St Mary Redcliffe and Temple School

KS3 Computer Science Alive Themes

	What we do	When we do it (e.g.Term 3)	How it helps students to develop our Alive theme
Year 7	Digital Literacy Scratch Programming Python 1 Office skills Unit	Term 1 Term 2 & 3 Term 4 & 5 Term 6	Digital literacy includes Internet Safety. This allows students to explore the values of We can question, when using internet and technology. We can communicate, using any electronic communication.
Year 8	Control Programming Python 2 Creating a text-based adventure game Office skills unit	Term 1 & 2 Term 3 & 4 Term 5 Term 6	Control programming has strong links with ‘We can contribute’. As part of this unit we look at how computers contribute to the real world and design and create programs to control different scenarios. There is also opportunity for We are creative and We are organised.
Year 9	Computational Thinking and Algorithms Computer Systems Building programming skills	Term 1 & 2 Term 3 & 4 Term 5 & 6	CT & A gives students opportunity to be organised, resilient and interdependent. There is also opportunity for students to explore how computers can contribute. CS gives opportunity for all of above. But also trust and truth and justice and respect, as we explore legal, ethical, moral and environmental issues.

St Mary Redcliffe and Temple School

Year 7 Computer Science Alive Themes

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Term	Alive Theme	What we do	How it helps students to develop that Alive theme
1	We value ourselves We can communicate	Lesson on the IT acceptable use policy of the school and explanation of school systems including Email.	Understanding of we value ourselves. Explore how to keep safe using technology. We can communicate, also discussed as explanation of how to communicate effectively and appropriately using technology.
2	We value ourselves We value justice and respect We value trust and truth We are forgiving	Lesson to introduce Internet safety with a specific focus on Cyber Bullying. Students research topic and then create an appropriate presentation/poster to explain it and give advice.	Students explore what to do and not do when using the Internet. They look at what cyberbullying is and how to deal with it if it happens.
3	We are creative We are resilient We are organised We can review	Unit of work on Scratch programming. This is a high-level block-based programming language.	Students need to organise instructions to create programs. There is need to be resilient as you test and review your programs as you create them. You also need to have creative ideas to help you in this unit.
4	We are creative We are resilient We are organised We can review	Unit of worth on Python1. This is a text based high level programming language.	Students build on the skills developed in the Scratch unit to explore, develop and test programs for specific purposes. Again, a need for resilience, reviewing, being organised and creative is required.
5	We are creative We can research We can communicate	Office skills with a design theme. This unit has been introduced as a direct result of seeing lack of basic IT skills. Students given a client and set a range of design-based tasks.	Students will need to research the different tasks and put together designs for each task. They will then need to create the finished tasks and then evidence and explain each one.

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Year 8 Computer Science Alive Themes

Term	Alive Theme	What we do	How it helps students to develop that Alive theme
1	We can contribute	Introduction to Control. Explanation of what control is and how it contributes and how it is used in real life.	Students given the opportunity to explore how computers contribute with the use of control programs. They create a poster for homework based on this topic.
2	We are creative We are resilient We are organised	Develop, test and refine control programs for real-life scenarios.	Students need to have creative thinking and then show resilience and organisation to develop control programs
3	We are creative We are resilient We are organised We can review	Unit of work on Python2. This is a text based high level programming language.	Students build on the skills developed in the Python1 unit to explore, develop and test programs for specific purposes. Again, a need for resilience, reviewing, being organised and creative is required.
4	We are creative We can research We can communicate	Office skills with a design theme. This unit has been introduced as a direct result of seeing lack of basic IT skills (For both Year 7 & 8). Students given a client and set a range of design-based tasks.	Students will need to research the different tasks and put together designs for each task. They will then need to create the finished tasks and then evidence and explain each one.

Year 9 Computer Science Alive Themes

Term	Alive Theme	What we do	How it helps students to develop that Alive theme
1	We are organised We can review	As part of the computational thinking and algorithms unit students will need to understand and interpret algorithms	Students will need to be able to review and understand algorithms and be organised to create their own based on real life scenarios.
2	We value ourselves We value trust and truth We value justice and respect	In the computer systems unit we look at legal, ethical, moral and environmental issues of using Computers in society	Students are given the opportunity to explore the legal requirements of using technology and also discuss and form opinions about the different moral, ethical and environmental issues of using computers in society.