

Y2 Computing N2K

Programming A - Robot Algorithms

Autumn 1

Concepts

Computer Science

Understand what algorithms are, how they are implemented as programmes on digital devices and that programmes execute by following precise instructions. Design, write and debug programmes to accomplish specific goals.

Digital Literacy

Recognise common uses of information technology beyond school. Use technology safely, respectfully and responsibly.

Key Skills

- Create sequences that use commands.
- Predict the outcome of a sequence.
- Use an algorithm to program a floor robot.
- Debug a program.



Enquiry Questions

What is a sequence?

What happens when you change the order of instructions?

How do we fix something that is acting unexpectedly?

What is an algorithm?

Try out the **Bee-Bot emulator!** This will let you create your own Bee-Bot routes at home.



Key Vocabulary

sequence – A set of commands completed in a precise order. The commands are meant to act out something exactly as we want it to do.

algorithm – A list of rules to follow in or to complete a task or solve a problem. They must be listed in the correct order!

clear – Remove (delete) all the programming used on a device or robot.

prediction – A logical guess about what actions something will follow.

debugging – Working out why something is acting in an unexpected way and then thinking about how to change it.