# **Computing**



# KS3 Curriculum Overview (Year 7 and 8)

## Year 7

During Year 7 students...

# **Autumn Term**

Students are introduced to the schools IT network and develop an understanding of the various systems that are used within school such as the schools virtual learning environment (Moodle), email (Gmail), Show My Homework and also the school network. E-Safety is a large focus at the start of year 7 to support students in making sensible choices online and to help protect them from online dangers.

## **Spring Term**

In the Spring Term students study Spreadsheet software to supports their understanding about how to record and analyse data. They also learn how our data is encrypted to keep information secure.

#### **Summer Term**

The summer Term in Year 7 is about developing students programming skills by using 'Scratch' to give instructions to objects and enable students to create a computer game using the skills that they have acquired. Students then learn how to program using text based programming language of 'Python'.

# Year 8

During Year 8 students...

# **Autumn Term**

Students start to learn about written web programming languages in Year 8 and begin by creating webpages using HTML coding. Their knowledge of programming then develops further by using 'Action Script' to develop a 'Maze Game'. This is an advanced programming skill that builds upon the knowledge delivered in Year 7.

## **Spring Term**

During the Spring Term students develop their use of spreadsheet software further recapping what was learnt in Year 7 but extending their knowledge further. Pupils are then introduced to a 'flat file' database to allow them to understand how data is stored and searched in order to generate results to questions.

## **Summer Term**

The Summer Term looks developing pupils understanding of programming further by revisiting 'Python' to extend their knowledge and understanding of text based programming languages. Students also develop their creative skills by producing a website using software (WebX) whilst learning abouth the 'History of Computers'. Students in Year 8 complete their KS3 Computing studies by creating a quiz using 'Scratch' that tests knowledge that they have learnt over the last two years.