

# Subject: Computing

## Golden Concept: Digital Literacy

### Purpose:

The Digital Literacy strand aims to:

- Increasing knowledge about online safety and privacy. Identifying risks, and understanding digital footprints.
- Critical assessing the reliability, recognizing bias, and understanding the impact of digital media on society.
- Communication and Collaboration: Digital literacy involves effective communication and collaboration using digital tools.
- Ethical considerations copyright, intellectual property, digital rights, and responsible use of technology.

Overall, the Digital Literacy aims to empower students to be confident, competent, responsible, users of technology in digital environments.

### Assessment:

KS1 and KS2 are through teacher Assessment. Teachers assess students' progress based on their understanding and application of the computing curriculum. This includes observing students' practical work exercises, End-of-Key-Stage Assessments, and demonstrations of progression over time.

At KS3 teachers assess students' progress in computing by evaluating their understanding of concepts, application of computational thinking, and practical skills. Project-Based Assessments may be used that involve problem-solving, coding, or working with technology. Assessment could be based on the completion and quality of these projects.

The assessments in computing aim to evaluate not only students' technical skills but also their understanding of computational concepts, problem-solving abilities, and creativity in applying technology to solve problems.

### Cross curriculum:

Digital literacy within the computing curriculum has many cross-curricular themes that stretch beyond just technology. Some of these cross-curricular themes include: -

Critical Thinking and Problem Solving, Communication and Collaboration, Creativity and Innovation, Ethical Responsible and safe use of Technology Use, Information Literacy which is finding accurate information from various sources, Cultural and Global Awareness encompassing alternative viewpoints, Adaptability and Lifelong Learning providing valuable skills for life.

These themes are interwoven within the digital literacy strand of computing education to ensure that students not only gain technical skills but also develop broader competencies that are applicable across various subjects and in real-world contexts.

### Key Stage or stage breakdown:

At KS1 and 2 pupils are introduced to online safety. The idea of staying safe online through age-appropriate examples, and proper handling of on-line devices. Begin discussing basic safety rules, such as not clicking on unknown links, and understanding that not everything online is true or safe. This then moves on to responsible behaviour covering topics such as secure passwords, understanding and handling personal information online, recognizing and dealing with online risks.

Fundamental Digital skills like understanding different devices, using a keyboard and mouse, navigating simple interfaces. Learning effective online research techniques and finding information from various sources and understanding search engine use. Using digital content purposefully, including images and information handling and respecting what copyright is. Encouraging creativity through simple graphic or storytelling through digital platforms.

An early introduction to coding exploring simple coding concepts through playful activities and games involving basic sequencing, and simple algorithms using age-appropriate resources. Then introducing more complex coding through interactive platforms or basic programming languages and focusing on skills like problem-solving and algorithmic logic.

At KS3 Internet safety covers topics such as online privacy, avoiding scams, and dealing with cyberbullying. Introducing students to the fundamentals of cybersecurity, including malware, phishing, and other on-line threats. Encouraging discussions about online reputations and the permanence of online actions, understanding the consequences of online behaviour.

Digital Skills now looks at more effective online research techniques avoiding plagiarism, and citing digital resources properly. Critical Thinking and Evaluation: Teach students how to assess the credibility of online sources evaluating digital content and spotting the difference between reliable and unreliable information. Understanding copyright of intellectual property teach students how to use digital content responsibly and ethically.

There is also a focus on digital Well-being where excessive screen time and strategies for managing healthy use, promoting a healthy balance between online and offline activities, and maintaining mental and emotional well-being in the digital age. Exploring the ethics related to technology, such as biases in algorithms, data privacy concerns.

These components help students develop the necessary skills and knowledge to navigate the digital landscape responsibly.