



Year 9 Design & Technology - Curriculum Overview and KS3 Progress Descriptors

Aims and Rationale - “Sustainability”

Students will be applying the key skills they have learnt across Y7 and Y8 to the projects they complete in Y9. Students will have chances to complete more independent investigation, design and manufacturing work as they complete projects which allow them to become creative problem solvers. Students will be applying these skills to three practical projects which are assessed summatively and will also be assessed on the theory using quizzes at the end of each rotation. Formative assessment will be via verbal feedback to students throughout the projects. Students will be focusing on sustainability as a theme for all of their projects across Y9.

Curriculum Content

Textiles - Sustainable fashion - Independent research / Sustainability in the fashion industry - Issues & solutions / Experimentation with materials / Problem solving / Using and adapting templates / Creating a prototype / Recapping sewing machine skills / Construction skills / Promoting independent working
Graphics - Sustainable Take-out Rebrand - Market research / Specification / Branding / Adobe Illustrator skills / Digital technical drawing skill development
Product Design - Jewellery Design - Problem solving / Working to a brief & Specification / Design Development / Experimentation with a range of materials / Producing a high quality product / Metal Working Processes

Key Terms/Themes

Product Design - Self Assessment / Peer Assessment / Iterative Design Cycle / Development / SCAMPER Designing / Branding / Biodegradable / Landfill / 6 R's / Responsible Design / Primary & Secondary Research / Ergonomics / Anthropometrics / CAD CAM / Hand techniques
Textiles - 6 R's / Sustainability / Fast fashion / Finite resources / Landfill / Organic / Biodegradable / Pattern cutting / Garment or Accessory construction
Graphics - Trend analysis / Specification / Branding (inc. typography, colour, etc.) / CAD / CAM / Prototype / Ergonomics / Cohesion / Product Testing / 6 R's / Sustainability
ACCESSFM - The Key words used for analysing, developing & evaluating in Design & Technology (Aesthetics, Cost, Customer, Environment, Safety, Size, Function, Materials)

How we assess at Key Stage 3

At Hitchin Girls' School our curriculum is our progress model. Students benefit from a broad, diverse and challenging curriculum which increases in difficulty and challenge as students progress through the school. The expectation is that all students meet our curriculum at their relevant age range and as such meet the minimum of the secure descriptors below. Those working at an advancing level are working above, while those excelling are consistently working at a level far above their age range.

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	<i>Developing</i>	<i>Secure</i>	<i>Advancing</i>	<i>Excelling</i>
Technical Principles	<ul style="list-style-type: none"> • Shown a developing ability: Knowledge: You have demonstrated a fair knowledge of materials, tools, "design and manufacture" processes, social and moral concerns. Application: You have applied this knowledge to the development and production of your prototype. 	<ul style="list-style-type: none"> • Shown a securing ability: Knowledge: You have demonstrated substantial knowledge of materials, tools, "design and manufacture" processes, social, moral and environmental concerns. Application: You have consistently applied this knowledge to the development and production of your prototype. 	<ul style="list-style-type: none"> • Shown an advancing ability: Knowledge: You have demonstrated a fully detailed knowledge of materials, tools, "design and manufacture" processes, social, moral and environmental concerns. Application: You have effectively applied this knowledge to the development and production of your prototype. 	<ul style="list-style-type: none"> • Shown an excelling ability: Knowledge: You have demonstrated a fully detailed and extensive knowledge of a wide range of materials, tools, "design and manufacture" processes. You also show evidence of a wider awareness of social, moral and environmental concerns. Application: You have effectively applied this knowledge to the development and production of your prototype.
Creativity	<ul style="list-style-type: none"> • Shown a developing ability: Explore: You have made an investigation into some information linked to your user to guide your designing. Create: You have produced a range of design ideas with some labelling of techniques and materials. Evaluate: You have responded to peer feedback throughout designing. 	<ul style="list-style-type: none"> • Shown a securing ability: Explore: You have made a detailed investigation into a wide range of information linked to your user to guide your designing. Create: You have produced a range of design ideas with detailed annotation referring to some aspects of ACCESSFM. Evaluate: You have responded confidently to peer feedback throughout designing which may feed into the development of designs. 	<ul style="list-style-type: none"> • Shown an advancing ability: Explore: You have made a fully detailed investigation into a wide range of information linked to your user to guide your designing. Create: You have produced a fully detailed range of design ideas with very detailed annotation referring to most aspects of ACCESSFM. Evaluate: You have responded extensively to feedback which feeds into development of designs. 	<ul style="list-style-type: none"> • Shown an excelling ability: Explore: You have made a fully independent, extensive investigation into a wide range of information linked to your user to guide your designing. Create: You have produced an extensive range of design ideas with fully detailed annotation referring to all aspects of ACCESSFM. Evaluate: You have responded extensively to feedback from peers and potential users which feeds into development of designs.

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Making	<ul style="list-style-type: none"> • Shown a developing ability: Quality: You have produced a final prototype of a basic standard, demonstrating some areas of quality and accuracy. Making Skills: You have demonstrated with a fair amount of support, simple processes in the making of your final product. 	<ul style="list-style-type: none"> • Shown a securing ability: Quality: You have produced a final product of a good standard, demonstrating good quality and accuracy. Making Skills: You have demonstrated good practical skills and processes when making your final product. Processes are carried out with some independence. 	<ul style="list-style-type: none"> • Shown an advancing ability: Quality: You have produced a final product of a high standard, demonstrating excellent quality and precise levels of accuracy. Making Skills: You have demonstrated complex Practical skills and processes when making your final product. You know how to demonstrate how to adjust processes if they go wrong/do not produce the desired result. You have assisted others throughout the project. 	<ul style="list-style-type: none"> • Shown an excelling ability: Quality: You have produced a final product of an exceptional standard, demonstrating exceptional quality and precise levels of accuracy. The quality of your outcome is shop quality. Making Skills: You have consistently demonstrated complex practical skills and processes when making your final product. You know and can demonstrate how to adjust processes if they go wrong/do not produce the desired result. You have taught others throughout the project.
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