Welcome to the Computing Department

AUTUMN TERM
Year 7 students will focus on understanding the role of different types of hardware and software, and what algorithms are. Year 8 students will develop a websites using HTML coding and look at the difference between a flat file and relational database. Year 9 students will develop their computational thinking skills to solve a range of programming problems.

SPRING TERM
Students in Years 7, 8 and 9 will investigate key e-safety advice, with the focus of their work being around Safer Internet Day. Year 7 students will move on to spreadsheet modelling. Year 8 students will then investigate networks, while Year 9 students look at binary and logic gates.

SUMMER TERM
Year 7 students will learn about how digital devices use a binary system to implement instructions, and will write programs in Scratch and Python. Year 8 students will write more advanced programs in Python and develop their graphics editing skills. Year 9 students study the impact on computer science technologies on the environment and the ethical considerations of what can be viewed as moral or good. They will then move on the looking at the hardware and software technologies used within computers.

Courses
Year 10/11
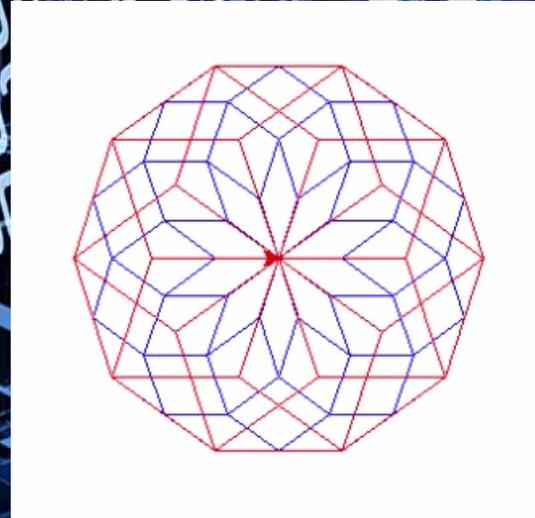GCSE Computer Science

Year 12/13
Alevel Computer Science
BTEC Level 3 in Information Technology

Year 7 Computing

GCSE Result- 9-4

2019- 80%

LightBot- Click here to play a game of LightBot

Scratch- Click here to have a go a Scratch

Code Academy- Click her to learn how to program

Take a
QUIZ

Year 7 Computing

Autumn Term

Unit 1: Introduction to Computing

Unit 2: Binary

Decimal	Binary	Hexadecimal
63	00111111	3F
250	11111010	FA
117	01110101	75
220	11011100	DC
171	10101011	AB
94	01011110	5E

Convert binary to denary
Binary addition
Overflow error
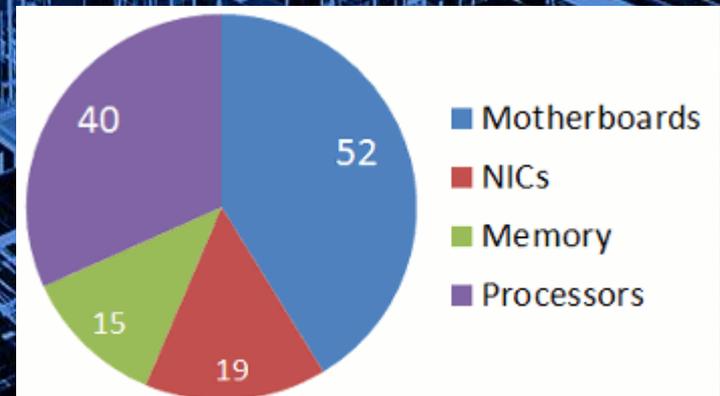
Year 7 Computing

Spring Term

Unit 3: E-safety

Unit 4: Spreadsheet modelling

Basic formula on Microsoft Excel
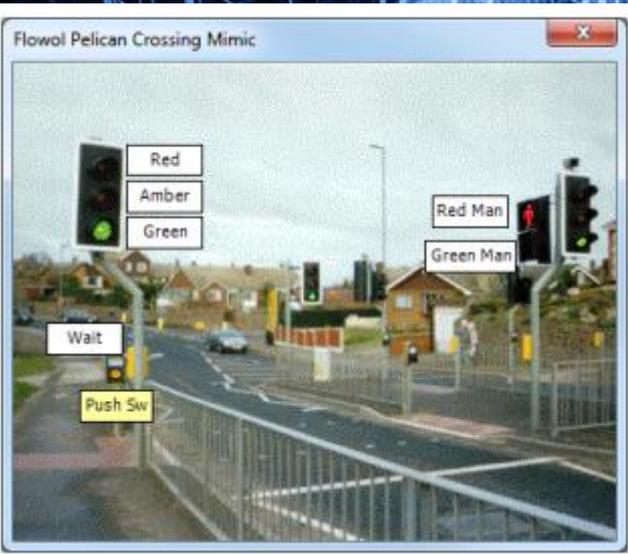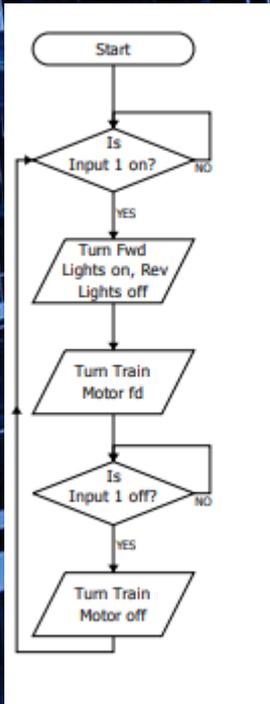Pie charts and graphs
What if scenarios
Macros

How to stay safe online?
Cyber bullying
Malware and viruses

Year 7 Computing

Summer term
Term

Unit 5: Flowol

Unit 6: Scratch to Python

Students to know the difference between graphical and textual programming language.
Be able to use variables to write print statements and if statements.

Flowol Pelican Crossing Mimic

Red
Amber
Green

Red Man
Green Man

Wait

Push Sw

Flowcharts- To understand shapes used in a flowchart.
- Understanding the input process output.

```
from turtle import *
#

for turn in range(4):
    fd(100)
    lt(90)
```