

YEAR THREE

	AUTUMN ONE	AUTUMN TWO	SPRING ONE	SPRING TWO	SUMMER ONE	SUMMER TWO
AREA OF COMPUTING	1) Digital Literacy 2) Information Technology	Digital Literacy	Information Technology	Information Technology	Information Technology	Computer Science
UNIT	1) Online Safety (3) – 3.2 2) Simulations (3) – 3.7	Email and Email Safety (6) – 3.5	1) Branching Databases (4) – 3.6 2) Touch Typing (4) – 3.4	Presenting (6) – 3.9	1) Spreadsheets (3) – 3.3 2) Graphing (3) – 3.8	Coding (6) – 3.1
PROGRAMMES	1) 2Simulate 2) 2Publish	2Email 2Connect 2DIY	2Question 2Type	Google Slides OR Microsoft Power Point	2Calculate 2Graph	2Code
NATIONAL CURRICULUM PROGRAMME OF STUDY COVERAGE	Use and combine a variety of software to accomplish given goals. (3.7) Collect and Present Information. (3.7) Design and create content. (3.7) Collect and present data. (3.7) Use search technologies effectively. (3.7) Use and combine Internet searches. (3.7) Analyse and evaluate information. (3.7) Use technology responsibly. (3.2) Identify a range of ways to report concerns about contact and content. (3.2) Recognise acceptable/unacceptable behaviour (3.2)	Use and combine a variety of software to accomplish given goals. Collect and Present Information. Design and create content. Collect and present data. Use search technologies effectively. Use and combine Internet searches. Analyse and evaluate information. Use technology responsibly. (3.5) Identify a range of ways to report concerns about contact and content. (3.5) Recognise acceptable/unacceptable behaviour (3.5)	Use and combine a variety of software to accomplish given goals. Collect and Present Information. Design and create content. Collect and present data. Use search technologies effectively. Use and combine Internet searches. Analyse and evaluate information.	Use and combine a variety of software to accomplish given goals. Collect and Present Information. Design and create content. Collect and present data. Use search technologies effectively. Use and combine Internet searches. Analyse and evaluate information.	Use and combine a variety of software to accomplish given goals. (3.3) Collect and Present Information. Design and create content. Collect and present data. Use search technologies effectively. Use and combine Internet searches. Analyse and evaluate information.	Work with various forms of input and output. Design and create programs that accomplish specific goals. Control or simulate physical systems. Use logical reasoning to detect and correct errors in programs. Use sequence, repetition and selection in programs.

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AUTUMN ONE	DIGITAL LITERACY	ONLINE SAFETY	Unit 3.2 Purple Mash
SKILLS (LANCASHIRE KEY LEARNING)		KNOWLEDGE AND UNDERSTANDING	
Use technology responsibly.		Know how to use technology responsibly. Understand that online actions can impact on other people.	
To create appropriate passwords.		Understand the need to keep personal information and passwords private in order to protect themselves when communicating online.	
Keep passwords and personal data safe.		Understand the need to keep personal information and passwords private in order to protect themselves when communicating online.	
Recognise acceptable behaviour.		Know what images are suitable to include in an online profile and ensure that appropriate permissions have been obtained, e.g. copyright or asking friends before uploading their images. Understand what acceptable and unacceptable online behaviour is.	
Recognise unacceptable behaviour.		Understand the risks involved in arranging to meet and subsequently meeting anybody from the online world in the offline world. Understand what acceptable and unacceptable online behaviour is. Understand the risks posed by the internet relating to contact e.g. bullying, grooming. Understand the risks posed by the internet relating to content e.g. violent and biased websites	
Be able to create a 'secure' password, e.g. combination of letters, symbols and numbers in accordance with the school's e-Safety policies and procedures /AUP.		Know the school's rules for keeping safe online and be able to apply these beyond school. Understand the need for certain rules of conduct particularly when using live forms of communication, e.g. chats and forums in the school's VLE, taking turns to speak when video conferencing. Recognise that cyber bullying is unacceptable and will be sanctioned according to the school's e-Safety policies and procedures /AUP. Know how to report an incident of cyber bullying if and when it occurs, according to the school's e-Safety policies and procedures /AUP. Understand the school's acceptable use policy.	
Know what to do and who to tell if they discover something inappropriate or offensive on a website, at home and in school.		Understand the need for certain rules of conduct particularly when using live forms of communication, e.g. chats and forums in the school's VLE, taking turns to speak when video conferencing. Know a range of ways to report concerns about content and contact. Know how to respond if asked for personal details or in the event of receiving unpleasant communications, e.g. saving the message and showing to a trusted adult –according to the school's e-Safety policies and procedures /AUP.	

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AUTUMN ONE		INFORMATION TECHNOLOGY		SIMULATIONS		Unit 3.7 Purple Mash	
SKILLS (LANCASHIRE KEY LEARNING)				KNOWLEDGE AND UNDERSTANDING			
Explore the effects of changing variables in models and simulations, asking 'What if?' questions.				Understand how computer simulations can represent real or imaginary situations and how these can help in the wider world.			
				Understand how computer simulations and spread-sheet models allow changes to be made quickly and easily in comparison with real life situations.			
Make and test predictions.				Understand how computer simulations can represent real or imaginary situations and how these can help in the wider world.			
				Understand how computer simulations and spread-sheet models allow changes to be made quickly and easily in comparison with real life situations.			

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AUTUMN TWO		DIGITAL LITERACY	EMAIL AND EMAIL SAFETY	Unit 3.5 Purple Mash
SKILLS (LANCASHIRE KEY LEARNING)		KNOWLEDGE AND UNDERSTANDING		
Use a range of digital tools to communicate, e.g. contributing to chats and/or discussion forums, in school's VLE, blog or text messages, making purposeful contributions to respond to another pupil's question or comment.		Understand that computer networks can be used for communication. Understand the opportunities computer networks offer for communication. Know a range of ways that computer networks can be used for communication.		
Investigate the different styles of language, layout and format of different electronic communications and how these vary depending on the audience.				
Continue to use webcams and /or video conferencing as a class, if appropriate and available, e.g. with external providers, another class or school, or abroad as part of a wider topic.				
Begin to publish their work to a wider audience, e.g. using VLE or podcasting tools.				
Log on to an email account, open emails, create and send appropriate replies.				
Forward an e-mail.				
Save an e-mail in draft format and then return and edit prior to sending.				
Attach different files to emails, e.g. text document, sound file or image.				
Open and save attachments to an appropriate place.				
Select an email recipient from a class address book.				
Use technology responsibly. To create appropriate passwords. Keep passwords and personal data safe. Recognise acceptable behaviour. Recognise unacceptable behaviour. Be able to create a 'secure' password, e.g. combination of letters, symbols and numbers in accordance with the school's e-Safety policies and procedures /AUP. Know what to do and who to tell if they discover something inappropriate or offensive on a website, at home and in school.		Understand that some emails and other forms of electronic communications may be malicious or inappropriate and recognise when an attachment may be unsafe to open. Recognise the effect that content in their communications may have on others. Discuss the differences between online communication tools used in school and those used internet content, recognising this is possibly not the case on computers used at home at home, e.g., those 'blocked' through the school's filtering. Respect the ideas and communications of others they encounter online.		

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SPRING ONE	INFORMATION TECHNOLOGY	BRANCHING DATABASES	Unit 3.6 Purple Mash
SKILLS (LANCASHIRE KEY LEARNING)		KNOWLEDGE AND UNDERSTANDING	
Create and use a branching database to organise and analyse information to answer questions.		Understand the need to structure information properly in a database. Talk about the advantages of using IT to sort, interrogate and classify information quickly.	
Collect data and enter it into a database under appropriate field headings.		Understand that there are different types of data.	
Use a database to answer straightforward questions by searching, matching and ordering the contents of a single field.		Know, understand and use the vocabulary: file, record, field, sort and search. Understand that effective yes / no questions are key to organising data efficiently in a branching database.	
Based on the data collected, children should raise their own questions and translate them into search criteria that can be used to find answers to specific questions.		Talk about the advantages of using IT to sort, interrogate and classify information quickly.	
Compare different charts and graphs, e.g., in tables, frequency diagrams, pictograms, bar charts, databases or spread sheets and understand that different ones are used for different purposes.		Know that ICT can enable the creation of a variety of tables and graphs for different purposes. Understand some graphs and charts are more appropriate and easier to read than others.	
Select and use the most appropriate method to organise and present data.		Understand the need to structure information properly in a database. Recognise similarities and differences between ICT and paper-based systems. Understand that there are different types of data, e.g. numeric, alphabetic, date, alphanumeric. Begin to make choices about how to present data to solve a specific problem.	

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SPRING ONE INFORMATION TECHNOLOGY TOUCH TYPING Unit 3.4 Purple Mash	
SKILLS (LANCASHIRE KEY LEARNING)	KNOWLEDGE AND UNDERSTANDING
Use different font sizes, colours and effects to communicate meaning for a given audience.	Recognise the features of good page design and multimedia presentations.
Use page setup to select different page sizes and orientations.	Consider how design features meet the needs of the audience e.g. poster, newspaper, menu, instructions.
Use cut, copy and paste to refine and re-order content.	Consider how design features meet the needs of the audience e.g. poster, newspaper, menu, instructions.
Combine and use various software tools to complete a project, problem or task.	Understand that some tasks and problems require a variety of software tools to accomplish them.
Use appropriate editing tools to ensure their work is clear and error free, e.g. spell checker, thesaurus, find and replace.	Demonstrate this through editing their work.
Use page setup to select different page sizes and orientations.	Recognise the features of good page design and multimedia presentations.

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SPRING TWO INFORMATION TECHNOLOGY PRESENTING Unit 3.9 Purple Mash	
SKILLS (LANCASHIRE KEY LEARNING)	KNOWLEDGE AND UNDERSTANDING
Use different font sizes, colours and effects to communicate meaning for a given audience.	Develop an increasing sense of audience and talk.
Use various layouts, formatting, graphics and illustrations for different purposes or audiences.	Recognise the features of good page design and multimedia presentations.
Use various software tools to complete a project, problem or task	Understand that some tasks and problems require a variety of software tools to accomplish them.
Use cut, copy and paste to refine and re-order content.	
Combine and use various software tools to complete a project, problem or task.	
Use appropriate editing tools to ensure their work is clear and error free, e.g. spell checker, thesaurus, find and replace.	Recognise that IT can automate manual processes e.g. find and replace and understand the advantages and disadvantages of this.
Select and import sounds from other sources, e.g. own recordings, sound effects and music.	Compare and contrast the impact of using different sounds, words and images from a variety of electronic sources.
Select and import graphics from digital cameras, graphics packages and other sources and prepare for use, e.g. cropping, resizing and editing.	
Use and combine internet services such as those that provide images, sounds, 3D representations and graphic software.	Understands what is meant by Internet services Has an awareness of Internet services Understand that internet services such as those that provide images, sounds, 3D representations and graphic software can be used to achieve specific goals and tasks. Understand that images, 3D representations, sounds and text can be subject to copyright and abide by copyright rules when creating a presentation.
Create a range of hyperlinks and produce a non-linear, interactive presentation.	
Recognise intended audience and suggest improvements to make their work more relevant to that audience.	Consider how design features meet the needs of the audience e.g. poster, newspaper, menu, instructions.
Through self and peer assessment, analyse and evaluate presentations and projects so that suitable improvements can be added to work.	Understand that evaluation and improvement are vital parts of the design process and that ICT allows changes to be made quickly and efficiently. Understand that presentations and projects need to be analysed and evaluated and suitable changes suggested to improve it.

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SUMMER ONE		INFORMATION TECHNOLOGY		SPREADSHEETS		Unit 3.3 Purple Mash	
SKILLS (LANCASHIRE KEY LEARNING)				KNOWLEDGE AND UNDERSTANDING			
Use a pre-prepared spread sheet to record data to answer questions and produce graphs.				Understand how computer simulations and spread-sheet models allow changes to be made quickly and easily in comparison with real life situations.			
				Understand that changes made to one element of a spread sheet can impact on other calculations			
Use a pre-prepared spread sheet to explore simple number patterns, e.g. multiples.				Understand how computer simulations and spread-sheet models allow changes to be made quickly and easily in comparison with real life situations.			
				Understand that changes made to one element of a spread sheet can impact on other calculations			
Change the contents of cells in a pre-prepared spread sheet and explore the consequences.				Understand how computer simulations and spread-sheet models allow changes to be made quickly and easily in comparison with real life situations.			
				Understand that changes made to one element of a spread sheet can impact on other calculations			

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SUMMER ONE		INFORMATION TECHNOLOGY		GRAPHING	Unit 3.8 Purple Mash
SKILLS (LANCASHIRE KEY LEARNING)			KNOWLEDGE AND UNDERSTANDING		
Create frequency diagrams and graphs to answer questions.					
Begin to identify what data should be collected to answer a specific question.			Understand that there are different types of data.		
			Understand that there are different types of data, e.g. numeric, alphabetic, date, alphanumeric.		
Based on the data collected, children should raise their own questions and translate them into search criteria that can be used to find answers to specific questions.					
Compare different charts and graphs, e.g., in tables, frequency diagrams, pictograms, bar charts, databases or spread sheets and understand that different ones are used for different purposes.			Know that ICT can enable the creation of a variety of tables and graphs for different purposes.		
			Understand some graphs and charts are more appropriate and easier to read than others.		
Select and use the most appropriate method to organise and present data.			Recognise similarities and differences between ICT and paper-based systems.		
			Talk about the advantages of using IT to sort, interrogate and classify information quickly.		
			Begin to make choices about how to present data to solve a specific problem.		

YEAR THREE

SUMMER TWO		COMPUTER SCIENCE	CODING	Unit 3.1 Purple Mash
SKILLS (LANCASHIRE KEY LEARNING)		KNOWLEDGE AND UNDERSTANDING		
Write programs that accomplish specific goals.		Understand how to plan and write programs that accomplish specific goals.		
Read what a sequence in a program does.		Understand what the terms sequence, repetition and selection mean and know how to use them in programs		
Work with various forms of input. Work with various forms of output		Know a range of input devices and how they can be used. Know a range of output devices and how they can be used. Know the difference between an input and an output. Understand that computers can collect data from various inputs.		
Use logical reasoning to predict outputs.				
Design programs, showing skills needed to plan and implement a task/problem that accomplish specific goals.		Understand what the terms sequence, repetition and selection mean and know how to use them in programs		
Design programs showing appropriate planning and implementing skills.		Understand that planning is a vital part of designing programs. Understand that evaluation is a vital part of the design process.		
Create programs that implement algorithms to achieve specific goals.		Understand that computers can collect data from various inputs.		
Debug programs that accomplish specific goals through self and peer assessment.		Know what debugging is and how it can be used to achieve specific goals.		
Use sequence, repetition and selection in programs.		Understand what the terms sequence, repetition and selection mean and know how to use them in programs		
Plan, test and evaluate programs that solve specific problems using a screen turtle or other programmable devices.		Understand that planning is a vital part of designing programs. Understand that evaluation is a vital part of the design process.		
Use sequences of commands to control physical devices using outputs.		Be aware that everyday devices use sensors and outputs, e.g. automatic doors, traffic lights, intruder alarms.		
Demonstrate and develop a sense of audience when appropriate.				
Use and debug programs to control physical devices Note real or screen simulations could be used.		Understand how to control physical devices.		
Use logical reasoning to detect and correct errors in programs		Understand how to use logical reasoning to detect errors in programs Understand how to use logical reasoning to correct errors in programs.		