## Subject:

Autumn Term

# Computing



# KS4 - Year 10 Curriculum Overview

### Topics being taught

Programming
Procedures and functions
Arrays
Records and Files
Strings
Robust and Secure programming

### What you will be assessed on

Using functions and procedures
Tracing functions and procedures
Arrays

Algorithms
Programming
Data representation

### How you can support at home

Practice using functions and procedures

Convert older programs to use functions and procedures

Revision of Y9 work

Practice loading and saving files

### CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS

### Topics being taught

Sorting algorithms

Determining the purpose of an algorithm

Compression

Mini programming project – Using files, records and compression

### What you will be assessed on

Bubble and Merge sort
Determining the purpose of algorithms through tracing

Programming project – Designing, building and testing a solution to a given problem

### How you can support at home

Practice sorting

Practice searching once sorted

Designing your program

Practice tracing algorithms

### EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS

### Topics being taught

Boolean logic Circuits

Application software System software

Programming challenge

### What you will be assessed on

Boolean logic

**Algorithms** 

**Programming** 

Data Representation

Boolean logic and software

### How you can support at home

Look for real life applications of Boolean logic

Practice writing Boolean expressions

Revision of all of year 9 work

Revision of all year 10 work

# Summer Term