Year 2
Programming

Prior Learning (Y1):
Learners will be introduced to on-screen programming through ScratchJr. Learners will explore the way a project looks by investigating sprites and backgrounds. They will use programming blocks to use, modify, and create programs. Learners will also be introduced to the early stages of program design through the introduction of algorithms.

Current Learning (Y2):

Learners begin to understand that sequences of commands have an outcome, and make predictions based on their learning. They use and modify designs to create their own quiz questions in ScratchJr, and realise these designs in ScratchJr using blocks of code. Finally, learners evaluate their work and make improvements to their programming projects.

Future Learning (Y3):
This unit explores the concept of sequencing in programming through Scratch. It begins with an introduction to the programming environment, which will be new to most learners. They will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. The final project is to make a representation of a piano. The unit is paced to focus on all aspects of sequences, and make sure that knowledge is built in a structured manner. Learners also apply stages of program design through this unit.

Key Vocabulary

Vocabulary to use from Y1: Algorithm, program, command

Debug	The process of finding an issue in the program you have written and repairing it
Logical Reasoning	The process of applying rules to problem solving

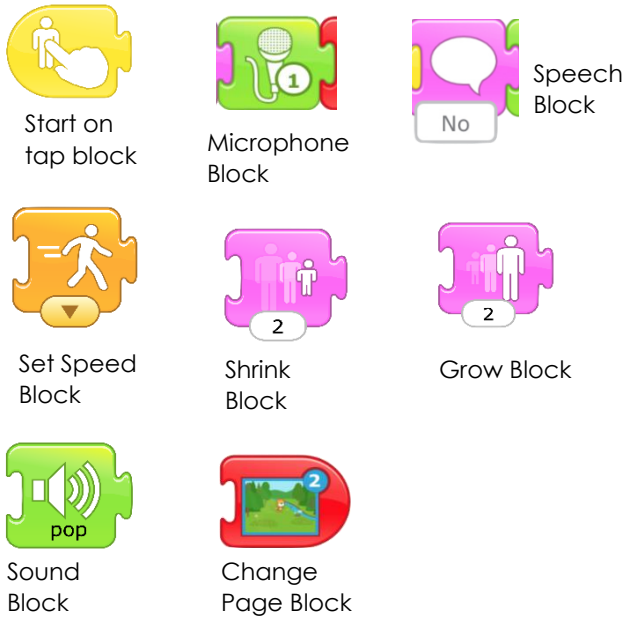
Key Unit Specific Vocabulary:

Sprite; Background; Home page; Blocks; Grow; Shrink; Outcomes; Sound; Speech

Key Questions:

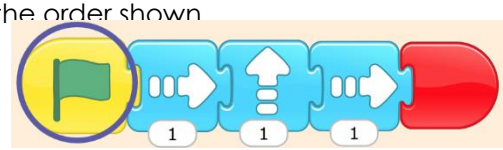
- How do I start a program?
- How can I change the outcome to a sequence of commands?
- How do I create a program using a given design?
- How do I change a given design?
- How do I create a program using my own design?
- How can my project be improved?

New Blocks in ScratchJr:



Starting a Sequence

Like activities in the real world, programs run in a sequence. You read programs in ScratchJr from left to right. This is the sequence of commands. When you run the code, it runs in the order shown



Like most real world activities programs start with an event. In ScratchJr, we use the **Green Flag** to signal the beginning of the event; when we press the flag, the code will run.

Outcomes in ScratchJr

When you run a program in ScratchJr the sequence of commands is followed and this results in an outcome.

Sometimes programs use different blocks, but produce the same outcome.

We can also use the same blocks in a different order. These programs will produce the same outcome.

You can change the outcome of the program,