



Curriculum Outline of Content Year 7



Assessment

Autumn Term

Esaftey (ICT)

6 lessons

- familiarise themselves with the school network.
- discuss appropriate use of the school network
- update and remind learners of important online safety issues.
- how to use presentation software effectively.
- focuses on respecting others online, spotting strangers, and the effects of cyberbullying.

Scratch programming 1 (CS)

6 lessons

- introduction to programming
- variables
- selection
- count controlled

Spring Term

Spreadsheet (ICT)

6 lessons

- creating spreadsheets
- entering information into a cell
- editing information in a cell in the cell and in the formula bar
- control column width / cell heights
- formatting cells (borders, shading, font and font colour, text wrap, cell merge)
- construct, enter, edit simple formula
- using the following formulae : SUM, AVERAGE, (V/H)LOOKUP, IF, AND, OR, TODAY, DATE, MIN, MAX, COUNT, COUNTIF

Networks (CS) - 6 lessons

- defining a network
- addressing the benefits of networking
- how data is transmitted across networks using protocols.

Summer Term

Scratch Programming Part 2 (CS)

6 lessons

- build on their understanding of the control structures' sequence, selection, and iteration (the big three)
- develop their problem-solving skills.
- create their own subroutines
- develop their understanding of decomposition
- create and use lists, and build upon their problem-solving skills by working through a larger project at the end of the unit.

Using Media in gaining support (ICT) - 6 lessons

- create a blog post about a real-world cause that they would like to gain support for.
- develop software formatting skills
- explore concerns surrounding the use of other people's work, including licensing and legal issues.

Autumn Term

- Individual activity grades
- 50% from each activity goes towards overall termly grade

Spring Term

- Individual activity grades
- 25% from each activity goes towards overall termly grade

Summer Term

- Individual activity grades
- 16.6% from each activity goes towards overall termly grade

End of Year Grade

- Each activity will be worth 16.6% of final end of year grade.



Curriculum

Outline of Content

Year 8



Assessment

Autumn Term

Computer Hardware (CS)

6 lessons

Input, process and Output
Components Inside the computer
Introduction to hardware
Central processing units

Sound, Camera, Action (ICT)

6 lessons

-Create storyboarding
-Decomposing a project into smaller components
-Record and import audio track;
-vector and bitmap graphics
Produce a simple animation;
Combine elements together into a complete project

Spring Term

Introduction to Python(CS)

6 lessons

-students to text-based programming with Python
-simple programs involving input and output, and gradually moves on through arithmetic operations, randomness, selection, and iteration

Media - Vector Graphics(ICT/Media)

6 lessons

-vector graphics to create logos, icons to posters, board games, and complex illustrations
-students will be able to better understand the processes involved in creating such graphics
- provided with the knowledge and tools to create their own

Summer Term

Mobile App development (CS/ICT)

6 lessons

-creating an app, using App Lab from code.org
-Building on the programming concepts learners used in previous units
-work in pairs to perform user research, design their app, write the code for it
- evaluating and publishing it for the world to use.

Representations(CS) - 6 lessons

-binary number systems,
- adding binary numbers,
-ascii and Code breaking
-bitmap images and cryptics
- how computer represent sounds.

Autumn Term

- Individual activity grades
- 25% from each activity goes towards overall termly grade

Spring Term

- Individual activity grades
- 25% from each activity goes towards overall termly grade

Summer Term

- Individual activity grades
- 16.6% from each activity goes towards overall termly grade

End of Year Grade

- Each activity will be worth 16.6% of final end of year grade.



Curriculum

Outline of Content

Year 9



Assessment

Autumn Term

Cybersecurity (CS)

6 lessons

- Techniques that cybercriminals use to steal data, disrupt systems, and infiltrate networks.
- Considering the value their data holds and what organisations might use it for.
- Learning about social engineering and other common cybercrimes
- Methods to protect against these attacks

Data Science (ICT)

6 lessons

- Data to investigate problems and how make changes to the world around them.
- Exposed to both global and local data sets
- Gain an understanding of how visualising data can help with the process of identifying patterns and trends.

Spring Term

Media Animations (ICT/Media)

6 lessons

- Create 3D animations using the industry-standard software package, Blender
- basics of modelling
- texturing
- animating; outputs will include 3D models and short videos

Physical Computing (CS)

6 lessons

- Acquainted with the host of components built into the micro:bit
- Write simple programs
- Python programming skills
- work in pairs to build a physical computing project.
- select and design their project purposefully, apply what they have learnt by building a prototype

Summer Term

Python programming with Sequencing of data

6 lessons

- How can data can be represented and processed in sequences? i.e such as lists and strings
- learners will process solar system planets, book texts, capital cities, leaked passwords, word dictionaries, ECG data, and more.

Representation - going audiovisuals

6 lessons

- making digital media such as images and sounds
- discover how media is stored as binary code.
- practical aspect; designing software (GIMP and Audacity in this case) to manipulate images and sounds.

Autumn Term

- Individual activity grades
- 25% from each activity goes towards overall termly grade

Spring Term

- Individual activity grades
- 25% from each activity goes towards overall termly grade

Summer Term

- Individual activity grades
- 16.6% from each activity goes towards overall termly grade

End of Year Grade

- Each activity will be worth 16.6% of final end of year grade.