

Year 4 - Computational thinking - Term 3

Key Vocabulary

Abstraction	Identifying the important detail and ignoring irrelevant information.
Algorithm design	Creating a formula or set of instructions to solve the problem.
Code (computer)	A set of instructions written in programming language, to tell a computer what to do.
Code blocks	A visual representation for a section of code that performs a certain job. They can be snapped together to build a program.
Computational thinking	A method of tackling a complex problem, to devise a solution which both computers and humans can understand.
Computer	Electronic machines that accept and process information to produce an output, and then store the results.
Decompose	To break something down into smaller chunks.
Pattern recognition	Identifying similarities and recurrences in data.
Problem	A matter or situation that needs to be resolved.
Sequence	A set order or pattern for something to follow.



Data without any identification, order or sequence.



Sequence of dance moves:	Decomposition:	Pattern recognition:
Start Criss-cross Jump Criss-cross Double step to the left Double step to the right End	x2 x2 x2 x2 x1 x1 x1 x2	Criss-cross Jump Criss-cross Step forwards Step backwards Step forwards Step backwards

To know statements	✓ x
I can understand that computational thinking is made up of four key strands: decomposition, pattern recognition, abstraction and algorithm design	
I can understand what decomposition is and I know how to apply it to solve problems	
I understand the terms: pattern recognition and abstraction	
I know how to create an algorithm and what it can be used for	
I know how to combine computational thinking (decomposition, pattern recognition, abstraction and algorithm design) skills to solve a problem	

What can you remember from previous units?
 What is decomposing in coding and why is it useful?
 What is a variable?

Anything else you have learnt? What have you enjoyed?