

Year 4

Autumn

Knowledge Organiser: Computing

Coding



What have I learnt already:

Logical thinking:

That a **program is a** type of **algorithm** that computers use

Create and communicate:

How to:

-**Break down** familiar **problems** into precise instructions

-Choose an appropriate template

Coding and problem solving:

Suggest ways to make code more efficient

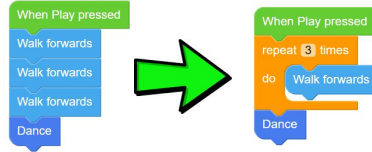


Key learning:

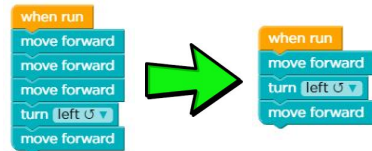
- **Break down** more **complex problems** into precise instructions and suggest ways to **make code more efficient**

- Use graphical tools to **combine elements** into a **flowchart/mind map**

- **Use a repeat command** to make programs more efficient




- **Find errors/bugs** and **correct them** (**debug**)





Key Vocabulary:

Decomposition  **Splitting** things into **smaller parts**

Conditional ...  Statements that **only run under certain conditions** (e.g. IF...WHEN)

Choice  A coding **error** in a computer program

Selection  A way in computer programs to **make choices** (e.g. IF..THEN)

Pattern  Finding and using **repetition**

Efficient  Working in the best manner to achieve the best results