

Lyng Primary School Knowledge Organiser

Computing

Topic: Computing



Microbit: How can we program wearable technology?

Spring 2

Year 5

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| What Goldilocks and Step On words will I use? |
| **Spelling** | **Defintion** |
| .hex file | File type that carries binary information |
| .zip file | Multiple files that are bound together as a single file to use less digital storage space |
| Bluetooth  | Device to device connectivity |
| Decompose | Break down into smaller chunks |
| Emulator | A program or machine that is built to copy the way another computer system works |
| Microbit | Created by BBC. Small compact computer that you can code |
| pedometer | A device to record the number of steps taken |
| Systematic | Doing something in an ordered way to achieve a specific goal |
| Variable | Numbers or text that can change each time the program is run and often in combination with selection to change the end result of the program |

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**Aims of this unit**

* Decompose programs
* Predict how software will work based on previous experience
* Write more complex algorithms for a purpose
* Iterating and developing programming
* Use loops
* Use a systematic, logical approach to debugging code

**Safeguarding**

Filtering and monitoring system is in place. Children will use their own log in details to track any misuse and to protect the child from harmful websites and pop ups. Children will be reminded of how to stay safe online and to use technology safely and respectfully and to tell a trusted adult if there is anything on their computer that makes them uncomfortable. When using the iPads, the monitoring software will track which iPad has been used to enable us to know which class has used the iPad.

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| Unit Outcomes |
| * Clip blocks together and predict what will happen. Make connections with previous programming interfaces they’ve used, e.g. Scratch.
* Create their own images to make the animation and recognise the difference between ‘on start’ and ‘forever’.
* Recognise blocks they’ve used previously, identifying inputs and outputs used and make predictions about how variables work.
* Choose appropriate blocks to complete the program and attempt the challenges independently.
* Break a program down into smaller steps, suggesting appropriate blocks and match the algorithm to the program.
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Spring Term

Programming – Microbit

**In this unit…**

The children will extend their programming skills to simulations and physical technology

**Agreed outcome:**

Create simulations