

Wonderblocks Series 1: Computational Thinking Connections to Barefoot

There are close connections between the 'approaches' to computational thinking that Barefoot Computing uses and the Characteristics of Effective Learning in the EYFS Statutory Framework. Playing and exploring links closely with tinkering and collaborating, as well as abstraction. Active learning is links to debugging and persevering. Creating and thinking critically links with Barefoot's creating, as well as back to the concepts of logical reasoning and algorithms.

You may like to read more about this:

Berry, M. & Goto, E. (2016) Laying the Foundations for Computing in the Early Years. *Switched On*, 19, 6-7. Available at: <https://milesberry.net/2016/01/laying-the-foundations-for-computing-in-the-early-years/> [Accessed 10 October 2025].

Episode	Patterns (Repetition and generalisation)	Decomposition	Algorithms (and Sequencing)	Abstraction	Logic	Evaluation	Tinkering	Creating	Debugging	Persevering	Collaborating	Linked Barefoot materials
1 – Go												Bee-Bot Tinkering
2 - Stop												Creating Patterns Activity
3 - Hop												Dance Move Algorithms
4 - Moo												Lego Building Algorithm
5 – Cluck												Spot the locks
6 – Moving Up												Lego Building Algorithm
7 – Splat												Creating Patterns Activity
8 – The Breakfast Bears												Crazy Character Algorithm
9 – Moo, Cluck, Baa												Story Sequencing Activity

Key		
Main focus of episode	Supplementary focus	Musical episode

Episode	Patterns (Repetition and generalisation)	Decomposition	Algorithms (and Sequencing)	Abstraction	Logic	Evaluation	Tinkering	Creating	Debugging	Persevering	Collaborating	Linked Barefoot materials
10 – Dancefloor Delight												Head, shoulders, knees and toes algorithm
11 – Step by Stepping Stone												Bee-Bots 1,2,3 programming
12 – Rainy Day Bears												Crazy Character Algorithm
13 – Tower of Flowers												Patterns Unplugged
14 – Building Sandcastles												River crossing
15 – First Things First												Head, shoulders, knees and toes algorithm
16 – What Can We Do?												Bee-Bot Tinkering
17 – Woodland Wiggle												Getting Ready for School
18 – Magic Beans												Crazy Character Algorithm
19 – Musical Bears												Creating Patterns Activity
20 – Sounds Like a Plan												Decomposition Unplugged Activity
21 – Top Secret Holiday Hideout Plan												Lego Building Algorithm
22 – Someone's Been Eating My Porridge												River crossing

Key		
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Episode	Patterns (Repetition and generalisation)	Decomposition	Algorithms (and Sequencing)	Abstraction	Logic	Evaluation	Tinkering	Creating	Debugging	Persevering	Collaborating	Linked Barefoot materials
23 – Bunch of Bugs												Crazy Character Algorithm
24 – Potted Plant Parade												River crossing
25 – Again												Patterns Unplugged
26 – Here We Go Again												Creating Patterns Activity
27 – Giant Beanstalks												Patterns Unplugged
28 – Bouncy Castle												Creating Patterns Activity
29 – Ice Cream Bears												Sorting Objects
30 – It's Wonderful What You Can Do												BeeBot Route

Key		
Main focus of episode	Supplementary focus	Musical episode