

Y5 Computing

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

E = evidence work for computing book

Autumn 1 Internet Research and Webpage Design

- What makes a good webpage? – evaluate webpages
- Page layout – create a webpage layout
- Type the text – add text to a webpage
- Images – add images to a webpage
- Hyperlinks – add hyperlinks into a webpage
- Publishing the page - Publish and share my webpage E

Additional lesson to be covered in Autumn 1: Using and Applying Project Lesson 1

Autumn 2 Radio Station

- Audacity – use Audacity software to create own sounds by recording, editing and playing.
- Jingles – combine audio effects to create an original radio jingle
- Planning podcasts – research and plan digital content for a radio podcast E
- Recording podcasts – use software to create and present digital content for a radio podcast
- Advertising – design and record a persuasive radio advert for a product or service E
- Playback and performance – present and evaluate audio content

Additional lesson to be covered in Autumn 2: Using and Applying Project Lesson 2

Spring 1 Online Safety

- Spam! – identify spam emails and what to do with them
- Sites to Cite – write citations for the websites used for research **E**
- Powerful passwords – create strong passwords
- False photography – recognise when, why and how photographs we see online may have been edited
- Online safety story planning – apply online safety rules to real life situations
- Online safety comics – creating a comic strip about the consequences of not following online safety rules **E**

Additional lesson to be covered in Spring 1: Using and Applying Project Lesson 3

Spring 2 Controlling devices using Flowol

- What is a flowchart? – draw and interpret a flowchart with the correct symbols
- Programming outputs – create and edit a flowchart to control a simulated device
- Multiple outputs – control multiple outputs at the same time
- Inputs and decisions – use a decision symbol based on the status of an input
- Subroutines – create a flowchart program containing a subroutine
- Combining skills – design, write and debug own flowchart program for a given task **E**

Additional lesson to be covered in Spring 2: Using and Applying Project Lesson 4

Summer 1 Scratch 3.0 Developing Games

This unit will cover the six lessons for this half term/

- Creating a maze game – design and program a character game **E**
- Designing characters and backdrops – design an original character or backdrop for a game
- Adding effects – add features or effects to enhance a game
- Splat game – create an original animated game with a specific goal **E**
-
-

Additional lesson to be covered in Summer 1: Using and Applying Project Lesson 5

Summer 2 3D Modelling sketch up

- 2D to 3D – draw and manipulate simple 3D shapes **E**
- Detail – add detail to 3D drawings
- Inside – add detail to 3D drawings
- Furniture – add and manipulate 3D models
- A Table – create a complex 3D model
- Your room – create a 3d model of own design **E**

Additional lesson to be covered in Summer 2: Using and Applying Project Lesson 6

