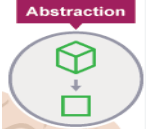
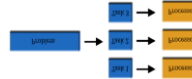
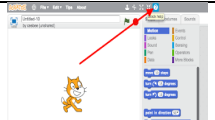


We are programmers

Prior Knowledge

You programmed BeeBots in **Unit 1.1: We are treasure hunters** and programmed on-screen in ScratchJr in **Unit 1.5: We are rhythmic**.

Key Vocabulary:

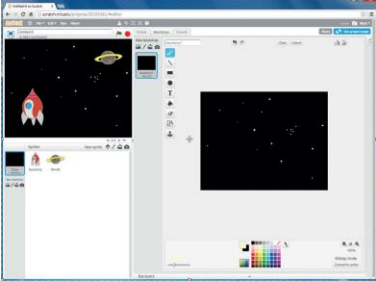
abstraction		computational thinking approach to managing complexity by simplifying things, through identifying what is important and what detail can be hidden or ignored	output		information produced by a computer – in this case, an animation
algorithm		a sequence of precise instructions or steps (sometimes a set of rules) to achieve an objective	parallel processing		when programs run (or appear to run) simultaneously
bug		an error or mistake in a program or algorithm, causing the computer or robot to behave in a manner that was not originally intended	program		a sequence of instructions (or sometimes a set of rules) that can be followed by a computer
code		instructions (or sometimes rules) that can be understood by a computer	repetition		programming construct which allows a group of instructions to be repeated a number of times, or until a certain condition is met
debug		correct mistakes in a computer program or algorithm	scratch		simple, block-based programming language in which programs for characters are built by snapping together code blocks
event		something that happens within a computer program to cause some particular code to be run, such as a sprite being tapped by the user	sprite		a graphical character in a program that can be given its own sequence of instructions
input		data supplied to a computer, in this case, pressing buttons on the robot			

Key Skills

How do we create algorithms in Scratch Jr to create a program?

How do I debug?

Key learning: How do I write a program in Scratch?

 Session 1: Planning the algorithm needed to move from one planet (hoop) to another	What is an algorithm?	 Session 4: Adding control sprites to programs in ScratchJr	What kind of blocks start something in ScratchJr? What is an output? What kind of outputs can be created in ScratchJr?
 Session 2: Programming a spacecraft navigation program in ScratchJr	How are algorithms used at school?	 Session 5: Adding a repeating code to programs in ScratchJr	Why do we use repetition in programs?
 Session 3: Adding audio and messages to ScratchJr programs	What is debugging?	 Session 6: Using the paint editor in ScratchJr	How do I write a program in Scratch?

Key Applications (apps)



Next Steps

You will be introduced to Scratch in **Unit 2.2: We are games testers** as they explore some pre-built games and work out the rules. **Unit 3.1: We are programmers** continues your programming development as you make a scripted animation in Scratch.