	AF1 - Planning, developing and evaluating	AF2 - Handling data, sequencing instructions and modelling	AF3 - Finding, using and communicating information
Level	Across a range of contexts pupils:		
8	Design and implement integrated ICT based systems for others to use which:		
	<ul> <li>meet the needs of the user</li> </ul>		
	<ul> <li>take account of ease of use</li> </ul>		
	<ul> <li>collect, process and prepare information for processing efficiently</li> </ul>		
	<ul> <li>automate dataflow through the system</li> </ul>		
	<ul> <li>include an appropriate interface between the system and the user</li> </ul>		
	<ul> <li>use appropriate ICT tools and techniques</li> </ul>		
	<ul> <li>integrate evaluation into the development process to inform subsequent refinements</li> </ul>		
	Explain the impacts of ICT on social, economic, ethical and moral issues		
Level 7	Across a range of contexts pupils:	Across a range of contexts pupils:	Across a range of contexts pupils:
	Design and plan an ICT-based system by:	Select appropriate tools and techniques to implement an ICT based system	Develop an appropriate user interface for an ICT based system which:
	<ul> <li>scoping the information flow through the system</li> </ul>	in which:	<ul> <li>enables efficient data input</li> </ul>
	<ul> <li>devising and applying success criteria to ensure a quality solution, refining work as it progresses</li> </ul>	<ul><li>data flow is automated</li><li>sequences of instructions are developed, tested and refined</li></ul>	<ul> <li>displays system outcomes that are fit for purpose and audience</li> </ul>
	<ul> <li>identifying the advantages and limitations of the system</li> </ul>	<ul> <li>assumptions, variables and rules are identified</li> </ul>	
	Identify the impact of ICT on people, communities and cultures		
Level 6	Across a range of contexts pupils:	Across a range of contexts pupils:	Across a range of contexts pupils:
	<ul> <li>Plan and develop solutions which show efficiency and integration of ICT tools and techniques</li> </ul>	<ul> <li>Devise a data handling solution to test hypotheses that uses techniques to reduce input errors</li> </ul>	<ul> <li>Use complex lines of enquiry efficiently to interrogate information</li> <li>Explain choices when presenting information for different purposes and wider</li> </ul>
	Use criteria and feedback to improve the effectiveness and efficiency of solutions	Create efficient sequences of instructions including the use of subroutines	or remote audiences
	Explore the impacts of the use of ICT in work, leisure and home	Test predictions by varying rules in models and assess the validity of the conclusions	
Level 5	Across a range of contexts pupils:	Across a range of contexts pupils:	Across a range of contexts pupils:
	<ul> <li>Plan and develop structured solutions to problems which use a combination of ICT tools and techniques</li> </ul>	<ul> <li>Use logical and appropriate structures to organise and process data</li> <li>Create precise and accurate sequences of instructions</li> </ul>	<ul> <li>Take account of accuracy and potential bias when searching for and selecting information</li> </ul>
	<ul> <li>Use criteria to evaluate the quality of solutions, identifying improvements and refining their work</li> </ul>	Change variables within models and explain the impact	<ul> <li>Present information in a range of forms for specific purposes and familiar audiences</li> </ul>
	Identify benefits and limitations of using ICT both inside and outside school		Use ICT safely and responsibly
Level	Across a range of contexts pupils:	Across a range of contexts pupils:	Across a range of contexts pupils:
4	<ul> <li>Plan and implement solutions that combine and refine different forms of information</li> </ul>	<ul> <li>Organise and process data for a purpose</li> <li>Devise and refine sequences of instructions.</li> </ul>	<ul> <li>Use appropriate search criteria to find relevant information, and check its plausibility and usefulness</li> </ul>
	Evaluate the quality and success of their solutions	Use models to explore relationships between inputs and outputs and explain	Present information in different forms suited to purpose
	Explain how and why the use of ICT varies in and out of school	how the models work	<ul> <li>Use ICT to communicate and collaborate, identifying some of the risks and acting to minimise them</li> </ul>
Level	Across a range of contexts pupils:	Across a range of contexts pupils:	Across a range of contexts pupils:
3	Plan how they will use ICT to solve a problem	Collect, store and retrieve data	Identify and select appropriate information using straightforward lines of enquiry
	Comment on success of their solution	Use a sequence of instructions to control events	Present information using text, images and other media
	Refine and develop information using ICT tools and techniques to make changes	<ul> <li>Use ICT-based models or simulations to answer questions</li> </ul>	Use digital communication to exchange ideas
	Describe how they use ICT at school and how it is used outside school		Identify ways they can keep themselves safe when using ICT