Term Autumn 14 weeks	Year 9

Literacy foci
Reading skills
Terminology and vocabulary
Keywords
Spelling tests

Homework
Quizizz.com,
Spelling & bespoke DPR intervention

Key Objectives

Revisiting, revising, remembering opportunities
Starter activities
Quizizz.com, DPR individual work

Key Objectives

SIMS Data drop

Units:

9.1 Computational thinking & Python

NC Content:
Students are able to understand several key algorithms that reflect computational thinking They will use logical reasoning to compare the utility of alternative algorithms for the same problem in a program

Students will use a programming language, which is textual, (python), to solve a variety of computational problems, the will understand the appropriate use of data structures [for example, lists, tables or arrays]; design and develop programs that use procedures or functions.

1) I can explain what a programming language is and how you can solve a problem with a program.
2) I know how to use variables, loops, if, else, lists and functions to create a working program.
3) I understand that computers use a variety of data types differently and I can explain this.
4) I understand what Computational thinking is and can describe how decomposition, pattern recognition, abstraction and algorithms relate to it.
5) I understand how algorithms are used to solve problems.

9.2 Multimedia

NC Content:
They will complete a creative project that involves them selecting, using, and combining multiple applications, across a range of devices, to achieve a challenging goal, They will collect and analyse data and meet the needs of known users or clients.

They will create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.
They must create a Multimedia product which meets a specific brief.

8) I am able to create my own creative digital artefacts through digital image editing and multimedia production

Enrichment/life and work skills:
Computer Science Club
Competitions
Assessments:
Quizizz.com
Endpoints:
Students will understand how to program in Python, have an understanding of computational thing and the use of algorithms.

Term Spring 10 weeks	Year 9

Literacy foci
Reading skills
Terminology and vocabulary
Keywords
Spelling tests

Homework
Quizizz.com,
Spelling & bespoke DPR intervention

Key Objectives

Revisiting, revising, remembering opportunities
Starter activities
Quizizz.com, DPR individual work

Key Objectives

SIMS Data drop

Units:

9.3 Networks

NC Content:

Students revisit how to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; and ability to recognise inappropriate content, contact and conduct and know how to report concerns.

They learn about the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. The school network is used as a real life example

7) I can describe the benefits of a network and what different types there are

9.4 Hardware/Software

NC Content:

They will learn about the hardware and software components that make up computer systems, and how they communicate with one another and with other systems.
They will recognise how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits, relating this back to the hardware.

9) I understand what computer hardware is and can describe key components

10) I know what software is and am able to distinguish between application and system software

Enrichment/life and work skills:
Computer Science Club
Competitions
Assessments:
Quizizz.com
Endpoints:
Students wil understand how networks operate and their own use of them, they will also understand the role of Hardware and Software in Computing and its relation to digital data.

Term Summer 14 weeks	Year 9

Literacy foci
Reading skills
Terminology and vocabulary
Keywords
Spelling tests

Homework
Quizizz.com,
Spelling & bespoke DPR intervention

Key Objectives

Revisiting, revising, remembering opportunities
Starter activities
Quizizz.com, DPR individual work

Key Objectives

SIMS Data drop

Units:

9.5 Technology for the Future

NC Content:
Students will understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. Students will understand how instructions are stored and executed within a computer system. They will create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.

8) I am able to create my own creative digital artefacts through digital image editing and multimedia production

9.6 IT for Life

NC Content:

Students will have the opportunity to design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. They will also understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems

1) I understand what Computational thinking is and can describe how decomposition, pattern recognition, abstraction and algorithms relate to it.
2) I understand how algorithms are used to solve problems.

Enrichment/life and work skills:
Computer Science Club
Competitions
Assessments:
End of Year Assessment.
Endpoints:
Students will understand how the advances in computing are reflected in the world around them, they will also understand their own position within this context. Students will have an understanding of current issues within computing and how this will affect their lives

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The progressive, inclusive curriculum 'skills, knowledge and concepts: literacy, life skills and enrichment'