Topic Plan

Year 3
Summer 2 – "Remarkable Robots'" – We will be looking at technologies of the past and the future. We will study robots and think about how they can help us.

Key Skills	Key Facts	Key Vocabulary
- Use knowledge of existing products to design his/her own functional product. - Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them. - Plan, collect and develop ideas. - Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. - Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	- The word robot comes from an old Slavic word, 'robota', meaning servitude. - Robots are machines that can be programmed to carry out task for humans. - The first programmable robot was designed in 1954 by George Devol. - George Devol and Joe Engleberger designed the first programmable robot arm. This later became the first industrial robot, completing dangerous and repetitive tasks. - There have been many examples of machines that can carry out tasks in history. Early examples include Ancient Egyptian water clocks that were able to strike bells as required by the user.	**Robotics -** involves design, construction, operation, and use of **robots**. **Programme** – A set of instructions that a robot or other machine follows to complete a task. **De-bugging** – Looking carefully at a programme to spot and correct mistakes. **Computer network** – A set of computers that are linked together to share resources and information.

Key Figures/Places

Factories using robotics

George Devol

Reading and Writing Links

The Iron Man by Ted Hughes.

Writing:
- Persuasive writing,
- Newpaper report,
- Diary entries.

Alongside this, we will be focusing on year 3 spelling and grammar.