

# ICT/Computing

## Curriculum Manager:

Mr S Howe / Mr J Moore (KS3 – Co-ordinator)

## Teaching Staff:

Mr J Moore, Mr D Burgess, Mrs R Mazurek, Mrs G Otway, Mr T Green

## Curriculum Overview:

**Computer Sciences** - Problem solving through the use of algorithms and hands on coding

**Information Technology** - Using a wide array of software effective for a given purpose

**Digital Literacy** - How to use technology safely

### The World of Digital Gaming – Term 1

*In this practical unit, pupils will broaden and enhance their IT skills and coding abilities in the application of game design.*

*Pupils will work with a range of digital tools and techniques to produce effective game solutions.*

#### Pupils will gain experience with:

- Game Genres
- Game Platforms
- Planning
- Design Principles
- Algorithms
- Creating Sprites
- Creating Backgrounds
- Reviewing/improving outcomes

### Practical Programming: MicroPython – Term 2

*In this practical programming unit, pupils will broaden and enhance their computing and programming skills, including the application of software development. Pupils will work with a range of digital tools and techniques to produce effective programs and solutions. Pupils will also gain experience in using microcomputers.*

#### Pupils will gain experience with:

- Effective searching
- Validity of information
- Website features
- How to code using HTML
- How to code using CSS
- Design and Planning websites
- Reviewing your work

### Living in a Digital World – Term 3

*The aim of this unit is to encourage learners to think about mobile phones and personal digital devices we use every day. We will explore the technology behind these platforms and analyse how they communicate with each other to create the digital environment we use in today's society.*

#### Pupils will gain experience with:

- Mobile phones
- Personal computers (desktops, laptops and netbooks)
- Hardware/software
- Cyber Crime
- Health & Safety
- E-Safety

## Assessments:

*Term 1: Final game design assessment*

*Term 2: Final website design assessment*

*Term 3: Living in a digital world exam (Linear assessment of unit)*

## Homework:

*Students complete their homework using the ICT department Virtual Learning Environment (Moodle) or Google Classroom. All homework will be set using these systems and pupils can access it at home with their appropriate log in details (given out on the first lessons in year 7). The web address for Moodle is [thedeantrustmoodle.org](http://thedeantrustmoodle.org)*

## Other Useful Information:

*The ICT department run a programme of extra-curricular activities including game design, web design and computer programming. The timetable will be displayed on Moodle and outside each of the ICT classrooms (Room's 1, 2 & 3)*