

# Computing



## Introduction

The computing curriculum follows the national curriculum guidelines and is broken down into three key strands:

- 1) Computer Science (coding and programming)
- 2) Digital Literacy (knowing how to keep safe online and when using technology to communicate)
- 3) Information Technology (using technology purposefully, use a variety of software to accomplish given goals)

The aim of the computing curriculum is to enable our pupils to use technology safely and effectively in their everyday lives, and also equip them with skills they can use in the workplace and further education experiences.

## Implementation

We believe that computing should be embedded in all areas of the curriculum as well as being taught in discrete lessons. We aim to use and teach computing as creatively as possible making links across the curriculum and make learning meaningful.

We recognise that all pupils have differing ICT abilities. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We cover skills in many different areas such as:

- Word Processing to write stories, poems or letters
- Databases to record information, e.g. rainforest animals.
- Spreadsheets to calculate data and to create tables, charts and graphs.
- iPad technology to work creatively and encourage interactivity
- Desktop Publishing programs to design posters, leaflets, cards, booklets
- Video Editing Software to create films
- Multimedia Presentation to create slide show presentations using text, sound, images, video and effects.
- Painting Programs to create pictures and designs
- Internet and CD-ROMs to find information
- Digital Cameras to record what they have done in class or on a visit
- Electronic toys to help understand how things work
- Practicing writing emails and blogs on safe school based platforms
- Games involving simple coding and programming to introduce the concept of providing instructions to achieve goals

## Planning and Assessment

Long term planning is in place to ensure that the whole of the curriculum is covered throughout the year. Individual class teachers then complete medium term planning which will be differentiated to ensure that each pupil makes progress.

Assessment is continuous throughout each term, and formally recorded/levelled at the end of each term. Assessments are based on observations, examples of pupils work, video/photo evidence, and levels of independence achieved.

## **Resources**

The school have a bank of iPads, Fizzbooks and Laptops which are booked out by classes to provide each pupil with access to the technology they need to complete their activities. Each classroom is also equipped with an interactive plasma screen and a class computer or laptop. In addition we have a set of programmable 'Beebots' for use in developing algorithms.

The school has also invested heavily in subscriptions to various educational programs and resources to enable us to teach the curriculum to the pupils in up to date and engaging ways.

## **Cross Curricular links**

Information Technology and Digital Literacy (knowing how to keep safe online and how to use digital technology purposefully) are transferable skills learned through the use of our digital resources in support of learning in other curriculum areas. For any part of the curriculum these skills can be learned through;

- Guided and specific Internet research.
- The use of digital devices to record and edit media.
- The use of subject specific websites, software and applications.
- Recording and presenting information using software packages.
- Learning how to save, edit, share and print documents of various types.
- Use of communication aids.