

# DESIGN & TECHNOLOGY - YEAR 7

## USB Light Project

During this project we will learn about basic electronic systems, looking at how simple circuits work and identifying a range of input, process and output components and their symbols. We will learn about conductors and insulators and the tools and equipment needed to safely solder a circuit. We will continue or woodworkig skills to make a casing for our circuit to turn it into a nightlight style lamp.

## Gonk Project

During this project we will learn about metals and alloys. We will look at the sources and origins of metals, how they are categorised and begin to think about their properties. We will learn about the tools and equipment needed to work with metals safely and will learn how to cut, drill, shape and join metals. We will also learn how to do dip coating and why this is important when working with mild steel. We will learn about the advantages and disadvantages of CAD CAM and how to use the CNC Milling Machine. During this project we will focus on the Initial Design strand of the design process looking at what makes a good design,

design to a client. We will also learn how to evaluate designs successfully to develop ideas.

## Block Bot Project

Design this project we will learn about the origins of 3D printing, looking at the different types of 3D printing and how they work. We will learn about the advantages and disadvantages of 3D printing and how to use a 3D printer. We will also learn about the different types of 3D printing and how they work.