

## Year 6

# **Progression in Computing**

#### Key Stage 2 Computing Statutory Coverage

#### Computer Science- programming

Pupils should be taught to:

- 1. Design, write and debug programs to achieve specific goals, including solving problems
- 2. Use sequence, selection and repetition in programs; work with variables and various forms of input and output
- 3. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

#### Computer Science- theory

4. Understand computer networks including the internet; how they can provide multiple services such as the World Wide Web

#### Information Technology

Pupils should be taught to:

- 1. Use search technologies effectively
- 2. Select, use and combine a variety of software (including the internet) 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

#### **Digital Literacy**

Pupils should be taught to:

- 1. Be discerning in evaluating digital content and appreciate how search results are selected and ranked
- 2. Understand the opportunities networks offer for communication and collaboration
- 3. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Key Objective	Key Skills
<ol> <li>Computer Science- programming</li> <li>Design, write and debug programs to achieve specific goals, including solving problems</li> <li>Use sequence, selection and repetition in programs; work with variables and various forms of input and output</li> <li>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ol>	-Plan and design complex multi-level games -Control an on-screen icon using text based controls, including responding to sensors and repeating written algorithms -Detect and correct errors in programs
Computer Science- theory  3. Understand computer networks including the internet; how they can provide multiple services such as the World Wide Web	-Understand computer networks including the internet e.g. tracing servers around the world -Describe how information is passed between computers and networks e.g. using Cisco games

### Information Technology

- 1. Use search technologies effectively
- Select, use and combine a variety of software (including the internet) 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
- -Save documents and images into different formats for different purposes
- -Add, amend and combine different forms of information in different ways
- -To create an interactive activity by adding hyperlinks

## **Digital Literacy**

- Be discerning in evaluating digital content and appreciate how search results are selected and ranked
- 2. Understand the opportunities networks offer for communication and collaboration
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
- -Understand how search engines work e.g. using Google and evaluating the credibility of information online
- -Use social networking sites respectfully, responsibly and sensibly by completing the DigitalME Safenetworking course
- -Know how to share appropriate content and comments on social networks
- -Understand how publishing information creates a digital footprint