We Are

Toy Makers

Computer Science



Year 6 — Summer Term

E-Safety

- Continue to actively use technology safely and respectfully when creating or remixing online content.
- Understand and use several
 methods that underpin acceptable behaviour
 online, in a range of digital contexts.
- Fully understand the severity of the consequences of carrying out unacceptable behaviour online.
- Be confident in using a range of methods to report inappropriate behaviour online.

Key skills

- I will learn how computers use stored programs to connect input to output
- I will know how to generate and evaluate designs in response to a brief
- I will plan a complex project by decomposing it into smaller parts
- I will work with physical components of a system
- I will learn how to design and write a program for an embedded system
- I will use criteria to provide others with feedback on their work and gain feedback about my own

Connecting Concepts

Logical Thinking

Solving a problem or making sure that something is achieved by thinking things through logically.



Coding

The process of assigning a code to a computer to communicate with it.



What I should already know:

- Use technology safely and respectfully including when creating or remixing online content and understand the principles that underpinning acceptable behaviour in a range of digital contexts. Understand encrypted HTTPS connections.
- Be able to discuss the differences between acceptable and unacceptable behaviour and know the likely consequences of this behaviour in a range of digital contexts.
- Be discerning in evaluating digital content
- Have a range of methods to report inappropriate
 behaviour and be able to discuss these including CEOP.
- Understand the opportunities networks offer for communication and collaboration.
- Appreciate how search results are selected and ranked.

Vocabulary	
Bluetooth	Wireless digital communication protocol using low energy signals over short distances
Controller	Programmable device that determines electronic output based on electronic input
Embedded System	Computer hardware and software that forms part of a device or product
Input	Data supplied to a computer Interactive: system whose output is determined by the input provided
MakeCode	Block- and text-based editor from Microsoft, supporting a variety of hardware platforms including the micro:bit
Micro:bit	simple, single board programmable computer with integrated input, output and network capabilities
Microprocessor	single silicon chip that performs all the functions of a computer's central processing unit
Output	Information produced by a computer
Simulator	Software that allows one computer system to behave as another; in this case, the MakeCode editor includes an on-screen simulator of a micro:bit so that programs can be tested
System	A set of components (perhaps of different types, such as hardware and software) working together