

COMPUTING

Year group: 5/6

Term: Spring 2025



Prior knowledge

Children will know internet safety rules, including understanding different forms of communication and that personal information should not be shared online and that they must report anything concerning to a trusted adult. They will understand about trusted and appropriate content and contact and sources of information. They will be aware of how to appropriately conduct themselves online.

They will be able to create digital content and open, edit, save and retrieve digital work.

They will be able to research information safely and effectively and present it digitally in a variety of formats.

They will be able to create a program using an algorithm following a timed sequence and will have be able to debug simple programs.

National Curriculum Objectives

NC objectives

Use search technologies effectively and be discerning in evaluating digital content

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

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

Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts

Topic Overview

The children will have a weekly one hour lesson in the Computing suite where they will develop their Information Technology, Computer Science and Digital Literacy skills using a range of apps and software packages. There will be additional and frequent opportunities to apply their IT skills across the curriculum and to learn how to stay safe online.

By the end of this unit, I will be able to:

Information Technology and Digital Literacy

Describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect.

Describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively.

Describe some strategies, tips or advice to promote health and wellbeing with regards to technology.

Explain how and why some apps and games may request or take payment for additional and explain the importance of seeking permission from a trusted adult before purchasing.

Explain how identity online can be copied, modified or altered.

Computer Science

Begin to simplify code.

Create a playable game.

Understand what a simulation is.

Program a simulation using 2Code.

Know what decomposition and abstraction are in computer science.

Take a real-life situation, decompose it and think about the level of abstraction.

Understand how to use friction in code.

Begin to understand what a function is and how functions work in code.

Understand what the different variables types are and how they are used differently.

Key vocabulary

age restrictions, connecting, contacting, communicating, efficient, execute/run, function, function editing, editing tools, generate, manipulating, parental controls, profile, privacy setting, sharing, social media software