strategies for keeping personal information private, depending on context.
- To explain that others online can pretend to be someone or other people, including their friends and suggest reasons why they might do this.
- To explain how Internet use can be monitored.

E-Safety: Copyright and Ownership:

- To explain why someone needs to consider who owns something and whether they have the right to reuse it when searching on the Internet for content to use.
- To give some simple examples.

Key Vocabulary			Greater Depth
• Logical reasoning • Audio • Selection • Page ranking • Hacker • Repetition • Script • Scripts area • Secure (https)	• PEGI • Netiquette • Conditional • Scene • Filters • Griefing • Storyboard • Cloud computing	• Positive online communication • Online persona • Digital footprint • Animation • Age restrictions • Social network • Screenshot • Screencast	**Information Technology:** • How would you change your end result for a different audience? **Computer Science:** • How would you explain what your code does? **Digital Literacy:** • Why do you think people say unkind things online?

Skills Map – Computing		
Year 5		
Information Technology Skills		
Audio and Visual Design: • To identify and use appropriate hardware and software to fulfil a specific task. • To remix and edit a range of existing and original media to create content. • To consider the audience when designing and creating digital content. • To identify success criteria for creating digital content for a given audience and purpose and evaluate original content against these success criteria and make improvements accordingly.	**Text and Images:** • To change the layout using centring and justification. • To format a list. • To import, position and manipulate graphics. • To move, resize and reshape text and graphics.	**Data Handling:** • To create data collection forms and enter data from these accurately. • To know how to check for and spot inaccurate data. • To enter information into a spreadsheet using appropriate headings and move to a specific cell in a spreadsheet. • To use simple formula and use a spreadsheet to investigate.
Computer Science Skills		
Programming: • To name a range of sensors in physical systems. • To recognise that different solutions may exist for the same problem. • To predict what will happen in a program or algorithm when the input changes. • To use two-way selection in programs and algorithms.	• To recognise variables in a program and what they do. • To create programs including repeat until loops. • To create and use simple variables. • To evaluate a program and make improvements to the code or design accordingly.	
Digital Literacy Skills		
Internet Research: • To use advanced search functions in Google. • To use AND and OR in searches. • To check the accuracy of information with support. • To begin to be aware of privacy and other issues related to using the Internet and to interpret and question the plausibility of information.	**E-Safety:** Health, Well-Being and Lifestyle: • To describe ways technology can affect healthy sleep and can describe some of the issues. • To describe some strategies, tips or advice to promote healthy sleep with regards to technology. • To explain how identity online can be copied, modified or altered. • To demonstrate responsible choices about online identity, depending on context.	

E-Safety: Online Relationships:

- To explain that there are some people online who may want to do other people harm and to recognise that this is not those people's fault.
- To describe some of the communities in which people are involved and describe how people collaborate with others positively.
- To recognise when someone is upset, hurt or angry online and describe how to get help for someone that is being bullied online and assess when they need to do or say something or tell someone.
- To explain how to block abusive users and report online bullying on the apps and platforms that are used.

E-Safety: Online Reputation:

- To search for information about an individual online and create a summary report of the information they find.
- To describe ways that information about people online can be used by others to make judgments about an individual.

E-Safety: Managing Online Information:

- To evaluate digital content and explain how to make choices from search results.
- To understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead) and to explain what is meant by 'being sceptical' and 'hoax'.
- To explain why someone needs to think carefully before forwarding anything online.
- To explain why some information found online may not be honest, accurate or legal and why information that is on a large number of sites may still be inaccurate or untrue and assess how this might happen.

E-Safety: Privacy and Security:

- To create and use strong and secure passwords.
- To explain how many free apps or services may read and share private information with others.
- To explain how and why some apps may request or take payment for additional content and explain why someone should seek permission from a trusted adult before purchasing.

E-Safety: Copyright and Ownership:

- To assess and justify when it is acceptable to use the work of others.
- To give examples of content that is permitted to be reused.

Key Vocabulary			Greater Depth
• Abstraction • Vlog • YouTuber • IP address • Pixels • Vector • HTML • CSS • Services • ISP • LAN • TCP/IP • Variables	• Hub • Peripheral • Bandwidth • CEOP • ChildLine • Cache • Harassment • Plagiarism • Infringe copyright • Illegal downloads • Streaming • Blocking	• Victim • Cookie • Junk mail • RAM / ROM • USB • ZIP • Augmented reality • Bit & bytes • Upload • Score • Podcast • Edit	**Information Technology:** • What are the advantages and disadvantages of the software you have used? **Computer Science:** • Predict the outcome if you swapped the order of two pieces of your code. **Digital Literacy:** • How do people get scammed online?

Skills Map – Computing		
Year 6		
Information Technology Skills		
Audio and Visual Design: • To select, combine and remix a range of media to create original content. • To consider all steps of the design process when creating content. • To identify the most effective tools to create content for a specific purpose. • To evaluate existing digital content in terms of effectiveness and design.	**Text and Images:** • To split cells in a table. • To merge cells in a table. • To insert/delete cells in a table. • To use find, search and replace where needed.	**Data Handling:** • To use formulae and functions in a spreadsheet and enter and use simple formula in a spreadsheet. • To understand what changing numerical data effects a calculation and change data to satisfy 'what if' queries. • To make graphs from the calculations on a spreadsheet and use editing tools to alter the design of a graph. • To organise, refine and present information appropriate to the audience and use a spreadsheet to solve simple problems.
Computer Science Skills		
Programming: • To design and program a physical computing system that uses sensors. • To recognise and use procedures (sub-routines) in programs. • To plan out a program in detail, including task, algorithm, code and execution level.	• To explain common errors in programs and how to fix them. • To use nested selection statements in a program or algorithm effectively. • To combine a variable with relational operators (< = >) to determine when a program changes. • To recognise key concepts (sequence, selection, repetition and variables) in a range of languages and contexts.	
Digital Literacy Skills		
Internet Research: • To understand websites such as Wikipedia are made by users. • To suggest ways to check the accuracy of information independently. • To be aware of privacy and other issues related to using the Internet.	**E-Safety:** Health, Well-Being and Lifestyle: • To describe and identify ways in which media can shape ideas about gender and gender roles and explain why it is important to reject inappropriate messages about gender.	

E-Safety: Online Relationships:

- To show someone understands their responsibilities for the well-being of others in their online social group.
- To explain how impulsive and rash communications online may cause problems.
- To demonstrate how someone would support others (including those who are having difficulties) online.
- To demonstrate ways of reporting problems online for both a person and their friends and how to capture content as evidence to share with others who can help them.

E-Safety: Online Reputation:

- To explain how someone develops an online reputation which will allow other people to form an opinion of them.
- To describe some simple ways that help build a positive online reputation.

E-Safety: Managing Online Information:

- To describe how some online information can be opinion and can offer examples.
- To explain how and why some people may present 'opinions' as 'facts' and to define the terms 'influence', 'manipulation' and 'persuasion' and explain how they might encounter these online.
- To demonstrate strategies to enable someone to analyse and evaluate the validity of 'facts' and explain why using these strategies are important.
- To identify, flag and report inappropriate content.
- To describe issues online that might make people feel sad, worried, uncomfortable or frightened and give examples of how to get help, both on and offline.
- To describe common systems that regulate age-related content and describe their purpose.
- To assess and action different strategies to limit the impact of technology on their health and explain the importance of this.

E-Safety: Privacy and Security:

- To use different passwords for a range of online services and describe effective strategies for managing those passwords.
- To know what to do if a password is lost or stolen.
- To explain what app permissions are and can give some examples from the technology or services used.
- To describe simple ways to increase privacy on apps and services that provide privacy settings and describe ways in which some online content targets people to gain money or information illegally and how to identify such content.

E-Safety: Copyright and Ownership:

- To demonstrate the use of search tools to find and access online content which can be reused by others.
- To demonstrate how to make references to and acknowledge sources someone has used from the Internet.

Key Vocabulary			Greater Depth
• Antivirus • New media • Collaboration • Visual coding • Text based coding • Adware • Trojan • Feedback • Bot • Boolean • Checksum • Server	• Firewall • Generalisation • Security updates • Plug in • Pop up blocker • Scams • Phishing • Location based settings • In app purchasing • Trolling • Sexting • Exclusion	• Doxxing • Catfishing • Flaming • Fabotage • Creeping • Dissing • Filtering • Malware • Screen time • Balanced lifestyle • Configuring	**Information Technology:** • What is your favourite software to use for this purpose? Why? **Computer Science:** • Is there any part of your code you could remove without changing how it functions? **Digital Literacy:** • What might you suggest if someone regrets what they have said to someone else online?

DEEPER LEARNING QUESTIONS

	Information Technology	Computer Science	Digital Literacy
EYFS	What are you making?	Which one did you choose?	When do you use technology?
Year 1	How did you make that?	Describe what happens when your code runs.	Who can you tell if you don't like something you see online?
Year 2	How can you describe your end result?	How would you identify if your code was working?	What could happen if you told a stranger online your phone number?
Year 3	How could you improve your end result?	How would you fix a bug in your code?	What could the result be if someone told others their password?
Year 4	How would you change your end result for a different audience?	How would you explain what your code does?	Why do you think people say unkind things online?
Year 5	What are the advantages and disadvantages of the software you have used?	Predict the outcome if you swapped the order of two pieces of your code.	How do people get scammed online?
Year 6	What is your favourite software to use for this purpose? Why?	Is there any part of your code you could remove without changing how it functions?	What might you suggest if someone regrets what they have said to someone else online?

Nebula
where stars are born

SEN

Provision for Pupils with SEN
Here are some recommendations for ways in which the computing curriculum can be adapted to meet the needs of children with SEN: • Video presentations can have subtitles and/or audio descriptions. • Keyboard shortcuts can be taught instead of using a mouse/trackpad. • Sticky keys feature can be turned on to reduce the need to hold multiple buttons down. • Increased font sizes can be used on screens. • Writing on screens can be read aloud by a screen reader. • Keyboard stickers can be used to enlarge the letters. • Touch screens can be used for writing/drawing instead of typing. • Predictive text can be used to lessen the need for typing. • Symbol-processing software or picture communicators can take away needing to read large amounts. • Word banks of key vocabulary can be used to support embedding of language. • Software demonstrations can be shown in short steps to reduce amount needing to be remembered.