

Year 2 – Term 1

What does it mean to survive?

COMPUTING



Progression in Skill:

Understand algorithms as sequences of instructions or sets of rules in everyday contexts.
Program on screen using sequences of instructions to implement an algorithm.
Create a simple program on screen, correcting any errors.
Give logical explanations for what they think a program will do.
Keep safe and show respect to others while using digital technology.
Understand that they should not share personal information online.
Understand what to do if they have concerns about content or contact online.

Long-term Memory Knowledge:

The onscreen sprite can be controlled with very similar instructions to the Beebot: forwards, turn right, etc.
Turning a 'corner' needs a 'turn 90' instruction.
Several blocks of code can be combined to make a more complex journey for the sprite.
The journey the sprite has been programmed to take can be drawn or hidden, depending on whether the 'pen' is in the up or down position.
Children can spot why the sprite may not move as they expect and correct this.

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

Progression in Resources:

J2e code

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.
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.

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.