KS3 Computing and KS4 ICT Learning Journey

Collaborative – Learning is done with you, not to you

Resilience - When making mistakes try again and again

Assertive - Active learners, not spectators

Accountable – Ask for help when needed

Independent – Aim for independence in your learning

Courageous – Be prepared to take risks

YEAR 11

HOW DATA & INFORMATION IS USED & TRANSFERRED

- *Help Videos*
- How input data Is checked for errors
- ***Physical And digital folders***
- Risks to information held On a computer
- Methods used to Protect information
- Cultural impact of ICT
- ***Mock Exam***
- Why data must be fit for purpose
- How data transfers over different types of network
- Different types of Network connectivity
- ***Revision Sessions***
- The impact of data loss
- How moral and ethical issues affect computers users
- How legal issues affect users
- Digital footprint
- ***Final Exam***
- ***All lessons on Google Classroom***
- **LEGAL, MORAL, ETHICAL, CULTURAL & ENVIRONMENTAL IMPACTS OF IT & THE NEED FOR CYBER-SECURITY**
- Services provided by ICT
- **THEORY EXAM**
- Functionality of different software
- Functionality of different Hardware devices
- Create a mail Merge letter
- Use a variety of formulae to perform calculations and create invoices.
- **SPREADSHEETS**
- Create flat file and relational databases. Edit and search using queries.
- Create a client database
- **DATABASES**
- Practice project runs alongside actual project
- ***Revision Guides***
- **HOW IT CAN BE USED TO FULFIL THE NEEDS OF ORGANISATIONS & INDIVIDUALS**
- Use Publisher and Word to create a number of publications. They will be integrated (linked to the database and spreadsheet).
- **PUBLICATIONS**
- Calculate the costs Of a business
- Develop your Photoshop skills and use many tools to create a logo
- Create a logo
- **DIGITAL IMAGING**
- **PRACTICAL CONTROLLED ASSESSMENT**

YEAR 10

- Plan each product
- **PLANNING**
- Learn how the project lifecycle can help plan a project
- **ALGORITHMS & BOOLEAN LOGIC**
- Building a tower
- Finding patterns in code
- Abstraction
- Evaluate abstractions
- Sorting Algorithms
- Create logic gates
- AND, OR, NOT gates
- Guess the Number game
- Rabbit trick
- Lists
- Algorithms
- Searching Algorithms
- Key algorithms
- Indiana Jones Style game
- Create truth tables
- **PYTHON MAGIC**
- Functions
- Programming in Python
- Evaluate abstractions
- Making flowcharts
- Pattern Recognition
- Decomposition
- **COMPUTATIONAL THINKING**
- Build your Dream house
- Undertake creative projects
- Use the 3D warehouse
- Build models To scale
- Decorate rooms
- Use technology safely
- Stop photo-bombers!
- **DIGITAL IMAGING**
- Make a calculator
- Joint project with the Art Department
- Using layers and backgrounds
- Photoshop tools
- Using IF statements
- Creating sprites and backgrounds
- Network simulation game
- Build a web page
- Coding with HTML
- **GRAND DESIGNS**
- 3D Modelling In Sketchup
- How the web works
- Make an e-safety video
- E-Safety
- **WEB AWARENESS**
- Create a mythical beast
- Editing photos
- Cloning animals!
- Creating digital artifacts
- Create a race Car game
- Creating and programming
- Using operators
- **ADVANCED SCRATCH**

YEAR 9

- Quizlet for Key Words
- Taking apart a computer
- Networks
- Understanding Binary code
- Understand components
- Computer hardware
- **WHAT IS A COMPUTER?**
- "Learning Labs" to help you revise
- **MICROBITS**
- Making a dice
- Coding a Microbit
- Helping Gringotts bank
- Data handling
- Queries
- Harry Potter Themed
- Storing records
- Paper-based vs Databases
- **DATABASES**
- Searching a pirate database
- Creating reports and forms
- Making a digital pet
- Using variables
- Using a programming language
- Using outputs such as lights and buzzers
- **GAME MAKING WITH KODU**
- Create your own world
- Create a Racing game
- Making a dice
- Create a Football game
- Insert & use objects
- Creating and programming
- Program characters
- Programming loops
- Advanced Formula
- Modelling
- Data manipulation
- Select your Hogwarts House
- Charts
- Linking sheets
- **SPREADSHEETS**
- Given a target grade (Emerging-Excellence)
- Mixed ability classes
- Making spells & potions
- Basic Formula
- Harry Potter Themed
- Given a username and account
- **PRIMARY SCHOOL**