

Year 5 Computing



Unit 1 Introductory unit

This unit consolidates existing computing knowledge. Introduces the pupils to the basics of using a school network and sending and receiving emails including attachments, replying and forwarding emails. Allows children to set up a personal E-Portfolio to allow them to track their progress throughout their years at St Johns.

Unit 2 Keeping yourself safe

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Unit 3 Word

An introduction into word processing. Aimed at teaching basic word-processing skills to children. In this unit, children will learn to use various features for formatting text. focuses on some important computer skills and introduces children to screenshots and the Snipping Tool. Combining a variety of software allowing them to establish which programs are used for which function.

Unit 4 Excel

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Unit 5 Flowol

This unit introduces children to flowcharts and how they are used to program and control devices. Lessons are designed to be used with Flowol software (version 4.0), which includes simulations of real life automatic computer systems. Children are taught to build sequences of instructions, control multiple outputs and structure algorithms with decisions and inputs.

Unit 6—Pivot animator

Plan, create and evaluate animations using Pivot Stick Animator including making a figure interact with a background image and trying to make the figure move in a natural manner.

Year 6 Computing



Unit 1 Spy School

Introduces spreadsheets including basic formula, the Sum, Average, Min and Max function formulae with AutoFill, creating graphs and absolute and relative cell references. Higher ability students also look at further functions and advanced features such as conditional formatting.

Unit 2 PowerPoint

PowerPoint is a wonderful tool for learning in both a student and teacher-directed situation. It can add a new dimension to learning allowing teachers to explain abstract concepts while accommodating all learning styles. Used properly, PowerPoint can be one of the most powerful tools for disseminating information known.

Unit 3 Adventure Story

Create an interactive presentation where the user decides on the route through the presentation. Pupils plan, create and evaluate the stories and use hyperlinks to make the story interactive.

Unit 4 Kodu

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Unit 5 Shakespeare Comic Book

Allows pupils to work in teams to use a digital camera to re-enact the Shakespeare play "Macbeth". The images are then combined to make a comic book to tell the story.

Unit 6 Repeating Patterns

A short unit allowing pupils to explore creating graphics using Paint and applying a variety of effects to images to create pop art style images.

Year 7 Computing



Unit 1 Lake Garda

In this unit the pupils perform research into the area surrounding Lake Garda in Italy. They need to plan a house style and content for several different types of documents for a travel agent. They create the documents and a 30 second TV advert from the clips provided and finally evaluate the work they have produced.

Unit 2 Visual Scratch Programming

This unit of work teaches an introduction to programming using the Scratch programming language. Students will be introduced to programming inputs, variable storage, outputs, sequencing and selection.

Unit 3 Audacity

This unit allows children to use software and digital devices for recording sound. Based on the theme of a Radio Station, it is designed to encourage a creative approach that includes interviewing, making adverts and using jingles. Other software is incorporated where children write scripts and design additional advertising for their Radio Station. Opportunities are included for children to present, listen, review and evaluate their own content as well as professional and commercial examples, plus those created by their peers

Unit 4 Computer Hardware and Networking

The computer hardware unit is designed to teach students what a computer system is, the various components of a computer system and its purpose. Students will also learn about the purpose of the CPU, RAM, Hard Drive and I/O devices and how they all function together and the function of the CPU, including the fetch, decode, execute cycle

Unit 5 HTML and CSS

Students will be taught of some basic HTML syntax and will be introduced to CSS so that they can understand how to better present their webpages. They will learn how to add gradient backgrounds, add page borders, curve images and reorganise content on the page with the help of DIV tags.

Year 8 Computing



Unit 1 My Digital World

In this unit of work, students will learn how to use the internet safely and effectively. They will learn about copyright law, search engines (including the use of Boolean logic for effective searching) and they will also learn about the dangers of the internet and ways to combat these dangers.

Unit 2 Introduction Python

In this unit, students will be introduced to programming in the Python programming language. They will learn how to print messages to the screen, ask the user to input data and stores this data in variables. They will also understand how computers make decisions and consequently learn how to program IF statements.

Unit 3 Binary Bits and Bobs

Binary Bits and Bobs introduces students to the binary number system, converting between binary and denary and simple binary addition. Students will also be taught how (and why) characters, images and sound are represented by the binary system.

Unit 4 Google Sketch up

In this unit the children extend their drawing skills to create 3D models based on using the software SketchUp. The free version of this is suitable for the unit, although the full version can also be used if the teacher already has access to this. Children will learn how to create simple and complex 3D models. They will be able to add detail and manipulate 3D models using a variety of tools

Unit 5 HI-ICT

The key objective of this unit is to enable students to use & develop ICT skills to demonstrate the knowledge and understanding they have gained in another subject (History). The aim of this is twofold: to reinforce prior learning they have gained in another subject and to gain an appreciation of ICT in terms of how it is used in the wider world; using a set of tools used to achieve specific outcomes.