

KEY STAGE 4 – AUTUMN HALF TERM 1

		WK1	WK2	WK3	WK4	WK5	WK6
Year 10- acrylic phone holder							
Year 10	Content	Intro to H&S and the workshop rules. Product analysis on existing spinning toy. Plastic knowledge. Specification buzzword	Intro to a jig. Manufacturing process for plastics. Recap of tools and machines. List tools and uses in booklet.	Specification write up. Customer identified. Begin planning phone holder. Model make from card/ cardboard	4 Design ideas using the specification and points to consider to design 4 different ideas. Annotated and colour, showing 3D in their drawings and realism in their colouring. Complete the card model		Final design idea draw showing front and back view in detail.
	Assessment			Diagnostic mark	Assessment/peer assessment		
				Quality Assurance on model making and success for their idea for a phone holder Feedback from Miss.	How realistic and real does your idea look. Has it been drawn in 3D and have you annotated the key features?		
	Wednesday theory	Plastic knowledge and research. Watch video and create powerpoint research. Buzzword- Design brief	Continue materials research. Buzzword- Jig Research what a JIG is used for in DT	Mini report from Miss regarding feedback and targets to set this half term. Set individual personal target. Intro to CAD drawing on 2D design	CAD drawing of phone holder to be continued. Buzzword CAD	CAD drawing of phone holder to be continued Buzzword CAM	CAD drawing of phone holder to be continued. Buzzword Tolerance
Home LEARNING	Carousel quiz #1	Carousel quiz #2	Carousel quiz #3	Carousel quiz #4	Carousel quiz #5	Carousel quiz #6	

		WK1	WK2	WK3	WK4	WK5	WK6
Year 11- Non-exam assignment and exam prep							
Year 11	Content	Section A-Research- 10 marks- Recap of NEA and mind mapping for theme. Examples of NEA shown and expectations. Survey for customers to begin research.	Results from the surveys analysed and presented on eportfolio. NEA researched in depth with possible problems identified. Primary research product analysis- ACCESS FM Practical- 4 different Joints	Product analysis of existing products for NEA Record interview findings and research findings for existing products for NEA. Level and assess success of stool project making. Take stools home. Practical- 4 different Joints	Product analysis and existing products on e-portfolio for. Customer identified and customer profile created. Problem clearly identified. Practical- 4 different Joints	Problem clearly identified. Materials research Anthropometrics Ergonomics Plan of product range to design and investigate. Place of where product would be used.	Exam questions prep for mock exam- Hoovers product analysis. Shop research. Secondary research online. Existing products.
	Assessment	Verbal feedback to whole class about e-portfolio and what is needed. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed		Diagnostic mark- practical stool		Verbal feedback to whole class about e-portfolio and what is missing. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed	
				How accurate are the joints. Presentation and skill involved? Key features?			
Home LEARNING	Carousel quiz #1	Carousel quiz #2	Carousel quiz #3	Carousel quiz #4	Carousel quiz #5	Carousel quiz #6	

KEY STAGE 4 – AUTUMN HALF TERM 2

Year 10

	WK1	WK2	WK3	WK4	WK5	WK6
Year 10- acrylic phone holder						
Content	Practice line bending and test run with phone holder. Improve and tweak design on CAD for laser.	Cut out acrylic phone holder and line bend into shape. Sand and smooth edges.	Check QC. Evaluate practical work. Peer assessment and evaluation for their project. Evaluation and testing against specification. Finishing off practical. Improvements from evaluation and improvements made.		New project begins- Nightlight. Cutting MDF finger joints accurately and measuring accurately using template if needed. 4 shapes for the night light to be cut out. Hand tools and scroll saws.	
Assessment	Assess the phone holder and progress made. Pros and cons.		Final lesson- Evaluation and finishing off the toy. peer assessment WWW and EBI			
			Quality Assurance and Quality control as a class. Peer assessment and Feedback from Miss.	Assess the phone holder and progress made. Pros and cons. What would be changed if this exercise was repeated?		
Wednesday theory	Last lesson on final design CAD work of phone holder. Print out and glue in booklets. Buzzword- Quality Control	Continue materials research. Buzzword- Jig Research what a JIG is used for in DT	Plastics intro- Polymers and heating techniques. Recap on plastics. Research and create power point.	Next project intro- Night light intro. Eportfolio introduction. Examples of night lights- existing products. Slide 1.	Customer profile of who will use the night light. Buzzword Tessellating and nesting	Theme board for night light. Using CAD to draw orthographic drawing of night light.
Home LEARNING	Carousel quiz #7	Carousel quiz #8	Carousel quiz #9	Carousel quiz #10	Carousel quiz #11	Carousel quiz #12

Year 11

	WK1	WK2	WK3	WK4	WK5	WK6
Year 11- Non-exam assignment and exam prep						
Content	Exam prep- Orthographic projection. Working drawings and meanings of lines. MOCK EXAM. Primary shop research-analyzing existing products. Run through mock exam paper and discuss answers and results.	Designers and iconic influencers. Design movements who are iconic and iconic designers. Theme board for NEA. Inspiration from artists, designers, design movements. Theme board for NEA. Inspiration from artists, designers, design movements.	Section B- Design brief and design specification- 10 marks. Detailed design brief clearly identifying the customer needs and problem to be solved. ACCESS FM design specification detailed and clear. Print out mood boards		Section C-Initial design ideas- 20 marks- 3 sheets of A3 with a wide range of ideas to answer customers problem and needs.	Initial design ideas- 20 marks- 3 sheets of A3 with a wide range of ideas to answer customers problem and needs. CAD drawings to be included showing skills. Annotation added to explain.
Assessment	Verbal feedback to whole class about e-portfolio and what is missing. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed		Diagnostic mark- Eportfolio			
			Verbal feedback to whole class about e-portfolio and what is missing. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed			
Home LEARNING	Carousel quiz #7	Carousel quiz #8	Carousel quiz #9	Carousel quiz #10	Carousel quiz #11	Carousel quiz #12

KEY STAGE 4 – SPRING TERM 1

WK1

WK2

WK3

WK4

WK5

WK6

Year 10

Year 10- night light

Content	Cutting out finger joints out of MDF Eportfolio begin for theory night light.	Isometric drawing of nightlight using grid paper. Cutting out finger joints out of MDF. Soldering circuit.	Toppers for nightlight. Side shapes to be cut. Soldering done. Add grooves into the inside of the MDF shapes for plastic to sit.	Toppers for nightlight. Side shapes to be cut. Soldering done. Use the vacuum former to create the HIPS reforming process. Using the MDF as formers. Paint the MDF with decoration for a finish.	Final lesson on night lights. Complete manufacturing and assemble.	
Assessment			Diagnostic mark	Assessment/peer assessment		
			QA on MDF sides. Peer assessment. Feedback from Miss.	Peer assessment and constructive feedback		
Wednesday theory	Carousel quiz to assess students knowledge from previous term. CAD work for night light. Orthographic view. 4 separate pieces.	CAD work for night light. Orthographic view. 4 separate pieces.	Mini report from Miss regarding feedback and targets to set this half term. Set individual personal target. Isometric drawing using tech soft 3v	Include all CAD work to e-portfolios. Write up specification of night light. ACCESS FM	Evaluate the night light against the specification	Evaluate the night light against the specification And complete all aspects of night light eportfolio.
Home LEARNING	Carousel quiz #13	Carousel quiz #14	Carousel quiz #15	Carousel quiz #16	Carousel quiz #17	Carousel quiz #18

WK1

WK2

WK3

WK4

WK5

WK6

Year 11

Year 11- Non-exam assignment and exam prep

Content	Practical- book holder for the library to display books. Problem solving challenge over 2 lessons. Section C- Initial design ideas- 20 marks- CAD drawings to be included showing skills. Annotation added to explain	Section C- Initial design ideas- 20 marks- 3 sheets of A3 with a wide range of ideas to answer customers problem and needs. CAD drawings to be included showing skills. Annotation added to explain.	Section C- Initial design ideas- 20 marks- 3 sheets of A3 with a wide range of ideas to answer customers problem and needs. CAD drawings to be included showing skills. Annotation added to explain. Peer assessment of ideas.	Section D- Development of ideas. Taking 3 ideas forward to model make and develop into prototypes to test different opportunities and possibilities for possible solution to customers problem. Imaginative and inspiring.	Section D- Development of ideas. Taking 3 ideas forward to model make and develop into prototypes to test different opportunities and possibilities for possible solution to customers problem. Imaginative and inspiring. Photos as evidence.	Exam questions prep Mock exam 2 nd Feb 1 hour Discuss and go through mock paper Section D- Development of ideas continued.
Assessment	Mock exam revision	Tick list for sections A and B given for each student to check	Diagnostic mark- development of ideas. Presentation of work? Creative designs and ability to solve customers problem. Unique and imaginative?		Verbal feedback to whole class about e-portfolio and what is missing. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed. Peer assessment comments sheet.	
Home LEARNING	Carousel quiz #13	Carousel quiz #14	Carousel quiz #15	Carousel quiz #16	Carousel quiz #17	Carousel quiz #18

KEY STAGE 4 – SPRING TERM 2

WK1

WK2

WK3

WK4

WK5

WK6

Year 10- Stool project

Year 10	Content	New project begins- Timber stool. Cutting pine mortice and Tenon joints accurately and measuring accurately using template if needed.	Timber stool. Cutting pine mortice and Tenon joints accurately and measuring accurately using template if needed.	Using the wood turner lathe to make a spindle for the base of the stool. Mortice and Tenon joints for each side of the 4 legs on the stool. Timber stool. Cutting pine mortice and Tenon joints accurately and measuring accurately using template if needed.	Upholstery on seat area of the stool. Complete the other sections. Varnish and stain with wood stain.	Upholstery on seat area of the stool. Complete the other sections. Varnish and stain with wood stain.	
	Assessment			Diagnostic mark	peer assessment WWW and EBI		
				QA on the wooden stool so far and progress made. Feedback from Miss.	Evaluate- Assess the toy and progress made. Pros and cons. What would be changed if this exercise was repeated?		
	Wednesday theory	New eportfolio for stool project. Initial designs- A wide range of designs for a possible stool design.	.Initial designs- A wide range of designs for a possible stool design. Detailed specification written for the stool. ACCESS FM	Development of ideas through sketches and CAD.	Development of ideas through sketches and CAD.	Manufacturing diary. Plan of make, step by step how product has been made.	
	Home LEARNING	Carousel quiz #19	Carousel quiz #20	Carousel quiz #21	Carousel quiz #22	Carousel quiz #23	Carousel quiz #24

Year 11- Non exam assignment and exam prep

Year 11	Content	Section D- Development of ideas. Taking 3 ideas forward to model make and develop into prototypes to test different opportunities and possibilities for possible solution to customers problem. Imaginative and inspiring. Photos as evidence. Wooden/material models.	Section E- Begin making prototype for real with possibilities for development and best idea for the solution of customer problem. Imaginative and inspiring. Photos as evidence. Wooden/material models.	Section E- Begin making prototype for real with possibilities for development and best idea for the solution of customer problem. Imaginative and inspiring. Photos as evidence. Wooden/material models. Updating eportfolio each week with their manufacturing diary showing progress and trials and experiments throughout. Annotation and summaries for photos explaining why decisions were made.	Section E- Begin making prototype for real with possibilities for development and best idea for the solution of customer problem. Imaginative and inspiring. Photos as evidence. Wooden/material models. Updating eportfolio each week with their manufacturing diary showing progress and trials and experiments throughout. Annotation and summaries for photos explaining why decisions were made.		
	Assessment	Verbal feedback to whole class about e-portfolio and what is missing.		Diagnostic mark- Eportfolio	Verbal feedback to whole class about e-portfolio and what is missing.		
				Verbal feedback to whole class about e-portfolio and what is missing. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed- peer assessment.			
	Home LEARNING	Carousel quiz #19	Carousel quiz #20	Carousel quiz #21	Carousel quiz #22	Carousel quiz #23	Carousel quiz #24

KEY STAGE 4 – SUMMER TERM 1

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
		Year 10- cam toy project					
Year 10	Content	Final lesson on the stool project. Hinges attached to allow the stool part to open.	Intro to a cam and how cams work for a small toy. Motion and movement.	Specification write up. Customer identified. Begin model making cam toy.	1 cam toy to be design through model making and evaluated and tested throughout. Check that it works, problems solved and a plan of make to move forward their idea. Peer assessment and testing throughout.	Final design idea draw showing front and back view in detail with cam.	
	Assessment			Diagnostic mark	Assessment/peer assessment		
				Quality Assurance on the model. Feedback from Miss.		How realistic and real does your idea look. Has it been drawn in 3D and have you annotated the key features?	
	Wednesday theory		Cam's Levers Pulley system	Mini report from Miss regarding feedback and targets to set this half term. Set individual personal target.	CAD drawing of cam toy to be continued. Buzzword CAD CAM	CAD drawing of toy to be continued Buzzword CAM	CAD drawing of toy to be continued. Buzzword- motion and movements.
Home LEARNING	Carousel quiz #25	Carousel quiz #26	Carousel quiz #27	Carousel quiz #28	Carousel quiz #29	Carousel quiz #30	

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
		Year 11- Non-exam assignment and exam prep					
Year 11	Content	Manufacturing diary and evaluation against specification. 1 hour theory room 29 for eportfolio work. Tuesday KS4 after school catch up sessions.	Manufacturing diary and evaluation against specification. 1 hour theory room 29 for eportfolio work. Tuesday KS4 after school catch up sessions. Photographs of final products to be taken and added to eportfolio.	Last week on NEA project to be saved as shown and all completed. Photographs of final products to be taken and added to eportfolio. Slide 20 completed.	Non-exam assignment deadline. Exam prep- Manufacturing procedures- Injection moulding Extrusion Blow moulding Materials and properties	Exam prep- Exploded view Orthographic views Isometric Product analysis Exam questions	Exam questions- Design movements Designers and influence
	Assessment	Verbal feedback to whole class about e-portfolio and what is missing. All students are clear on their customer and the problem that needs to be addressed. Examples of good and bad shown as reference. Examples to follow if needed					
	Home LEARNING	Carousel quiz #25	Carousel quiz #26	Carousel quiz #27	Carousel quiz #28	Carousel quiz #29	Carousel quiz #30

KEY STAGE 4 – SUMMER TERM 2

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
		Year 10- cam toy project				GCSE Non-exam assignment	
Year 10	Content	Continue to manufacture the cam and use appropriate materials and tools and equipment needed.	Continue to manufacture the cam and use appropriate materials and tools and equipment needed.	Add paint and finishing touches to the cam toy. Evaluate, test and photograph.		Begin NEA from AQA- Contextual challenge Begin research and customer survey.	Research contextual challenge and what it means. Who, what, where, when, why, how
	Assessment			Diagnostic mark	Final lesson- Evaluation and finishing off the toy. peer assessment WWW and EBI		
				Feedback from Miss.	Evaluate- assess the toy and progress made. Pros and cons. What would be changed if this exercise was repeated?		
	Wednesday theory	Last lesson on final design CAD work of spinning toy. Print out and glue in booklets. Buzzword- Quality Control	Exam questions prep Diagnostic marking to understand any misconceptions and address these.	Exam prep practice papers from last year.		Begin NEA from AQA- Contextual challenge Begin research and customer survey.	Research contextual challenge and what it means. Who, what, where, when, why, how
	Homework	Carousel quiz #7	Carousel quiz #8	Carousel quiz #9	Carousel quiz #10		

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
		Year 11- Non-exam assignment and exam prep					
Year 11	Content	Exam prep- Orthographic projection. Working drawings and meanings of lines. Primary shop research- analyzing existing products. Carousel full 50 question qiiz	Run through mock exam paper and discuss answers and results. Materials Moral, social, ethics Carousel full 50 question quiz	Year 11 DT exam			
	Assessment	Practice mock papers and questions in class. Feedback given. Exam tips and preparation.					
	Homework	Carousel quiz #31	Carousel quiz #32				