Super Curriculum – Year 5 & 6 Subject: COMPUTER SCIENCE

Laurie Wallmark has a series of books about women's contribution to our history – and in the world of computing. She has written about Ada Lovelace, Grace Hopper and Elizabeth Friedman. Choose one to read.	**The computing kitchen?** A fridge that automatically writes your shopping list, then places the order – how cool? Find out about other internet connected tech you can get for your kitchen.
TechnoMum – recommend one of these podcasts to your teacher. Find one you might be interested in first! https://www.radio-uk.co.uk/podcasts/techno-mum-technology-engineering-for-kids	**Dancing Robots?** Watch what one of the leading robotics companies Boston Dynamics, have managed to get robots to do. https://www.youtube.com/watch?v=D_Vc_yDvU24
Animation Time: create an animated character for use in a game. You could use software such as: • Synfig Studio • Pencil2D	**Life without technology?** Write a story about what life would be like without access to any technology. Think about school life, family life, social life, shopping and travel. How would we all cope?
What was life like without today's technology? Find out how phone calls were made, how we worked out how to get somewhere and what you had to do if you wanted to find out about a new topic – all without a computer!	**Speed Typing** Boost your typing speed, typing accuracy and work towards being able to touch-type. Try https://tinyurl.com/qehstyping
Hour of Code Spend a little time extending your skills. Choose a topic from https://hourofcode.com/uk	**Centre of Computing History –** Go on a virtual tour of the National Museum of Computing https://www.tnmoc.org/3d-virtual-tour

📖	Reading task	📝	Writing task
👂	Listening task	👁	Watching task
🔍	Research task	📍	Trip or visit
✂	Creative task	💡	Student-led task

Super Curriculum – Year 7, 8 & 9 Subject: COMPUTER SCIENCE

📖 **Computational Fairy Tales by Jeremy Kubica** A romp through the principles of computational thinking, illustrating high-level computer science concepts, the motivation behind them, and their application.	📖 **Algorithms to Live By: The Computer Science of Human Decisions** A fascinating exploration of how computer algorithms can be applied to our everyday lives.	🔍 **Where could Computer Science take you?** Carry out some research to find out about some unusual careers with the tech and Compute Science industry. Digital locksmith? Drone operator? Professional hacker?
👁 **Map of Computer Science:** A fantastic short video summarising the field of computer science. - https://www.youtube.com/watch?v=SzJ46YA_RaA	👁 **BBC Click:** Watch this weekly BBC television programme covering news and recent developments in the world of consumer technology and innovations. http://www.bbc.co.uk/programmes/b006m9ry/episodes/player	👁 **Where it all started:** Watch the TedTalk on "The birth of the computer" by George Dyson https://www.youtube.com/watch?v=EF692dBzWAs&index=1&list=PLF7032F8EB1A4F9E2
📝 **No more teachers –** Write a short essay debating the following question - *Will computer assisted education replace the need for teachers in the future?*	✂ **The year 2100**– Imagine that it is the year 2100. *What will the world be like? How will technology have changed? What new inventions will have been created?* Sketch a picture of a large city giving a perspective on what you think the world will be like in 2100.	📝 **Intelligent Machines –** Write a short essay debating the following question – *Are computers more intelligent than the people who make them?*
💡 **Animation Competition** Try your hand at some animation, using software such as Stop Motion Studio, Krita, Synfig, Adobe Animate, FlipaClip or Blender. Perhaps enter a competition such as https://younganimator.uk/competition	💡 **Computer Science Fundamentals -** A collection of interactive quizzes that will help you master computer science fundamentals. https://brilliant.org/courses/computer-science-fundamentals/	💡 **Raspberry Pi –** *Why not get yourself a credit card sized computer?* There are so many projects you can complete with this tiny computer. Take a look here for inspiration. https://raspberrypi.org/magpi-issues/Projects_Book_v1.pdf
💡 **Typing Skills** Focus on learning to touch type: https://www.typingclub.com/	💡 **Hour of Code** Spend a little time extending your skills. Choose a topic from https://hourofcode.com/uk	📍 **Centre of Computing History -** Plan a visit to the Centre of Computing History Rene Court, Coldhams Road, Cambridge, CB1 3EW http://www.computinghistory.org.uk/

📖	Reading task	📝	Writing task
𝔇	Listening task	👁	Watching task
🔍	Research task	📍	Trip or visit
✂	Creative task	💡	Student-led task