**Subject**: Computer Science

# Kay Stage 3 Curriculum Plan

**Year:** 7

## Department Information:

At KS3 students follow the national curriculum.

## Curriculum aims and intent:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

## Assessment:

Students are assessed on the last lesson of every end of topic, based on the content covered.

## Resources used to support learning:

BBC Bitesize - Covers a wide array of topics at KS3 and KS4.
Youtube - Craig n Dave - Although aimed at GCSE content some topics have videos that will be useful for KS3 groups.

## Home Learning:

Students are given one piece of homework per topic

## How parents can help their child:

Encourage at home learning through reading the PowerPoints on Microsoft Teams and encouraging revision using BBC Bitesize and other materials.

| Term | Summary of work being covered | Knowledge, Understanding and skills assessed | How the work is assessed | Career Links |
|---|---|---|---|---|
| 1 | Baseline assessment<br>E-Safety and Powerpoint<br>Focus on potential risks and measures to protect and effective presentations | Determine skill level<br>How do I use school systems safely?<br>How do I keep data safe?<br>How can I keep myself safe online?<br>What can I do to keep myself safe online?<br>How can I send appropriate e-mails? | Self, peer and teacher assessed PowerPoint | |
| 2 | Baseline assessment<br>E-Safety and Powerpoint<br>Focus on potential risks and measures to protect and effective presentations | Determine skill level<br>How do I use school systems safely?<br>How do I keep data safe?<br>How can I keep myself safe online?<br>What can I do to keep myself safe online?<br>How can I send appropriate e-mails? | Self, peer and teacher assessed PowerPoint | |
| 3 | Log Gates<br>AND<br>OR<br>NOT XOR | Introduces students to the fundamental principles behind how computers make decisions. Helps develop computational thinking, problem-solving, and logical reasoning. | PowerPoints, Worksheets and Quizz | |
| 4 | Log Gates<br>AND<br>OR<br>NOT XOR | Introduces students to the fundamental principles behind how computers make decisions. Helps develop computational thinking, problem-solving, and logical reasoning. | PowerPoints, Worksheets and Quizz | |
| 5 | Scratch Project<br>Developing understanding of block-based programming, sequencing and selection | What is block-based programming?<br>How do I design a game for a specific target audience?<br>What are the three basic programming constructs? | Microsoft Forms quiz on teams at the end of term | |
| 6 | Scratch Project<br>Developing understanding of block-based programming, sequencing and selection | What are the three basic programming constructs? | Microsoft Forms quiz on teams at the end of term | |