From level 5, pupils learn to:	To level 6, pupils learn to:
Improve the quality of outcomes for specific audiences and purposes by using a range of ICT tools.	Use ICT tools together to demonstrate a variety of outcomes, enabling the most appropriate choice of tool to be made.
Typically, pupils can:	Typically, pupils can:
use a range of software applications and hardware devices and make decisions	Evaluate a range of tools and choose the most appropriate when combining several ICT applications to form a complete solution to a problem; e.g. use validation for data entry, thesaurus to give alternative words, drop-down menus for text entry, evaluate the efficiency of linking information from one application to another (e.g. linked objects that update in all applications when the original version is changed), evaluate a range of tools to enable improvement and collaboration.
	Typical activity
	Pupils create a model of a seating plan for a theatre booking system in a spreadsheet or database, and use this information to update a web page for audience members.
	Pupils evaluate several methods of communicating the seating availability, and then select the most efficient. They check that the links between the model and the web page(s) work efficiently.
Key questions (to help make a judgement about appropriateness and understanding)	In what ways could you present seat availability to the public? What limitations might there be to some of the possible solutions? (e.g. paper-based methods versus live online data) How clearly is the information communicated to potential audience members? Does the system work for situations like block bookings and cancellations?
Common misconceptions: pupils sometimes think	The content of a Web page remains the same and you have to edit manually to reflect changes in the bookings. The only way to move data to a new application is to make a fresh (static) copy of the original data by using copy and paste.

From level 5, pupils learn to:	To level 6, pupils learn to:
Make and use simple success criteria that ensure fitness for purpose.	Devise and review complex success criteria to modify and develop their work as it progresses.
Typically, pupils can:	Typically, pupils can:
Create and use simple criteria (based on requirements developed from a straightforward problem) that help pupils develop their work and evaluate the final outcome; pupils consider the whole project to ensure the fitness for purpose of each element.	Develop success criteria for tasks and sub-tasks from thorough identification of audience needs; pupils' test plans focus on the needs of the audience; pupils continually check their progress against these criteria; modify their success criteria during the development of their work, based on their current evaluation.
	Typical activity
Activity	In devising a game for others to use, pupils work in pairs to develop a set of success criteria for each others' games. At a later stage, pupils try each others' games and provide feedback.
Activities that will result in a step change	As pupils break down the game into parts, they develop success criteria for each subsection and understand how these combine together to make the overall success criteria. Verify that the success criteria have been met in the light of user feedback and modify the success criteria where evaluation shows that they are not appropriate in their current form.
Key questions (to help make a judgement about appropriateness and understanding)	What do you want each part of your game to do? How well does each part of the game meet your success criteria for that subsection? Do the subsection criteria when used together help to judge the overall effectiveness of the solution?
Common misconceptions: pupils sometimes think	You only need overall success criteria. There is no need to review the appropriateness of success criteria as the game develops The author of the solution is the only person determining success criteria.

From level 5, pupils learn to:	To level 6, pupils learn to:
Justify the process they use in relation to the task.	Evaluate the effectiveness of their approach to developing an ICT solution.
Typically, pupils can:	Typically, pupils can:
Give reasons for the elements of their plan and explain how the plan contributes to the success of the whole project.	Determine and record clearly which techniques, features and methods of working have been most successful.
	Typical activity
Activity	Pupils plan to gather information from a range of sources and in different file formats. They consider the advantages and disadvantages of using different applications to store and analyse the data (e.g. data handling in a spreadsheet or a flat file database).
	Pupils evaluate the effectiveness of the plan by recording their judgements of the features and methods of working for each application. These are synthesised into a summary that informs their final choice of application.
	What are the similarities and differences between the applications you are evaluating? What features of each application are a benefit to you? How are you going to record your decisions about each application and the reasons for them?
Common misconceptions: pupils sometimes think	The most appropriate application to use is the one that you are most familiar with.

From level 5, pupils learn to:	To level 6, pupils learn to:
Gather and use feedback to inform future work.	Gather, record and use systematic feedback from users to improve their work.
Typically, pupils can:	Typically, pupils can:
Identify where and how appropriate feedback is needed and use this feedback to make judgements about how well their work meets the specified criteria.	Use structured and recorded feedback from other people (including end users, where possible) to identify strengths and weakness in the solution; pupils use this information to inform decisions about how to improve their work (which may involve the revision of the success criteria).
	Typical activity
Activity	Pupils create a series of web pages. They seek the opinion of others by using a feedback form, clearly linking the questions to the success criteria.
Activities that will result in a step change	Pupils build opportunities for gathering and using feedback into the overall plan with clear identification of which aspects would benefit from feedback. The planning identifies different approaches (e.g. observation, oral, written) and the stages of development in which these will occur. Pupils record feedback at each stage and make comments on the usefulness of this and any changes they plan to make as a result.
Key questions (to help make a judgement about appropriateness and understanding)	At what point will you collect feedback? How will you collect feedback? Why? What kind of responses would you expect users to make? How will you collect and record feedback during development?
Common misconceptions: pupils sometimes think	You only gather feedback at the very end of a project. As long as I respond to it, there is no need to record feedback in any detail. Asking questions is the only way to gain feedback.