



Linked learning theme: Year 4 – Spring 1

Computing – Programming A – Repetition in shapes

Prior Learning

- The children will have explored using block coding sequences to achieve an outcome in Year 3 when completing the Events and Actions in Programs unit. They have also experienced moving a physical digital resource on numerous occasions in KS1 and will move this into software in this module.

Core knowledge

Learners will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language.

Key skills

- Use typed commands to develop a program.
- Design, make predictions about and test algorithms using non-digital and digital methods.
- Identify how patterns can be used in coding by using repeat commands.
- Use repeat coding to form shapes.
- Use decomposition to identify which parts of code need to be repeated.
- Debug and code a looped program to achieve a purpose.

Vocabulary

Algorithm
Code
Command
Decomposition
Language
Loops
Patterns
Prediction
Program
Repeat

Learning Outcomes

- To identify that accuracy in programming is important.
- To create a program in a text-based language.
- To explain what 'repeat' means.
- To modify a count-controlled loop to produce a given outcome.
- To decompose a task into small steps.
- To create a program that uses count-controlled loops to produce a given outcome.