

Subject: Design Technology
Faculty: Innovation
Year Group: 8

EXCELLING (-, =, +)



All of the secure criteria plus:
 Describe ideas and look at improvements you could make and how you make these.

All of the secure criteria plus:
 Be able to analyse material choices when thinking about sustainability, 6R's and social, moral and cultural implications.

All of the secure criterion plus:
 To be able to understand the advantages and disadvantages of paper patterns and stencils.

SECURE



Autumn Term

Spring Term

Summer Term

Assessment strategy:
Informal retrieval practice
Teacher/Self/Peer assessment
 Pull along wooden toy project & Laser coasters project (CAD)

Assessment strategy:
Informal retrieval practice
Teacher/Self/Peer assessment
 Clock project

Assessed strategy:
End of year standardised assessments
 Textiles project & Electronics project

Technical Knowledge

Identify, explain and **explore** technical equipment, materials, components and techniques.

 Recognise and **explain** that products/designs have to meet a range of different needs- In relation to target market.

Everything from terms 1 and 2 plus:
Understand the characteristics of different ingredients, materials, components and processes.

Understand a range of advanced/ specialist techniques.

Everything from terms 1 and 2 plus:
 Have a **broad knowledge** of different materials, components, ingredients and processes.

Independently explore subject specific tasks (extra curricular/home projects).

Evaluating

Compare design ideas/final product against the design brief.

 Suggest **improvements** for design ideas/product with reasons.

 Use **technical terminology** from **examining, describing** and **evaluating**.

Everything from terms 1 and 2 plus:
Explain why materials, ingredients or components have been used.

Identify and **justify** any changes from the final design idea to the final product.

Everything from terms 1 and 2 plus:
 Suggest **alternative** materials, components or ingredients and **explain** choices.

 Carry out investigations/tests/ experiments to evaluate final products.

 Be able to analyse and evaluate to academic literature.

Practical Making

Select & use a range of functions on 2D design.

 Import and export in to laser software.

 Work **accurately** and within **tolerance**.

 Produce a **well designed, quality** product of the final product-Use gradients to fill and a range of simple shapes to create more complex shapes.

Everything from terms 1 and 2 plus:
 Work form your own **detailed plans**

 Use a range of tools and equipment with **precision**

 Carry out a range of **specialist techniques** (with support and understand the difference between different file types

 Produce a **high quality**, well considered final product

Everything from terms 1 and 2 plus:
 Carry out all tasks **accurately** and with **precision**

 Work **independently** and find **solutions** to design & practical problems

 Carry out a range of specialist techniques **independently**

Design Skills

Generate **detailed** design sketches/drawings/prototypes.Design s rendered.
 Have a basic understanding of software tools to be able to produce a simple vectorised design.

Everything from terms 1 and 2 plus:
Designs are rendered to a high standard.

Explore different materials, components or ingredients and use **technical information** to decide if they are suitable

Everything from terms 1 and 2 plus:
 Designs are neat, well rendered and well presented.

 Generate a **wide range** of **creative**, well **explained** and **justified** designs.

	<p>Use research to influence design ideas.</p> <p>Write a specification describing essential and desirable criteria</p>	<p>for the final product.</p> <p>Model ideas by cooking, 3D models or using ICT design software</p>	<p>Write a detailed specification and explain choices made.</p> <p>Explain decisions regarding the choice of materials and manufacturing processes</p>
DEVELOPING (-, =, +)			
Not yet secure with all of the criteria set out for the term.			