

Year 2 Term 1

What does it mean to survive? COMPUTING



Know that we can predict what will happen before running algorithms using logical thinking.
Design, write, implement, and debug more complex algorithms.
Use logical reasoning to predict what will happen before running algorithms.

Long-term Memory Knowledge:

Know that an algorithm is a sequence of instructions.
Input a set of instructions on screen to make something happen.
Notice when something unexpected has happened and suggest ways to rectify this.
Predict what they think will happen when a certain set of instructions is given.
Understand that too much screen time affects their emotions and can have an impact on what they do.

Key Vocabulary

block	a unit of computer code
debug	fix errors in a computer program
sprite	a computer graphic that can be controlled independently of others or the background
algorithm	a detailed, step-by-step process followed in order to complete a task
code	a set of rules or instructions
input	information given to a computer
background	the picture behind the sprite
screen time	the amount of time spent using devices with screens

Progression in Resources:

J2e Code (Level 1)

Relevance

Now	Children develop an understanding that a computer can be controlled by instructions given to it; they see that mistakes can be corrected and instructions altered.
Future	Children continue to develop their understanding of how a computer works, fixing errors that occur with programs they are familiar with.
Aspiration	Children develop an interest in coding/software design, developing software, apps, web pages, etc. either for themselves or others as a career choice.

National Curriculum Links:

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

Essential Prior Learning:

Children need to be able to log onto J2e, using their school login. They are not expected to know their details by heart but should be able to type the correct information in the correct place when prompted. Children will be aware of positional language: forwards, backwards, left, right, etc. and can follow simple instructions around this. They will be familiar with Beebots and can program them to travel in a given direction.

Progression in Skill:

Know how too much screen time can affect how they feel or behave.
Know that programs work by following clear, step-by-step instructions.
Know that to find and fix mistakes, you need to check each step carefully.