Year 4 – Term 5
Have we all got a place in the world?
COMPUTING

National Curriculum Links:

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

Use sequence, selection and repetition in programs; work with variables and various forms of input and output.

Use logical reasoning to explain how simple algorithms work and to detect and correct errors in algorithms and programs.

Essential Prior Learning:

Children should be able to log on to J2e
A sprite is a computer graphic that can be static or animated.
Computer code is the instructions that tell the computer what to do.
Commands must be given in a certain order for an action to be completed.

Progression in Skill:

Design and write a program using a block language to a given brief, including simple interaction.
Develop their own simulation of a simple physical system on screen.
Work with others to plan a project.
Use sequence and repetition in programs.
Write a program that accepts keyboard input and produces on-screen output.
Use logical reasoning to detect and correct errors in programs.

Long-term Memory Knowledge:

Using 'motion' blocks of code will give the computer the instruction to move the sprite around the screen; inputting co-ordinates with tell the computer where you want the sprite to go.
Using 'looks' blocks, you can instruct the computer to make your sprite 'speak.'
Using the 'if' block means you can set conditions for actions to be carried out.

Key Vocabulary

block language	a programming language in which blocks of code are used to program the computer
command	an instruction, written in a particular programming language, for the computer to execute
if	An **if** statement is a programming conditional statement that, if proved true, performs a function or displays information.
block	a graphical representation of computer code in languages such as Scratch; also used to describe a part of a computer program
script	a computer program typically executed one line at a time through an interpreter, such as the instructions for a Scratch character

Progression in Resources:

J2Code Visual Level 2

Relevance

Now	Children develop their understanding of how computers work and what they are capable of; they gain confidence in their own computer use.
Future	Children can use computers for purposes that suit them, understanding how their input affects the computer's output; they can detect and correct errors in programs
Aspiration	Children can manipulate programs to perform functions they choose; they code their own programs; they pursue careers in software development and web-design.