

# Computing Roadmap KS3 (Years 7/8/9)

**Subject Aim:** During KS3, all students will receive one weekly Computing lesson in their tutor group. Our lessons are very practical in nature, with coding tasks that aim to develop students' computational thinking, curiosity and interest in programming and creating digital artefacts using computers. They also teach the skills needed to successfully access the school's IT systems and to make use of computers in other subjects. Our homework tasks are designed to reinforce the key principles of computing that have been taught in lesson. We are always looking to try new and innovative ways of teaching Computing.

## What happens during the lessons?

## ASSESSMENT IN KS3 (Years 7/8/9)

AUTUMN TERM

### Structure of Topics

Each topic will contain approximately 6 lessons that will cover, but is not limited to: variables, sequence, selection and iteration. Each lesson is given 2hrs worth of teaching time to embed the concepts being taught.

### End of topic assessments & Homework's

At the end of each topic you will have:

- End of topic test in your last lesson of the half term. You can prepare for your test by completing the homeworks, and accessing the lesson resources using the link on the Brightspace Computing page.

During each topic you will have:

- 3 homeworks are set on the school's homework system - you will have 2 weeks to complete each homework.

Students are assessed in two ways:

- 1). Computing Assessments: These will be marked and the results will be used to calculate 'Attitude to Learning' grades from e0 to e5
- 2). Homework: quizzes should be completed independently. The results will also be used to calculate 'Independence' grades from e0 to e5.

## Key Computing Skills

## HOMEWORK IN KS3 (Years 7/8/9)

SPRING TERM

### In your KS3 Computing lessons, you will learn:

the end of each half term, you will have:

- How to log in the school systems, how to transfer files from school to your home device and vice-versa, how to organise your files into folders;
- How computer process information in a logical sequence of instructions;
- The key principles of Computing including variables, selection, iteration, text and integer data types, lists of variables, using random functions to create
- How to repurpose digital artefacts to meet specific target audience needs

There will be 6 Computing Homeworks over the academic year. Students have a fortnight to complete each one. The homeworks will take the form of a quiz, which can only be completed once. Pupils are welcome to use the lesson resources to help them complete the questions.

## ENRICHMENT THEMES IN KS3 (Years 7/8/9)

Women in Computing, use of IT in the workplace. Cyber-First Competition for girls.

## Key Apps and Programming Languages

## ASSESSMENT REVISION IN KS3 (Years 7/8/9)

SUMMER TERM



An appropriate assignment will be set on BrightSpace with relevant revision material to help student to prepare for the computing assessments.

## Where next?

**Enterprise GCSE Options:** The Enterprise Department teach several subjects all of which are available at GCSE as options (key stage 4: KS4). Computer Science, IT, Business and Economics continue at A level (key stage 5: KS5)

- Computing (KS3) & Computer Science (KS4/5)
- IT (KS4/5)
- iMedia (KS4)
- Business (KS4/5)
- Economics (KS4/5)

## Contacts

**Enterprise Department:** We are based in the Enterprise Office (the portakabin in the quad next to the main hall, up the ramp, room 27). Student issues - please do not hesitate to ask for help (Computing Teacher or at the Enterprise Office). We also run "drop-in" sessions (open to students for any help / questions etc.) in CR3 after school as required.