

### **Design and Technology Five Year Overview**

### KS3 phase 1-3 KS4 -GCSE

	Autumn	Spring	Summer
	Topic/Unit	Topic/Unit	Topic/Unit
Phase 1	Bird Feeder Working with tools, equipment, materials and components to make quality products M1 Use tools and materials	Mechanical Toy  Developing, planning and communicating ideas.  D1 Generate ideas by drawing on their own and other people's experiences	Noughts and Crosses Box Game  Developing, planning and communicating ideas.  D1 Generate ideas, considering the purposes for which they are designing
	<ul><li>M2 Measure, cut and score</li><li>M3 Use hand tools safely and appropriately</li><li>M5 Use appropriate finishing techniques</li></ul>	<ul><li>D2 Develop their design ideas through discussion, observation, drawing and modelling</li><li>D3 Identify a purpose for what they intend to design and make</li></ul>	<b>D3</b> Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail
	Coat Hook Working with tools, equipment, materials and components to make quality products M1 Begin to select tools and materials; use vocabulary to name and describe them	Working with tools, equipment, materials and components to make quality products M1 Select tools and materials; use vocabulary to	D4 Evaluate products and identify criteria that can be used for their own designs D5 Select appropriate tools and techniques for making their product
	<ul><li>M2 Measure, cut and score with some accuracy</li><li>M3 Use hand tools safely and appropriately</li><li>M5 Choose and use appropriate finishing techniques</li></ul>	name and describe them  M2 Measure, cut and score with some accuracy  M3 Use hand tools safely and appropriately  M5 Choose and use appropriate finishing techniques	Working with tools, equipment, materials and components to make quality products  M1 Select tools and techniques for making their product  M2 Measure, mark out, cut, score and assemble
	Developing, planning and communicating ideas.  D1 Generate ideas by drawing on their own and other people's experiences  D2 Develop their design ideas through discussion, observation, drawing and modelling  D3 Identify a purpose for what they intend to design	Evaluating processes and products E1 Evaluate against their design criteria E2 Evaluate their products as they are developed, identifying strengths and possible changes they might make E3 Talk about their ideas, saying what they like and	components with more accuracy  M3 Work safely and accurately with a range of simple tools  M5 Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT
	and make. Identify simple design criteria  Bookend  Working with tools, equipment, materials and components to make quality products	dislike about  Steady Hand Game  Developing, planning and communicating ideas.	Evaluating processes and products E1 Evaluate their work both during and at the end of the assignment

**M1** Begin to select tools and materials; use vocabulary to name and describe them

M2 Measure, cut and score with some accuracy

M3 Use hand tools safely and appropriately

M5 Choose and use appropriate finishing techniques

#### **Electronic Moisture Sensor**

Developing, planning and communicating ideas.

**D1** Generate ideas by drawing on their own and other people's experiences

**D2** Develop their design ideas through discussion, observation, drawing and modelling

**D3** Identify a purpose for what they intend to design and make

Identify simple design criteria

## Working with tools, equipment, materials and components to make quality products

**M1** Begin to select tools and materials; use vocabulary to name and describe them

M2 Measure, cut and score with some accuracy

M3 Use hand tools safely and appropriately

**M4** Assemble, join and combine materials in order to make a product

M5 Choose and use appropriate finishing techniques

#### **Evaluating processes and products**

E1 Evaluate against their design criteria

**E3** Talk about their ideas, saying what they like and dislike about them

**D1** Generate ideas by drawing on their own and other people's experiences

## Working with tools, equipment, materials and components to make quality products

**M1** Select tools and materials; use vocabulary to name and describe them

M2 Measure, cut and score with some accuracy

M3 Use hand tools safely and appropriately

M5 Choose and use appropriate finishing techniques

#### **Evaluating processes and products**

E1 Evaluate against their design criteria

**E2** Evaluate their products as they are developed, identifying strengths and possible changes they might make

**E3** Talk about their ideas, saying what they like and dislike about

**E2** Evaluate their products carrying out appropriate tests

### **Graphics Skills**

Developing, planning and communicating ideas.

**D2** Develop their design ideas through discussion, observation, drawing and modelling

### Phase 2

#### **Acrylic Phone Stand**

#### Developing, planning and communicating ideas.

- **D1** Generate ideas, considering the purposes for which they are designing
- **D2** Make labelled drawings from different views showing specific features
- **D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail
- **D4** Evaluate products and identify criteria that can be used for their own designs
- **D5** Select appropriate tools and techniques for making their product

## Working with tools, equipment, materials and components to make quality products

- **M1** Select tools and techniques for making their product
- **M2** Measure, mark out, cut, score and assemble components with more accuracy
- M3 Work safely and accurately with a range of simple tools
- **M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

- **E1** Evaluate their work both during and at the end of the assignment
- **E2** Evaluate their products carrying out appropriate tests
- E3 Suggest ways that their product could be improved

### **Small Item Storage**

#### Developing, planning and communicating ideas.

**D1** Generate ideas, considering the purposes for which they are designing

#### **Bridge Structures Project**

#### Developing, planning and communicating ideas.

- **D1** Generate ideas, considering the purposes for which they are designing
- **D2** Make labelled drawings from different views showing specific features
- **D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail
- **D5** Select appropriate tools and techniques for making their product

### Working with tools, equipment, materials and components to make quality products

- **M1** Select tools and techniques for making their product
- **M2** Measure, mark out, cut, score and assemble components with more accuracy
- M3 Work safely and accurately with a range of simple tools
- **M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

- **E1** Evaluate their work both during and at the end of the assignment
- **E2** Evaluate their products carrying out appropriate tests
- E3 Suggest ways that their product could be improved

### **Monopoly Board Game**

#### Developing, planning and communicating ideas.

- **D1** Generate ideas, considering the purposes for which they are designing
- **D2** Make labelled drawings from different views showing specific features

#### **Healthy Sports Bar**

#### Developing, planning and communicating ideas.

- **D1** Generate ideas, considering the purposes for which they are designing
- **D2** Make labelled drawings from different views showing specific features
- **D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail
- **D4** Evaluate products and identify criteria that can be used for their own designs
- **D5** Select appropriate tools and techniques for making their product

### Working with tools, equipment, materials and components to make quality products

- **M1** Select tools and techniques for making their product
- **M2** Measure, mark out, cut, score and assemble components with more accuracy
- M3 Work safely and accurately with a range of simple tools
- **M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work
- **M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

- **E1** Evaluate their work both during and at the end of the assignment
- **E2** Evaluate their products carrying out appropriate tests
- E3 Suggest ways that their product could be improved
- E4 Disassemble and evaluate familiar products

**D2** Make labelled drawings from different views showing specific features

## Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Electronic Christmas Decoration**

**D1** Generate ideas, considering the purposes for which they are designing

**D2** Make labelled drawings from different views showing specific features

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

**D4** Evaluate products and identify criteria that can be used for their own designs

**D5** Select appropriate tools and techniques for making their product

# Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

**D4** Evaluate products and identify criteria that can be used for their own designs

**D5** Select appropriate tools and techniques for making their product

## Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

**E1** Evaluate their work both during and at the end of the assignment

**E2** Evaluate their products carrying out appropriate tests

E3 Suggest ways that their product could be improved

#### **Body Clock**

#### Developing, planning and communicating ideas.

**D1** Generate ideas, considering the purposes for which they are designing

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

**D5** Select appropriate tools and techniques for making their product

# Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

**E1** Evaluate their work both during and at the end of the assignment

**E2** Evaluate their products carrying out appropriate tests

E3 Suggest ways that their product could be improved

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

### Phase 3

#### **Bird Box**

# Working with tools, equipment, materials and components to make quality products

**M1** Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Independently measure materials

**M5** Independently use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Mirror Frame**

#### Developing, planning and communicating ideas.

**D1** Generate ideas, considering the purposes for which they are designing

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

**D5** Select appropriate tools and techniques for making their product

# Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

#### **Garden Decoration**

#### Developing, planning and communicating ideas.

**D1** Generate ideas, considering the purposes for which they are designing

**D2** Make labelled drawings from different views showing specific features

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

**D4** Evaluate products and identify criteria that can be used for their own designs

**D5** Select appropriate tools and techniques for making their product

# Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

**E1** Evaluate their work both during and at the end of the assignment

### **Designer Influenced Clock**

#### Developing, planning and communicating ideas.

**D1** Generate ideas, considering the purposes for which they are designing

**D2** Make labelled drawings from different views showing specific features

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

**D4** Evaluate the work of others and identify criteria that can be used for their own designs

**D5** Select appropriate tools and techniques for making their product

# Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

**E1** Evaluate their work both during and at the end of the assignment

**M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

#### **Evaluating processes and products**

**E1** Evaluate their work both during and at the end of the assignment

**E2** Evaluate their products carrying out appropriate tests

**E3** Suggest ways that their product could be improved

### **Microcontroller Christmas Decoration**

Developing, planning and communicating ideas.

**D1** Generate ideas, considering the purposes for which they are designing

**D2** Make labelled drawings from different views showing specific features

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail

## Working with tools, equipment, materials and components to make quality products

**M1** Select tools and techniques for making their product

**M2** Measure, mark out, cut, score and assemble components with more accuracy

M3 Work safely and accurately with a range of simple tools

**M4** Think about their ideas as they make progress and be willing change things if this helps them improve their work

**E2** Evaluate their products carrying out appropriate tests

E3 Suggest ways that their product could be improved

**E2** Evaluate their products carrying out appropriate tests

E3 Suggest ways that their product could be improved

**M5** Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT

Year	Autur	Autumn		Spring		Summer	
	HT1	HT2	нт3	HT4	HT5	See Year 11 HT1	
	Topic/Unit	Topic/Unit	Topic/Unit	Topic/Unit	Topic/Unit	Topic/Unit	
10	Pencil Stand	<b>Graphics Skills</b>	Point of Sale	Trinket Box	Nature Area		
	Developing, planning and	Developing, planning and	Developing, planning and	Developing, planning and	Developing, planning and		
	communicating ideas	communicating ideas.	communicating ideas.	communicating ideas.	communicating ideas.		
	<b>D1</b> Generate ideas and	<b>D1</b> Generate ideas and	<b>D1</b> Generate ideas through	<b>D1</b> Generate ideas and	<b>D1</b> Generate ideas and		
	identify a purpose for their	identify a purpose for their	brainstorming and identify a	identify a purpose for their	identify a purpose for their		
	product	product	purpose for their product	product	product		
	<b>D2</b> Draw up a specification	<b>D5</b> Select appropriate	<b>D2</b> Draw up a specification	<b>D3</b> Develop a clear idea of	<b>D2</b> Draw up a specification		
	for their design	materials, tools and	for their design	what has to be done,	for their design		
	<b>D3</b> Develop a clear idea of	techniques	<b>D4</b> Use results of	planning how to use	<b>D3</b> Develop a clear idea of		
	what has to be done,		investigations, information	materials, equipment and	what has to be done,		
	planning how to use	Working with tools,	sources, including ICT when	processes, and suggesting	planning how to use		
	materials, equipment and	equipment, materials and	developing design ideas	alternative methods of	materials, equipment and		
	processes, and suggesting	components to make		making if the first attempts	processes, and suggesting		
	alternative methods of	quality products	Working with tools,	fail	alternative methods of		
	making if the first attempts	M1 Measure and mark out	equipment, materials and	<b>D4</b> Use results of	making if the first attempts		
	fail	accurately	components to make	investigations, information	fail		
	<b>D5</b> Select appropriate	M2 Use skills in using	quality products	sources, including ICT when	<b>D4</b> Use results of		
	materials, tools and	different tools and	M1 Measure and mark out	developing design ideas	investigations, information		
	techniques	equipment safely and	accurately	<b>D5</b> Select appropriate	sources, including ICT when		
		accurately	M2 Use skills in using	materials, tools and	developing design ideas		
	Working with tools,		different tools and	techniques	<b>D5</b> Select appropriate		
	equipment, materials and	<b>Electronic Christmas</b>	equipment safely and		materials, tools and		
	components to make	Decoration	accurately	Working with tools,	techniques		
	quality products	Developing, planning and	M3 Independently measure	equipment, materials and			
	M1 Measure and mark out		materials accurately	components to make	Working with tools,		
	accurately	communicating ideas.		quality products	equipment, materials and		

M3 Independently measure materials accurately

## **Evaluating processes and products**

**E3** Evaluate against their original criteria

### **Wooden Chess Set**

# Developing, planning and communicating ideas.

**D1** Generate ideas and identify a purpose for their product

**D4** Use results of investigations, information sources, including ICT when developing design ideas **D5** Select appropriate materials, tools and techniques

### Working with tools, equipment, materials and components to make quality products

**M1** Measure and mark out accurately

M2 Use skills in using different tools and equipment safely and accurately

M3 Independently measure materials accurately
M5 Cut and join with accuracy to ensure a goodquality finish to the product

**D1** Generate ideas through brainstorming and identify a purpose for their product **D5** Select appropriate materials, tools and techniques

### Working with tools, equipment, materials and components to make quality products

**M1** Measure and mark out accurately

**M2** Use skills in using different tools and equipment safely and accurately

M3 Independently measure materials accurately
M4 Analyse and evaluate their ideas as they make progress and independently change things if this helps them improve their work
M5 Cut and join with accuracy to ensure a goodquality finish to the product

# **Evaluating processes and products**

**E1** Evaluate a product against the original design specification

**E3** Evaluate against their original criteria

M4 Analyse and evaluate their ideas as they make progress and independently change things if this helps them improve their work M5 Cut and join with accuracy to ensure a goodquality finish to the product

## **Evaluating processes and products**

**E1** Evaluate a product against the original design specification

**E2** Evaluate it personally and seek evaluation from others **E3** Evaluate against their original criteria

### **Metal Clock**

# Developing, planning and communicating ideas

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail

**D5** Select appropriate materials, tools and techniques

Working with tools, equipment, materials and components to make quality products M1 Measure and mark out accurately
M2 Use skills in using different tools and equipment safely and accurately
M3 Independently measure materials accurately
M5 Cut and join with accuracy to ensure a goodquality finish to the product

# **Evaluating processes and products**

**E1** Evaluate a product against the original design specification

**E2** Evaluate it personally and seek evaluation from others **E3** Evaluate against their original criteria

### **Pull Along Toy**

# Developing, planning and communicating ideas.

**D1** Generate ideas and identify a purpose for their product

**D3** Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail

**D4** Use results of investigations, information

## components to make quality products

**M1** Measure and mark out accurately

M2 Use skills in using different tools and equipment safely and accurately

**M3** Independently measure materials accurately

materials accurately

M4 Analyse and evaluate
their ideas as they make
progress and independently
change things if this helps
them improve their work

M5 Cut and join with
accuracy to ensure a goodquality finish to the product

### **Evaluating processes and products**

**E1** Evaluate a product against the original design specification

**E2** Evaluate it personally and seek evaluation from others **E3** Evaluate against their original criteria

# **Evaluating processes and products**

**E1** Evaluate a product against the original design specification **E3** Evaluate against their

**E3** Evaluate against their original criteria

**M1** Measure and mark out accurately

M2 Use skills in using different tools and equipment safely and accurately

**M3** Independently measure materials accurately

M4 Analyse and evaluate their ideas as they make progress and independently change things if this helps them improve their work

**M5** Cut and join with accuracy to ensure a goodquality finish to the product

# **Evaluating processes and products**

**E1** Evaluate a product against the original design specification

**E3** Evaluate against their original criteria

sources, including ICT when developing design ideas **D5** Select appropriate materials, tools and techniques

Working with tools, equipment, materials and components to make quality products

**M1** Measure and mark out accurately

M2 Use skills in using different tools and equipment safely and accurately

M3 Independently measure materials accurately M4 Analyse and evaluate their ideas as they make

progress and independently change things if this helps them improve their work

M5 Cut and join with accuracy to ensure a goodquality finish to the product

# **Evaluating processes and products**

E1 Evaluate a product against the original design specification
E3 Evaluate against their

original criteria

Year	Autun	nn	Spring		Summer	
	HT1	HT2	НТ3	HT4	HT5	Year 11 HT1
	Topic/Unit	Topic/Unit	Topic/Unit	Topic/Unit	Topic/Unit	Topic/Unit
11	16 Investigation, primary	21 Prototype development	21 Prototype development	22 Selection of materials	1 New and emerging	
	and secondary data	Design and develop	Design and develop	and components	technologies	
	16a Use primary and	prototypes in response to	prototypes in response to	Select appropriate materials	1a Industry	
	secondary data to	client wants and needs.	client wants and needs.	and components to make a	The impact of new and	
	understand client and/or			prototype.	emerging technologies	
	user needs	22 Selection of materials	22 Selection of materials		1b Enterprise	
	16b How to write a design	and components	and components	25 Specialist tools and	Enterprise based on the	
	brief and produce a design	Select appropriate materials	Select appropriate materials	equipment	development of an effective	
	and manufacturing	and components to make a	and components to make a	How to select and use	business innovation	
	specification	prototype.	prototype.	specialist tools and	1c Sustainability	
	16c Investigations in order			equipment.	The impact of resource	
	to identify problems and	23 Tolerances	23 Tolerances		consumption on the planet	
	needs	Work accurately using	Work accurately using	26 Specialist techniques and	1d People	
		tolerances.	tolerances.	processes	Changing job roles due to	
	17 Environmental, social			How to select and use	the emergence of new	
	and economic challenge	24 Material management	24 Material management	specialist techniques and	ways of working driven by	
	The environment, social and	24a Cut materials efficiently		processes appropriate for	technological change.	
	economic challenges that	and minimise waste	24a Cut materials efficiently	the material and/or task	1e Culture	
	influence design and	The importance of planning	and minimise waste	and use them to the	Changes in fashion and	
	making.	the cutting and shaping of	The importance of planning	required level of accuracy in	trends in relation to new	
		material to minimise	the cutting and shaping of	order to complete quality	and	
	19 Design strategies	24b Use appropriate	material to minimise	outcomes.	emergent technologies.	
	19a Generate imaginative	marking out methods, data	24b Use appropriate	26a Surface treatments and	Respecting people of	
	and creative design ideas	points and coordinates	marking out methods, data	finishes	different faiths and beliefs.	
	using a range of different	The use of data points and	points and coordinates	How to prepare a material	1f Society	
	design strategies	coordinates including the	The use of data points and	for a treatment or finish.	How products are designed	
	Application of different	use of reference points, lines	coordinates including the	How to apply an appropriate	and made to avoid	
	design strategies.	and surfaces, templates, jigs	use of reference points, lines	surface treatment or finish.	having a negative impact on	
	19b Explore and develop	and/or patterns	and surfaces, templates, jigs	21 Drototypo dovolones-t	others	
	their own ideas	25 Specialist tools and	and/or patterns	<b>21 Prototype development</b> Evaluate prototype in	1g Environment	
	Use of iterative process	25 Specialist tools and		response to client wants and	Positive and negative	
	including: • sketching	equipment How to select and use		•	impacts new products have on	
	modelling			needs.	the environment	
		specialist tools and			the environment	
	• testing	equipment.				

• evaluation of their work to improve outcomes.

## 20 Communication of design ideas

Develop, communicate, record and justify design ideas using a range of appropriate techniques

#### 21 Prototype development

Design and develop prototypes in response to client wants and needs.

## 22 Selection of materials and components

Select appropriate materials and components to make a prototype.

#### 23 Tolerances

Work accurately using tolerances.

#### 24 Material management 24a Cut materials efficiently and minimise waste

The importance of planning the cutting and shaping of material to minimise **24b Use appropriate** 

24b Use appropriate marking out methods, data points and coordinates

The use of data points and coordinates including the use of reference points, lines

## 26 Specialist techniques and processes

How to select and use specialist techniques and processes appropriate for the material and/or task and use them to the required level of accuracy in order to complete quality outcomes.

### 26a Surface treatments and finishes

How to prepare a material for a treatment or finish. How to apply an appropriate surface treatment or finish.

## 25 Specialist tools and equipment

How to select and use specialist tools and equipment.

## 26 Specialist techniques and processes

How to select and use specialist techniques and processes appropriate for the material and/or task and use them to the required level of accuracy in order to complete quality outcomes.

### 26a Surface treatments and finishes

How to prepare a material for a treatment or finish. How to apply an appropriate surface treatment or finish.

# 1h Production techniques and systems

The contemporary and potential future use of technologies.

1i How the critical evaluation of new and emerging technologies informs design decisions considering scenarios from different perspectives.

2 Energy generation and storage 2a Fossil fuels 2b Nuclear power 2c Renewable energy

2d Energy storage systems including batteries

#### 18 The work of others

Students should investigate, analyse and evaluate the work of past and present designers and companies to inform their own designing.

and surfaces, templates, jigs		
and/or patterns		
25 Specialist tools and		
equipment		
How to select and use		
specialist tools and		
equipment.		
26 Specialist techniques and		
processes		
How to select and use		
specialist techniques and		
processes appropriate for		
the material and/or task		
and use them to the		
required level of accuracy in		
order to complete quality		
outcomes.		
26a Surface treatments and		
finishes		
How to prepare a material		
for a treatment or finish.		
How to apply an appropriate		
surface treatment or finish.		