



What I will know and understand by the end of Year 9

This year in Technology we will be learning:		This links to:	Key Vocabulary:
1	<p>Textiles rotation</p> <ul style="list-style-type: none"> • What tie dye and batik are, along with how to produce successful surface decoration results • How to successfully construct a Textiles product, using a mixture of hand skills and a sewing machine • How textiles can damage the environment, along with how we can limit the impact upon the environment 	<p>Textiles Rotation</p> <ul style="list-style-type: none"> • In year 7, students produced a 2D wall hanging, using applique. They will now further develop their skills to construct a tote bag, whilst applying more complex surface decoration (tie dye) • In year 7, students also learnt about the different types of fabric and where they come from. We will now be building upon this, to look at the environmental impacts of using fabric 	<ul style="list-style-type: none"> • Fibres • Specific • Tension • Influence • Sustainability • Circular economy • Fabric finish
2	<p>Microcontroller rotation</p> <ul style="list-style-type: none"> • How to successfully use a wide range of features on a BBC microbit, including writing block coding programme and downloading to their own device • How to apply key features of a microbit to design a range of different products for different applications • The ethical considerations that are needed when using electronic equipment, such as how cobalt is mined and why e-waste is a problem for the environment 	<p>Microcontroller rotation</p> <ul style="list-style-type: none"> • Students have studied electronics in Year 8; however for this rotation they will be using a flash memory product and focusing on programming successfully • They have used block programming in Computing • The environmental issues associated with using textiles and metals in Year 8 and 9 	<ul style="list-style-type: none"> • Flash memory • Variable • Sensor • Kinetic • Automation • Ethics
3	<p>Engineering rotation</p> <ul style="list-style-type: none"> • What a CNC operated machine is and how this compares to using a manual machine • How to accurately identify key parts of a centre lathe, along with using the machinery to produce a successful product • What the categories and uses of timber are within a range of different products • What key different manufacturing systems are used in industry 	<p>Engineering rotation</p> <ul style="list-style-type: none"> • In year 7 and 8, students have used polymers and metal to make products, using a range of different hand tools and machinery. This project will focus on using timber and will introduce the centre lathe to students • In year 8 paper and board, students have learnt about scales of production. This unit will link to the manufacturing systems that are used during production 	<ul style="list-style-type: none"> • Hazard • Aesthetics • Productivity • Sequence • Coniferous • Automation • Continuous

Target Grade:		AP1:		AP2:		AP3:		End of year exam	
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