

## Year 7 Rotation 1 Design and Technology – Mechanical Car Learning Journey 2018-2019

W	Date	Covering the <b>Key Concepts</b> – 2 x 9 week rotations	Identify and investigate	Design and Make	Analyse and Evaluate	Demonstrate and apply Knowledge		Assessment
1	03.09.18	<b>Balloon Boat</b> - Use Third Angle Projection. H&S. Tools and Equipment. Measure and mark for balloon boat. Drilling/accuracy					Balloon Boat and Mechanical car	
2	10.09.18	Assembly. Testing. Isometric drawing of boat base= render looking like wood.						Peer assessment
3	17.09.18	<b>Mechanical Car</b> . Review <b>design brief and specification</b> - add points to specification. Write task analysis. Information on TAP drawing. Marking and measuring sides for the car. Cut and shape.						
4	24.09.18	Production methods. Jigs, templates and formers. Tools ID. Drilling hole for follower.						
5	01.10.18	Continue assembly of body of car. Adhere in position. Affix living contour. Drawing and labelling of Cams. Movement symbols.						Self-assessment
6	08.10.18	RAP						
7	15.10.18	Line bending. Plastics forming info. Assembly of follower. Production schedule – fill in details/missing gaps.						
8	22.10.18	Surface finishes and adhesives. Wax.						
9	29.10.18	Evaluation and develop methods of testing. Own review.						Teacher Assessment

<b>FLIGHT PATH STICKER</b>	<u>Key Constructs</u>
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<b>AO1</b>	<b>Identify, Investigate and outline design possibilities to address needs and wants.</b>
<b>AO2</b>	<b>Design and Make Prototypes that are fit for purpose.</b>
<b>AO3</b>	<b>Analyse and evaluate:</b> <ul style="list-style-type: none"> <li>• Designer decisions and outcomes, including for prototypes made by yourself and others</li> </ul> <b>Wider issues in design and technology</b>
<b>AO4</b>	<b>Demonstrate and apply knowledge and understanding of:</b> <ul style="list-style-type: none"> <li>• technical principles</li> </ul> <b>designing and making principles</b>

Date teacher	ASSESSMENT	Grade	B4L (optional)	Target(s) to make progress/Assessment feedback
	Peer assessment <b>AO2</b> <b>Presentation drawing</b>			
	Self -assessment <b>AO2</b> <b>Make prototypes that are fit for purpose</b>			
	Teacher assessment <b>AO3</b> <b>Analyse and</b>			

	Evaluate			
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### Year 7 Rotation 1 Design and Technology – Insulator Learning Journey 2018-2019

W	Date	Covering the Key Concepts – 2 x 9 week rotations	Identify and Investigate	Design and Make	Analyse and Evaluate	Demonstrate and apply Knowledge		Assessment
1	04.02.19	What is a fabric/ material? Fabric properties identification and identifying situations when they may be needed.					<b>Insulator</b>	Peer Assessment
		Mono printing – samples on paper						
2	11.02.19 25.02.19	Analysis of brief. What properties will be required for the product? Target market analysis.						
		Mono printing evaluation of sample and final print on fabric.						
3	04.03.19 11.03.19	Investigate cotton. Understanding of stencils and screen printing.						
		Design and develop a stencil of a cotton boll for screen printing						
4		Complete stencil. Screen Print. Screen print process.						
5	18.03.19	Fixing. what is fixing? Insulating properties of fabric and quilted fabric – testing. Develop design ideas Self-assess design ideas.						Self-assessment
6		Using a pattern (template), cutting out fabric. Assemble fabric layers and elastic, pin and tack together- temporary stitching. Learning how to use the sewing machine and complete a driving test. Machine stitch around the edge of the product leaving a gap for turning						
7	25.03.19	Evaluate work completed. Do any changes need to be made to quilted design? Tack gap closed and using tailors chalk mark quilting lines.						
8	01.04.19	RAP complete all practical. Extension task: research the differences between natural and synthetic fibres. What are. How are they made.						
9 10	22.04.19	Complete quilting. Be able to describe the quilting process. Evaluate work					Teacher Assessment	

<b>FLIGHT PATH STICKER</b>	<u>Key Constructs</u>
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Date teacher	ASSESSMENT	Grade	B4L (optional)	Target(s) to make progress/Assessment feedback
	Peer assessment <b>A02 Presentation drawing</b>			
	Self -assessment <b>A02 Make prototypes that are fit for purpose</b>			

	Teacher assessment <b>A03</b> Analyse and Evaluate			
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### Year 7 Rotation 2 Design and Technology – Mechanical Car Learning Journey 2018-2019

W	Date	Covering the <b>Key Concepts</b> – 2 x 9 week rotations	Identify and investigate	Design and Make	Analyse and Evaluate	Demonstrate and apply Knowledge		Assessment
1	19.11.18	<b>Balloon Boat-</b> Use Third Angle Projection. H&S. Tools and Equipment.					Balloon Boat and Mechanical car	
		Measure and mark for balloon boat. Drilling/accuracy						
2	26.11.18	Assembly. Testing. Isometric drawing of boat base= render looking like wood.						Peer assessment
3	03.12.18	<b>Mechanical Car.</b> Review <b>design brief and specification-</b> add points to specification. Write task analysis. Information on TAP drawing.						
		Marking and measuring sides for the car. Cut and shape.						
4	10.12.18	Production methods. Jigs, templates and formers. Tools ID. Drilling hole for follower.						
5	17.12.18	Continue assembly of body of car. Adhere in position. Affix living contour. Drawing and labelling of Cams. Movement symbols.						Self-assessment
6	07.01.19	RAP						
7	14.01.19	Line bending. Plastics forming info. Assembly of follower. Production schedule – fill in details/missing gaps.						
8	21.01.19	Surface finishes and adhesives. Wax.						
9	28.01.19	Evaluation and develop methods of testing. Own review.					Teacher Assessment	

<b>FLIGHT PATH STICKER</b>		<u>Key Constructs</u>
<b>AO1</b>	Identify, Investigate and outline design possibilities to address needs and wants.	
<b>AO2</b>	Design and Make Prototypes that are fit for purpose.	
<b>AO3</b>	Analyse and evaluate: <ul style="list-style-type: none"> <li>Designer decisions and outcomes, including for prototypes made by yourself and others</li> </ul> <b>Wider issues in design and technology</b>	
<b>AO4</b>	Demonstrate and apply knowledge and understanding of: <ul style="list-style-type: none"> <li>technical principles</li> <li>designing and making principles</li> </ul>	

Date teacher	ASSESSMENT	Grade	B4L (optional)	Target(s) to make progress/Assessment feedback
	Peer assessment <b>A02</b> Presentation drawing			
	Self -assessment <b>A02</b> Make prototypes that are fit for purpose			

Teacher assessment <b>A03</b> Analyse and Evaluate			
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### Year 7 Rotation 2 Design and Technology – Insulator Learning Journey 2018-2019

W	Date	Covering the Key Concepts – 2 x 9 week rotations	Identify and Investigate	Design and Make	Analyse and Evaluate	Demonstrate and apply Knowledge	Assessment
1	29.04.19	What is a fabric/ material? Fabric properties identification and identifying situations when they may be needed.					<b>Insulator</b>
		Mono printing – samples on paper					
2	06.05.19	Analysis of brief. What properties will be required for the product? Target market analysis.					
		Mono printing evaluation of sample and final print on fabric.					
3	13.05.19	Investigate cotton. Understanding of stencils and screen printing.					
		Design and develop a stencil of a cotton boll for screen printing					
4	20.05.19	Complete stencil. Screen Print. Screen print process.					
5	03.06.19	Fixing. what is fixing? Insulating properties of fabric and quilted fabric – testing. Develop design ideas Self-assess design ideas.				Self-assessment	
6	10.06.19	Using a pattern (template), cutting out fabric. Assemble fabric layers and elastic, pin and tack together- temporary stitching. Learning how to use the sewing machine and complete a driving test. Machine stitch around the edge of the product leaving a gap for turning					
7	17.06.19	Evaluate work completed. Do any changes need to be made to quilted design? Tack gap closed and using tailors chalk mark quilting lines.					
8	24.06.19	EOYE					
9 10	01.07.19	Complete quilting. Be able to describe the quilting process. Evaluate work				Teacher Assessment	

<b>FLIGHT PATH STICKER</b>	<u>Key Constructs</u>
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Date teacher	ASSESSMENT	Grade	B4L (optional)	Target(s) to make progress/Assessment feedback
	Peer assessment <b>A02</b> Presentation drawing			
	Self -assessment <b>A02</b> Make prototypes that are fit for purpose			

	Teacher assessment <b>A03</b> <b>Analyse and Evaluate</b>			
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