# The Computing Curriculum at Yeadon Westfield Infant School

## <u>Intent</u>

At Yeadon Westfield Infant School we believe that *all* pupils are entitled to a full, stimulating, and well-structured Computing curriculum based on the National Curriculum 2014 and the EYFS Statutory Framework 2021. We believe the teaching of Computing 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. We aim to build their resilience to help them develop an appreciation and enjoyment of Computing and to inspire them for the future.

As an infant and nursery school, we are very much centred on the first steps in this journey. Through our teaching of Computing, we aim to:

- provide a relevant, challenging and enjoyable curriculum for all pupils, meeting the requirements of the national curriculum programmes of study for computing
- enhance learning throughout the curriculum using computing skills
- equip pupils with the confidence and attitude to continually develop their computing skill in response to future developments
- provide staff with the means and training to optimise their use of ICT
- respond to new developments in technology
- develop everyone's understanding of how to use ICT and computing safely and responsibly in line with the school's E Safeguarding policy

We believe that following a rigorous and child centred curriculum from the beginning of nursery allows us to ensure *all* pupils are given the opportunities they need to make progress across the areas for learning and the acquire the skills and knowledge in the National Curriculum, whether they are disadvantaged, have special educational needs, or have delays or gaps in learning.

#### **Implementation**

We have chosen to develop a curriculum that focuses on sequential learning building on the foundations already laid in the previous learning. Each stage of the children's learning journey is clear, misconceptions can be addressed, and gaps addressed: knowledge is carefully and systematically built up and mastery opportunities can be provided at every stage.

Nursery children have access to areas of provision to develop their learning and this is built on in reception. There is huge emphasis on language acquisition throughout. Children build on this learning as they move into KS1.

## The children will:

- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- be responsible, competent, confident and creative users of information and communication technology

There will be active participation in acquiring a range of skills, involving individual, group and class work. Opportunities will also be identified across the curriculum so that the children can develop and apply their skills in all aspects of learning and not simply in subject isolation.

#### Assessment

- all lessons will provide opportunities for formative assessment
- children in Early Years will be assessed against the statements in Development Matters and the EYFS Statutory Framework
- end of year reports contain information about how the children have progressed through the year including their strengths and areas for development

Monitoring is carried out to ensure staff and children are confident with teaching and learning Computing. Staff keep up to date with developments in Computing, with work being done in the ALPT and advice from the Department of Education.

#### **Impact**

By the end of EYFS, children should:

- be able to explore how things work
- describe what they see, hear and feel whilst outside (with use of technological equipment)
- use a range of programmable toys as well as equipment involving computers
- be able to click on different icons to cause things to happen in a computer program
- be able to interact with age-appropriate software and hardware
- understand that a range of technology is used in places such as homes and schools
- be able to select and use technology for particular purposes

# By the end of KS1, children should:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- be able to create and debug simple programs
- be able to use logical reasoning to predict the behaviour of simple programs
- be able to use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- be able to use technology safely and respectfully, keeping personal information private; identify where to go
  for help and support when they have concerns about content or contact on the internet or other online
  technologies.

Learning is expected to be of high quality with children putting in their best effort. Children should enjoy Computing lessons and be keen to challenge themselves regardless of stage of development. They should leave our school ready for the next stage of their learning in KS2.