

## KS4 ATTAINMENT BAND EXPECTATIONS

### Year 9 – Design Technology GCSE

	<b>RED ATTAINMENT BAND (30%) GRADE 1-3</b>	<b>AMBER ATTAINMENT BAND (20%) GRADE 4</b>	<b>GREEN ATTAINMENT BAND (30%) GRADE 5-6</b>	<b>PURPLE ATTAINMENT BAND (20%) GRADE 7+</b>
Section A: Identifying & investigating design possibilities (10 marks)	Basic design possibilities identified. Link to a contextual challenge is unclear and student demonstrates only a limited understanding of the problems/ opportunities.	Design possibilities identified and explored with some link to a contextual challenge demonstrating adequate understanding of the problems/ opportunities.	Design possibilities identified and explored, linked to a contextual challenge demonstrating a good understanding of the problems/opportunities.	Design possibilities identified and thoroughly explored, directly linked to a contextual challenge demonstrating excellent understanding of the problems/opportunities.
Section A	An attempt has been made to identify a user/client but is not be relevant to the contextual challenge. Student has undertaken a basic investigation of their needs and wants, but given little explanation and justification of these	A user/client has been identified that is partially relevant to the contextual challenge. Student has undertaken an investigation of their needs and wants, with some explanation and justification of some aspects of these.	A user/client has been identified that is mostly relevant to the contextual challenge and student has undertaken an investigation of their needs and wants, with a good explanation and justification of most aspects of these	A user/client has been clearly identified and is entirely relevant in all aspects to the contextual challenge and student has undertaken a comprehensive investigation of their needs and wants, with a clear explanation and justification of all aspects of these.
Section B: Producing a design brief & specification (10 marks)	Basic design specification has minimal detail. Limited justification linking to the needs and wants of the client/user. Very little influence on subsequent design stages	Adequate design specification lacking some detail. Some justification linking to the needs and wants of the client/user. Informs subsequent design stages to some extent.	Detailed design specification with good justification linking to the needs and wants of the client/user. Largely informs subsequent design stages.	Comprehensive design specification with very high level of justification linking to the needs and wants of the client/user. Fully informs subsequent design stages

<p>Section C: Generating design ideas (20 marks)</p> <p>Students should explore a range of possible ideas linking to the contextual challenge selected. These design ideas should demonstrate flair and originality and students are encouraged to take risks with their designs</p>	<p>Basic ideas have been generated with clear design fixation and limited consideration of functionality, aesthetics and innovation</p>	<p>Imaginative ideas have been generated with a degree of design fixation and having some consideration of functionality, aesthetics and innovation</p>	<p>Imaginative and creative ideas have been generated which mainly avoid design fixation and have adequate consideration of functionality, aesthetics and innovation.</p>	<p>Imaginative, creative and innovative ideas have been generated, fully avoiding design fixation and with full consideration of functionality, aesthetics and innovation.</p>
<p>Section D Developing Design Ideas</p>	<p>Basic development work is evident, using a limited range of 2D/3D techniques (including CAD where appropriate) in order to develop a prototype.</p>	<p>Development work is sufficient, using some 2D/3D techniques (including CAD where appropriate) in order to develop a prototype.</p>	<p>Good development work is evident, using a range of 2D/3D techniques (including CAD where appropriate) in order to develop a prototype.</p>	<p>Very detailed development work is evident, using a wide range of 2D/3D techniques (including CAD where appropriate) in order to develop a prototype</p>
<p>Section E- Realising design ideas (20 marks)</p>	<p>Tools, materials and equipment (including CAM where appropriate) have been used or operated safely at a basic level.</p>	<p>The correct tools, materials and equipment (including CAM where appropriate) have been used or operated safely with an adequate level of skill.</p>	<p>The correct tools, materials and equipment (including CAM where appropriate) have been used or operated safely with a good level, of skill.</p>	<p>The correct tools, materials and equipment (including CAM where appropriate) have been consistently used or operated safely with an exceptionally high level of skill.</p>
<p>Section F: Analysing &amp; evaluating</p>	<p>Superficial analysis and evaluation. Little influence on the design brief and the design and manufacturing specifications.</p>	<p>Adequate analysis and evaluation is present at some stages of the project but does not have sufficient influence on the design brief and the design and manufacturing specifications.</p>	<p>Good analysis and evaluation at most stages of the project that influences the design brief and the design and manufacturing specifications.</p>	<p>Excellent ongoing analysis and evaluation evident throughout the project that clearly influences the design brief and the design and manufacturing specifications</p>

# Year 9 GCSE DESIGN TECHNOLOGY – Long Term Plan 2019-20

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
<b>Term 1</b>	Lighting Project- Intro to project Memphis design	2. Design Brief  3-Mood board	4- Disassembly of product- lighting  5- specifications	6,7 Design ideas, annotated  WIN	8, 9  Woods- corner halving joints	10, 11 Making frame of wood	12, 13  WIN- technical knowledge woods	14, 15 Intro to plastics
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
<b>Term 2</b>	16, 17 Vacuum forming	18, CAD add print  19, technical knowledge plastics	20, 21 Electronics Begin circuit	22, 23 Complete circuit for lighting	24, Technical knowledge- Inputs, outputs. 25- insert circuit	<i>PRAG Progress week</i> 26, 27  <i>Add appropriate finishes, paints, varnish</i>	Evaluation of Product  28,29  WIN- Making of product	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
<b>Term 3</b>	Pewter Casting project Design Brief	Design Ideas WIN  CAD/ CAM	COMPLETE 2D DESIGN	MAKE MOULD FOR PEWTER	Practical Revision and consolidation Trust Revision booklets.	Evaluate final product		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
<b>Term 4</b>	Mechanical devices	levers	Motion Win assessment	Renewable energy	Nuclear power	Composite/ smart materials		
	Week 1	Week 2	Week 3	Week 4	Week 5			
<b>Term 5</b>	Systems- inputs/ outputs		Forces and stresses	Win- assessment	Materials/ composite/ smart			
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
<b>Term 6</b>	Ecological and social	Paper Cams mechanisms	Making card mechanism	Making card mechanism		Win assessment final graphics product		