

The STEM Textiles curriculum

STEM Textiles curriculum vision		
<p><i>Science, Technology, Engineering and Maths are the building blocks of the future. The most successful companies in the world are built on them, and our students benefit from STEM inventions every day. At Barr's Hill we equip our students with the fundamental skills they will need for a forward-looking career.</i></p> <p><i>The curriculum for STEM Textiles begins with an introduction to product design to encourage the mixing of different D&T elements. The 'electronic textiles projects' are ideal for producing a realistic design and making a product suitable for retail. Year 7 will undertake a unique smart circuit project which includes the use of LEDs, conductive thread and switches and Y8 will undertake a project which is ideal for using smart materials and also conductive products.</i></p>		
<i>Key stage 3 – Units of study</i>		
<i>Term</i>	<i>Designing a soft toy product which includes a circuit that lights up one flashing LED in its design.</i>	<i>Designing a garment which will allow children to be safely seen in the dark and daylight. Utilising modern and smart material which includes LEDs.</i>
<i>Rotation 1</i>	Year 7 <i>Curious Creatures</i>	Y8 <i>'Be safe and be seen'</i>

Supporting my child with their learning?

The following links will support additional learning to your child.

Year 7- Curious creatures	Additional Learning
Textiles and sustainability	https://www.bbc.co.uk/bitesize/topics/ztv4g6f/articles/zrcx2v4
Sources and properties	https://www.bbc.co.uk/bitesize/guides/z6t26yc/revision/1
Manufacturing techniques	https://www.bbc.co.uk/bitesize/guides/zfypfcw/revision/1
Modification of materials	https://classroom.thenational.academy/lessons/modification-of-materials-60ukjr
Fibres to fabrics	https://classroom.thenational.academy/lessons/fibres-to-fabric-6dj6c
Designing products for different lifestyles	https://classroom.thenational.academy/lessons/designing-products-for-different-lifestyles-60wpcd

Year 8- 'Safe to be seen'	Additional Learning
The impact of fashion	https://classroom.thenational.academy/lessons/the-impact-of-fashion-65h6cd
Technical Textiles	https://classroom.thenational.academy/units/understanding-fibres-and-fabrics-8af7
Constructional textiles	https://www.bbc.co.uk/bitesize/guides/z2mnb7h/revision/1
Fashion design	https://www.bbc.co.uk/bitesize/guides/zpp39ty/revision/1
Designing for our future	https://classroom.thenational.academy/lessons/designing-products-for-your-future-c9hp6r
True cost of fashion - what fabrics do we have in the home?	https://classroom.thenational.academy/lessons/true-cost-of-fashion-what-fabrics-do-we-have-in-the-home-c8u32r