Year 4	Computing		Provision Audit across the Year/Key Stage
Autumn	Spring	Summer	Computing

| Autumn 1
Children will consolidate their learning within the computer environment; housekeeping; safety on the internet; and the use of word processing applications.
They will begin to understand the language of computer programming and start to write code.

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

• 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

Autumn 2
Pupils will develop their skills in using: programming language; causal language and evaluation through debugging
Children will use the instructions required to create an educational game, using Scratch.

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Pupils will create an educational quiz in Scratch. It will use selection, repetition and variables. They will also debug in order to overcome any problems. Pupils will recognise the importance of user interface design, including consideration of input and output.
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Spring 2
The children will continue learning how to code. This term they will understand Java script. They will understand how and where it is applied. They will understand data in relation to numbers and strings.
Pupils will learn to: use a Boolean to determine if a statement is true or false; calculate word length, create a 'confirm' dialogue box as well as an 'input' dialogue box using a prompt and how to use a comment box to include or exclude data.

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Programming in Java script

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Summer 2

create a Music video using Windows Movie Maker, to go with their Egyptian song/rap.

• 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 | **Purpose of study**
A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims
The national curriculum for computing aims to ensure that all pupils:
• can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
• can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
• can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
• are responsible, competent, confident and creative users of information and communication technology

Key stage 2
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. |

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