

UNIT 8.5 OVERVIEW

With an increasing expectation that pupils will share and collaborate their work , this is an ideal unit for them to do this. In particular, they can review, modify and evaluate various stages which will encourage progressive changes to be made. Have opportunities to collaborate work via shared areas is important.

The Links page within the *pupil store* has been checked / updated, however, at the time of this update the following Internet links on the pupil activity pages or subsequent worksheets are inaccessible or the page has moved.

Activity 6 - Homework
http://www.school-resources.co.uk/Automated_Systems.htm

Lesson	Lesson learning objectives & content revision / notes		
1	Set up shared areas for each business. These can be used to collaborate work even if the unit is being completed individually. This will encourage evaluation and review.		
3	Discuss mail merging. Explain that most major programs support this and may use external data sources. What are their personal views on 'junk' mail or direct selling?		
4	Pupils should compare their ideas for the spreadsheet. They may use a set of criteria to do this. Explain that using criteria helps select solutions fit for purpose.		
5	When creating the spreadsheet explain why using test data is important and pupils may wish to try each others, again for ' fit for purpose'.		
6	Write suitable criteria to be able to select the best maze (review, modify and evaluate).		
7	When writing procedures the groups can discuss how effective they are and therefore how efficient they are.		
9	Pupils should acknowledge which work is being used in the final presentation. Evaluation sheets / criteria can be used.		
Level	Skill	Assessment Criteria	Knowledge & Understanding
5			Use appropriate evaluation criteria to select work from a range of materials. This can be used to show progressive change.
6	Can develop a clear set of sub routines for the maze which show an efficiency of commands		

YEAR 8 – UNIT 8.5	Lessons 1 - 9								
1 Finding information									
1.1 Using data and information sources									
use information from primary or secondary sources and know when to choose the different types									
recognise how the content and style of information can influence the message it gives and that data can be distorted and misused									
justify the use of particular information sources to support an investigation or presentation, and devise and apply criteria to evaluate how well various information types support a task									
1.2 Searching and selecting									
select information from a range of sources and assess the potential value of the information for a task									
frame searches in an appropriate and considered way in relation to the required results, for a more complex problem									
use basic logical operators and apply these when searching for information									
understand that the different ways in which search engines work can affect which information is returned									
acknowledge all sources, recognising copyright and other constraints									
1.3 Organising and investigating									
save files in appropriate formats and create a hierarchical folder structure									
identify the essential data and ICT tools required to solve a problem									
develop open and closed questions with sensitivity, recognising people’s cultural, social and ethical differences									
design a questionnaire or data-collection sheet to collect relevant data, and obtain and use feedback to establish what are good questions									
produce or adapt a data structure, enter data into this and check that data is reasonable and accurate									

use more complex queries – AND, OR, NOT; use different searches to produce the most effective result or to collect extra or different data for more detailed conclusions									
represent information in graphs, charts or tables, and in a report where appropriate; justify the form of representation and check the plausibility of their conclusions									
identify examples of automated data collection and recognise the impact of electronic databases on learning, everyday life and employment									
evaluate different applications in terms of the structure and method of processing data									
2 Developing ideas									
2.1 Analysing & automating processes									
identify the key elements of a problem and represent components in a plan									
automate simple processes by harnessing software tools; recognise where automation tools, such as filtering, can be used to improve safety when using the internet									
2.2 Models and modelling									
combine variables within a model in different ways to form rules									
recognise that the rules contained within a model determine its output, and make more complex predictions based on several variables									
amend existing simple models by changing variables and formulae									
identify whether a model has an appropriate set of variables to make it suitable for a particular purpose, and assess its accuracy by comparing its outcomes with those from other sources									
2.3 Sequencing instructions									
use precision and accurate syntax when framing instructions									
test and refine sequences in order to achieve specific outcomes									
recognise that sequencing instructions is fundamental to a wide range of ICT applications									

3 Communicating information

3.1 Fitness for purpose

plan communication projects and select the appropriate communication (type, length, media) for the intended audience (considering audience needs and expectations), purpose and environment

reflect on the work of others to help plan and amend their communications and understand how effective presentations or publications address specific audience needs and expectations

3.2 Refining and presenting information

draft, refine and structure their work using a combination of ICT tools to convey meaning more effectively

modify and develop text, images, tables and sounds from several sources within the structure of a piece of work

extract, combine and modify relevant information for a specific purpose, and structure and sequence this to meet audience needs

use a range of ICT tools efficiently to refine the presentation of information for a specific purpose

3.3 Communicating

select appropriate methods of exchanging digital information and recognise that the format affects the method of exchange

use digital communications for the sharing and collaborative development of ideas for a variety of purposes

work in a safe and responsible way when communicating with others

4 Evaluating

4.1 Evaluating work

improve the quality of outcomes for specific audiences and purposes by using a range of ICT tools

make and use simple success criteria that ensure fitness for purpose
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justify the process they use in relation to the task									
gather and use feedback to inform future work									
reflect on their previous work and learning in order to improve their work									