LAMBLEY PRIMARY SCHOOL
Reaching for the Stars

Computing Vision Statement

At Lambley Primary School we believe that computational thinking is vital in helping children to solve problems, design systems, and understand the power and limits of human and machine intelligence. We believe it is a skill that empowers, and one that all pupils should be aware of and develop competence in. Pupils who can think computationally are better able to conceptualise, understand and use computer-based technology, and so are better prepared for today's world and future.

Our Vision

- Children will understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Children will be able to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Pupils will be equipped to use information technology to create programs, systems and a range of content.
- We aim to ensure that children are responsible, competent, confident and creative users of information and communication technology.
- Children will become independent and skilful users of digital technology and will be outward looking and forward thinking in this technological age.
- To equip all learners with the experiences and skills of computing that they will use in a rapidly changing technological world and to engage children through enriched multi-media learning experiences.
- We aim to ensure that teachers develop confidence and competence to use digital technology in the effective teaching of their subject.
- Children will become digitally literate. They will be able to use, and express themselves and develop their ideas through, information and communication technology, at a level suitable for future workplace and as active participants in a digital world.

"A high quality computing education equips pupils to understand and change the world through computational thinking. It develops and requires logical thinking and precision. It combines creativity with rigour: pupils apply underlying

principles to understand real-world systems, and to create purposeful and usable artefacts,"
Computing Curriculum, Programmes of Study, 2013

Information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Lambley Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

The aims of ICT are to enable children to:
- Become creative, logical, critical thinkers, who reason systematically and work collaboratively. Risk taking and innovation will be enriched through the computer science.
- Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- Appreciate the relevance of digital literacy in our society and that they see it as an essential tool for learning, communication, finding information and for controlling and understanding their environment.
- To explore their attitudes towards computing and its value to them. For example, to learn about issues of security, confidentiality and accuracy. As children's confidence grows they will be able to make informed and discerning choices about their use of information technology.

Teaching and Learning
As the aims of the computing curriculum are to equip children with the necessary skills to become independent learners, the teaching style that we adopt is as active and practical as possible. We want to develop pupil's computer science skills, information technology skills and digital literacy knowledge in the hope that we will facilitate creative, analytical and problem solving young people. We want to develop pupil's skills, knowledge, understanding and capability through taught IT lessons and to provide opportunities for pupils to apply and consolidate their IT capability across all curriculum contexts. At times we do give children direct instruction on how to use hardware or software in 'skills' lessons but we often use IT capabilities to support teaching across the curriculum.

We recognise that all classes have children with widely differing abilities. This is especially true when some children have access to digital technologies at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways, by;

- Setting common tasks which are open-ended and require a variety of responses, including problem solving and creative and analytical thinking
- Setting tasks of increasing difficulty, evidenced in planning through differentiation and expected outcomes
- Providing appropriate adult support to scaffold learning and to aid the work of the individual or group

Safeguarding Children

As part of our safeguarding children procedures, we have a strict filtering system on our school network whish blocks out any illegal or inappropriate content. In addition to this, children are taught how to keep themselves and other people safe on the internet. We want them to be responsible digital citizens both inside and outside school so we work hard to ensure pupils and parents are made aware of important e-safety procedures.

General Health & Safety principles and procedures also apply to teaching and learning of computing at Lambley Primary School. Our electrical equipment is maintained well and checked on a regular basis to ensure the safety of our school community.