



Computing Topic: Unit 4.5 Logo

Year: 4 Term: Spring 2

Key Knowledge/Content:

- To learn the structure of the coding language of Logo.
- To input simple instructions in Logo.
- Using 2Logo to create letter shapes.
- To use the Repeat function in Logo to create shapes.
- To use and build procedures in Logo.

Links to:

Prior learning:

Logical decision processing and making
Sequencing and instructions
Visual use of the Logo programming language.

Future learning:

Logical planning of sequences and repetition.
Debugging skills
Development from text-based coding skills

Key vocabulary with definition:

Prior Vocabulary

Debugging - The process of identifying and removing errors from computer hardware or software.

Prediction - When you say what is going to happen when you run the instructions.

New Vocabulary

Grid - The template around which the 2Logo turtle moves.

LOGO - A text-based coding language used to control an on screen turtle to create mathematical patterns.

Multi Line Mode - Type several lines of commands in the text area.

Pen Down - Lowers the screen pen so the 2Logo turtle draws a line on the screen.

Pen Up - Raises the screen pen so the 2Logo turtle doesn't draw on screen.

Procedure - Pieces of Logo text with a procedure name that can be run by calling them by name. Saves time if you want to print to screen lots of the same shape.

By the end of this unit

All children can: 'read' 2Logo programs with several steps and predict the outcome accurately.

Most children can: think about the 2Logo commands that they need steps of two or more commands at a time before executing the code to check the result e.g. fd 4 rt 90 fd 6 rt 90.

Some children can: understand the repeat command and can plan simple repeat structures before executing rather than relying on trial-and-error

Background understanding for teachers and parents:

2Logo is a text-based coding language used to control an on-screen marker to create mathematical patterns. Children were introduced to turtle patterns using 2Go in year 1. In this unit they will: Learn common commands and constructs of the Logo programming language. Develop their ability to compose algorithms for drawing mathematical structures and turn these into Logo code.

Curriculum Driver (one):

Aspiration.

Evidence outcome:

Children are taught life skills of coding, which may be aspiration for their future.