

Inspiring and enabling our school community to live life to the full



YEAR 1

**Subject: Computing
Programming – moving a robot**

We aim to equip pupils to use computational thinking and creativity to understand and change the world; to become digitally literate –using, and expressing themselves and developing their ideas through, information and communication technology. They will build on this knowledge and understanding, becoming equipped to use information technology to create programs, systems and a range of content– at a level suitable for the future workplace and as active participants in a digital world

**Characteristics of an Effective
Learner**

Courage
Commitment
Collaboration
Creativity
Curiosity

Prior Learning:

Children have the opportunity to explore and engage with technology in Reception through both teacher led activities and continuous provision.

Forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, plan, algorithm, program, route

Intent: What do we want the children to know, be able to do by the time they complete this unit)?

Use technology purposefully to create, organise, store, manipulate and retrieve digital content

Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. To create and debug simple programs. To use logical reasoning to predict the behaviour of simple programs.

Recognise common uses of information technology beyond school

Know that work they create belongs to them.

Impact / Outcome:

What will the final product / result be?

This unit introduces learners to early programming concepts. Learners will explore using individual commands, both with other learners and as part of a computer program. They will identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. The unit is paced to ensure time is spent on all aspects of programming and builds knowledge in a structured manner. Learners are also introduced to the early stages of program design through the introduction of algorithms.

P4C Inquiry (where appropriate) N/A