Computing is the new name for ICT from the new national curriculum.

The Computing Curriculum can be divided into three inter-related strands:

- Computer Science
- Information Technology
- Digital Literacy

Computer Science:

This strand of the curriculum links closely to the control element of the old ICT curriculum.

Pupils will learn what algorithms are – this is the basis of what they need to know in order to write computer programs. It is possible and beneficial to learn computer science away from computers or other digital devices - this is also known as unplugged. Role play and kinaesthetic activities can help pupils develop logical reasoning.

Pupils will be able to write algorithms and programs. They also learn to find mistakes (bugs) and fix them, in their own programs and those of other people. When writing programs they will learn that there are often different ways of getting the right outcome, and they need to be able to evaluate the programs to decide which is the most efficient.

The computer science strand also requires knowledge of networks and how searches are performed.

Information Technology:

This strand of the curriculum equates to what was most of the areas from the old ICT scheme of work. Most of it can be covered by using technology to support other subject areas though it may be necessary to teach some discrete skills. Students should understand that technology is everywhere, be able to identify the technology they encounter and have a basic understanding of how it works. This will link to work on programming and algorithms.

Activities include word processing, creating images, taking and using photographs and video, creating music and animations, using and creating databases, producing websites and contributing to blogs. As well as creation of digital materials pupils will have experience of manipulating and editing their own work and resources from elsewhere. They will learn how to use the tools available but also to have an element of digital literacy – awareness of audience and good design principles. Pupils will experience a range of different applications and software, initially the teacher-led selection but over time pupils-led.

Pupils also learn how to store and organise their files so that they can easily be found again, developing an understanding of the devices they can use including: hard drive, USB sticks, school network server, and the cloud storage on the internet.

Digital Literacy:

Children need to be able to use technology safely. They will learn to keep their personal information private and treat other people with respect. They will learn to know what to do and where to go for help if they see something that isn't right. As children get older they will learn how to use technology responsibly. As well as thinking about how their online behaviour affects others they will be made aware of legal and ethical responsibilities, including

respecting copyright and intellectual property rights, keeping passwords and personal data secure and observing terms and conditions for online services.

They will understand the main risks relating to:

- **Content** – being exposed to illegal, inappropriate or harmful material
- **Contact** – being subjected to harmful online interaction with other users
- **Conduct** – online behaviour that increases the likelihood of, or causes, harm
- **Commerce** – online gambling, inappropriate advertising, phishing and or financial scams

Children will understand an age-appropriate version of the school's Acceptable Use Policy.