Computing Curriculum Statement – Kilmington Primary School

The National Curriculum
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.

Curriculum Intent
A high-quality computing education should equip pupils to use computational thinking and creativity to understand and change the world. Computing has strong cross curricular links with most subjects and particularly with mathematics, science, and design and technology. Computing can provide further insights into those subjects. 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 as active participants in a digital world.

Curriculum Design
Kilmington School operates with mixed age classes and follows a two year rolling programme to cover the full range of topics in each curriculum subject. Units of learning are planned to motivate and inspire pupils through meaningful and purposeful learning opportunities, using the 'Kapow' scheme of work as a foundation. These units will draw knowledge and understanding together in a coherent manner through generating and exploring **'key questions'** and using a variety of equipment and activities. E=safety is not only taught as a stand-alone unit within Computing and PSHE, but also across the curriculum. Memorable experiences are often incorporated into the sequence to enhance learning and create an exciting learning environment. This might be a trip, a special visitor, an extraordinary activity or event. There is a clear skills development pathway identified for each curriculum area which sets out expectations in each Key Phase: EYFS, KS1, LKS2 and UKS2. This enables teachers to plan a curriculum that builds on previous learning and develops skills at an appropriate level.

Nurturing lifelong learning behaviours through Computing

Debugging a program can be frustrating. Breaking commands down to individual steps.	Creating an algorithm requires careful thought and planning. What happens if…? I will need to use these ideas to solve this task.	Sharing equipment Giving and following instructions (an algorithm)	Using clear file names so files can be easily located Debugging a program: Why does this not work as I expected? Can I predict what this will do?

Evaluation
The curriculum is reviewed on a yearly basis to ensure that it is responsive to the needs of our current pupils.