

Denton Community College 2022/2023

Departmental Curriculum Map

Subject: Computer Science





	Lessons 1 - 3	Lessons 4 - 6	Lessons 7	Lessons 8-10	Lessons 11 - 13
Topics	Baseline assessment and online searching	Computational thinking	Computer Hardware	Al and Machine Learning	iDEA – Work towards silver award
What will students during this unit?	Students are taught how to search effectively and safely online. There is also a focus on what to trust, and how to be a "critical thinker" when it comes to reading/receiving information.	Students complete a series of tasks aimed at their logical skills. This includes abstraction, decomposition and general logic puzzles This helps prepare students for GCSE Topic – 1 Computational Thinking. A midway written assessment is completed in the final lesson at this stage.	Students learn computer hardware, why key components exist and what job it does. This helps prepare students for GCSE Topic 3 – Computer Hardware.	Students learn the difference between AI and ML, and its impact on society. This helps prepare students for GCSE Topic 5 – Ethics concerns.	Students apply what they have learnt and work towards their bronze award within iDEA. This award supports students' level of digital literacy. This is a focus on the programming badges which will help prepare students for GCSE Topic 6 - Programming
When will students be assessed?	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.
How will students be assessed?	 Baseline digital assessment Low-stakes lesson quiz 	Low-stakes lesson quizmidway assessment	Low-stakes lesson quiz	Low-stakes lesson quiz	 Low-stakes lesson quiz End of unit written assessment
Key Vocabulary	Online behaviour, digital footprint, data, PEGI, respectful.	Pixel, image, megapixel camera, RGB, file size, collage, file size, file type.	Ethical issues, impact, prediction, model, machine learning, Artificial Intelligence	Input, output, devices, fetch, decode and execute, system software, application software.	

Homework	IDEA is used for	IDEA is used for homework			
opportunities to broaden or deepen student knowledge	homework which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific "badges" which encourage further knowledge of topic.	which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific "badges" which encourage further knowledge of topic.	which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific "badges" which encourage further knowledge of topic.	which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific "badges" which encourage further knowledge of topic.	which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific "badges" which encourage further knowledge of topic.
Links to the National Curriculum	Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.	Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.