



# ICT - Year 8



## Autumn (Michaelmas) Term

What we are learning...	Consolidation	Deepen & Challenge
Components of a computer system	Try these quizzes out <a href="#">Quiz 1</a> <a href="#">Quiz 2</a> <a href="#">Quiz 3</a>	Customise your own 'dream' computer using any of the sites below.
Practical tasks - building computers	Try the different versions of the games!	Make a presentation showing the components you would include and explain why you would choose them. <a href="#">Build a PC on the Box Site</a> <a href="#">Build a PC on PC specialist</a>
Matching a computer spec to a user	Watch this YouTube video to learn more about gaming computer components <a href="#">Building a gaming pc</a>	Write out an algorithm (set of instructions) for brushing your teeth. Make sure you write down every single step clearly. How many instructions do you end up with? Can any of them be repeated?
What is an algorithm?	Work through <a href="#">bitesize</a> Use the screen reader built into Edge. Try the test at the end.	Draw out your algorithm for brushing your teeth using the flow chart symbols you learnt at school. Here is a reminder if you need one: <a href="#">Smartdraw</a>
Flowol - flow chart symbols and simple flow charts	<a href="#">Try this quiz</a> Press preview and start to play the quiz and revise flow chart symbols	Look at your algorithm for brushing your teeth. Can any section be repeated? If so, it could be a separate procedure. Write out the procedure and change your flow chart to include it.
Flowol - more advanced flow charts to control simple systems, including procedures	<a href="#">Click here</a> to read page 1 of this Bitesize page:	

## Spring (Lent) Term

What we are learning...	Consolidation	Deepen & Challenge
Database - what is a database? Searching a database and framing questions.	Read through/watch <a href="#">BBC Bitesize</a> Make a mind map (either on paper or on a site like <a href="#">Bubbl</a> ) of all of the examples of databases used in everyday life that you can think of.	Read <a href="#">Introducing Databases - BBC Bitesize</a> and listen to the clip (you only need to look at this page). What uses of databases are listed?
Database - creating tables/records	Watch this online lesson <a href="#">up to 3m40seconds</a> : <a href="#">Click here to continue lesson</a>	<a href="#">Continue the online lesson activity</a> from 3m40seconds onwards.
Database - running queries and reports	Complete the activity to create your own simple card based database with at least 8 cards (records).	Use your record cards to answer the search questions shown in the video.



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Photoshop graphics - difference between bitmaps and vectors	Bitmap-vector quizzes/games/activities <a href="#">quiz</a> Quizziz bitmap and vector quiz <a href="#">quiz</a> Wordwall vector bitmap quiz - choose how you play! <a href="#">video on how to make pixel art</a> Scratch - create your own pixel art	More in depth bitmap-vector quizzes/game <a href="#">quiz</a>
Photoshop graphics - photography and creating a montage	Create your own collage montage at home by taking, printing and cutting out photos. How does this compare to using Photoshop?	Find at least 3 examples of Hugo Suissas forced perspective work and consider how he took the photos - was Photoshop used?
Photoshop graphics - use of filters and effects	On your phone, take photos of a subject (eg a pet) and explore the filter effects in your camera app. What interesting effects can you achieve?	Explore further setting on your phone camera - eg crop, zoom, contrast.

## Summer (Trinity) Term

What we are learning...	Consolidation	Deepen & Challenge
Vector graphics - what is a vector? Nodes and lines	<a href="#">Watch this video on how to use</a> Scratch vector drawing activity	More in depth vector quizzes/game <a href="#">quiz</a>
Designing vector graphics - combining shapes, adjusting nodes - cartoons	<a href="#">Try this free text tool</a> - enter some text and play with the settings to add 3D effects	If you have access to a graphics program on an iPad or tablet (or your phone), try creating your own company logo and using filters and effects. Perhaps you could redesign the school logo?
Designing vector graphics - using filters and effects to create 3D effects on logos	Design a poster to warn young people of the dangers of scams, phishing and malware.  If you are unsure of these keywords, make a keyword poster instead - write out each word and underneath, write a simple definition. You might find this site helps you: <a href="#">bite size</a>	Look on a news site such as BBC newsbeat, <a href="#">news report link</a> , and see whether you can find two different articles about scams. Make notes on -who was scammed -how they were caught out -what happened - eg. did they lose money? -what happened to the scammers?
Scams and Hacking		