

## Key Stage 3 Long Term Planning

### Year 7 2021-2022 INTENT: Designing Your Own Puzzle (Tangram Puzzle)

(Pupils spend a term with their DT teacher before rotating. They experience 3 different DT mediums throughout the year.)

#### Faculty Area: Business Technology (Design Technology)

Year 7	Transition	Autumn 1 (rotation 1)	Autumn 2 (rotation 1)	Spring 1 (rotation 2)	Spring 2 (rotation 2)	Summer 1 (rotation 3)	Summer 2 (rotation 3)
<b>Knowledge</b>	Be able to show that making mistakes or failure to complete a task is not the end of the road. In fact, it's the beginning of another road/journey to progressing your learning.	Pupils will use a wide range of materials to design and make products. In this project pupils will work out their ideas with some accuracy, taking into account how products are made, who will use them, the material that will be used and their appearance.	They will develop their understanding of making and expand their design (CAD) skills. They will use a range of techniques, equipment (Hardware) and materials. The main aim of this project is to develop pupils understanding of CAD/CAM techniques	Pupils will use a wide range of materials to design and make products. In this project pupils will work out their ideas with some accuracy, taking into account how products are made, who will use them, the material that will be used and their appearance.	They will develop their understanding of making and expand their design (CAD) skills. They will use a range of techniques, equipment (Hardware) and materials. The main aim of this project is to develop pupils understanding of CAD/CAM techniques	Pupils will use a wide range of materials to design and make products. In this project pupils will work out their ideas with some accuracy, taking into account how products are made, who will use them, the material that will be used and their appearance.	They will develop their understanding of making and expand their design (CAD) skills. They will use a range of techniques, equipment (Hardware) and materials. The main aim of this project is to develop pupils understanding of CAD/CAM techniques
<b>Skills</b>	To develop their reasoning skills when it comes to choosing a particular design. The correct use of the English language (words and phrases)	Students will be given a focused practical task to make a tangram puzzle to a set specification. They will develop specific design skills which are paper and computer based.	The project allows pupils to understand basic principles of, manufactured board & joints, hardware and software and health & safety. This will lead them onto developing specific drawing skills used the CAD software	Students will be given a focused practical task to make a tangram puzzle to a set specification. They will develop specific design skills which are paper and computer based.	The project allows pupils to understand basic principles of, manufactured board & joints, hardware and software and health & safety. This will lead them onto developing specific drawing skills used the CAD software	Students will be given a focused practical task to make a tangram puzzle to a set specification. They will develop specific design skills which are paper and computer based.	The project allows pupils to understand basic principles of, manufactured board & joints, hardware and software and health & safety. This will lead them onto developing specific drawing skills used the CAD software
<b>Connections to previous learning</b>	Activities which have been explored and utilised in primary school (model making, etc)	Design work carried out in primary school	Computer work carried out in primary school. This could also include any hobbies which the pupils have been engaged in.	Design work carried out in primary school	Computer work carried out in primary school. This could also include any hobbies which the pupils have been engaged in.	Design work carried out in primary school	Computer work carried out in primary school. This could also include any hobbies which the pupils have been engaged in.
<b>Assessment</b>	Group discussion and interaction with individual pupils	<p><i>Point 1</i> To demonstrate if they are able to draw an accurate tangram puzzle on paper within a given tolerance. If the drawing is out of tolerance, then they are required to draw it again</p> <p><i>Point 2</i> To be able to independently draw using the skills developed throughout the computer lessons an accurate CAD design of their puzzle</p> <p><i>Point 3</i> Completing the comprehension exercise which relates to the use of paper and varying sizes</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i> End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</p>	<p><i>Point 1</i> To demonstrate if they are able to draw an accurate tangram puzzle on paper within a given tolerance. If the drawing is out of tolerance, then they are required to draw it again</p> <p><i>Point 2</i> To be able to independently draw using the skills developed throughout the computer lessons an accurate CAD design of their puzzle</p> <p><i>Point 3</i> Completing the comprehension exercise which relates to the use of paper and varying sizes</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i> End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</p>	<p><i>Point 1</i> To demonstrate if they are able to draw an accurate tangram puzzle on paper within a given tolerance. If the drawing is out of tolerance, then they are required to draw it again</p> <p><i>Point 2</i> To be able to independently draw using the skills developed throughout the computer lessons an accurate CAD design of their puzzle</p> <p><i>Point 3</i> Completing the comprehension exercise which relates to the use of paper and varying sizes</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i> End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</p>
<b>Homework</b>		To research the origins of 'Chinese puzzles' [tangram]. Establish the reasons for their production, use and sales. What are the rules governing a tangram puzzle?	Keywords and their meanings to be completed by the pupils. This will help them during the CAD design stages and final evaluation stage	To research the origins of 'Chinese puzzles' [tangram]. Establish the reasons for their production, use and sales. What are the rules governing a tangram puzzle?	Keywords and their meanings to be completed by the pupils. This will help them during the CAD design stages and final evaluation stage	To research the origins of 'Chinese puzzles' [tangram]. Establish the reasons for their production, use and sales. What are the rules governing a tangram puzzle?	Keywords and their meanings to be completed by the pupils. This will help them during the CAD design stages and final evaluation stage

# MOOR PARK HIGH SCHOOL: CURRICULUM

<b>Capital Cultural enrichment including Trips, Visits, Experiences, Extra-curricular</b>		Watch: 'Engineering Connections: Why the designers require to be accurate'. What are the key factors which are taken into consideration	Watch: 'Engineering Connections: How the designers go about being accurate'. What is the level of accuracy needed for different types of products	Watch: 'Engineering Connections: Why the designers require to be accurate'. What are the key factors which are taken into consideration	Watch: 'Engineering Connections: How the designers go about being accurate'. What is the level of accuracy needed for different types of products	Watch: 'Engineering Connections: Why the designers require to be accurate'. What are the key factors which are taken into consideration	Watch: 'Engineering Connections: How the designers go about being accurate'. What is the level of accuracy needed for different types of products
<b>Literacy</b>		Completing their puzzle challenges in the booklet and giving a reason for their choices	Expressing their opinion on their personal thoughts regarding a particular product or design	Completing their puzzle challenges in the booklet and giving a reason for their choices	Expressing their opinion on their personal thoughts regarding a particular product or design	Completing their puzzle challenges in the booklet and giving a reason for their choices	Expressing their opinion on their personal thoughts regarding a particular product or design
<b>Numeracy</b>		Measuring: Using the ruler to accurately mark out their puzzle design. Converting from mm to cm and vice versa	Measuring: Using the global positioning system in the CAD software to measure their lines accurately	Measuring: Using the ruler to accurately mark out their puzzle design. Converting from mm to cm and vice versa	Measuring: Using the global positioning system in the CAD software to measure their lines accurately	Measuring: Using the ruler to accurately mark out their puzzle design. Converting from mm to cm and vice versa	Measuring: Using the global positioning system in the CAD software to measure their lines accurately
<b>CIAG</b>		<b>Product Designers:</b> What do they need to take into consideration when designing a new product? <b>Market Researchers:</b> How do they collect evidence from the public?	<b>Engineers:</b> How do they use product analysis methods to help develop a solution?	<b>Product Designers:</b> What do they need to take into consideration when designing a new product? <b>Market Researchers:</b> How do they collect evidence from the public?	<b>Engineers:</b> How do they use product analysis methods to help develop a solution?	<b>Product Designers:</b> What do they need to take into consideration when designing a new product? <b>Market Researchers:</b> How do they collect evidence from the public?	<b>Engineers:</b> How do they use product analysis methods to help develop a solution?

## Key Stage 3 Long Term Planning

### Year 8 2021-2022 INTENT: Designing Your Own Souvenir (Coin Display Stand)

Faculty Area: Business Technology (Design Technology)

Year 8	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Knowledge</b>	In this project pupils will work out their ideas with some precision, taking into account how products are made, who will use them, the materials that will be used and their appearance. They will develop their understanding of making and expand their practical skills	They will use a range of tools, machinery and materials. The main aim of this project is to develop pupils understanding of manufacture, through the use of traditional production techniques and their understanding of CAD/CAM techniques from the previous projects (Yr 7)	In this project pupils will work out their ideas with some precision, taking into account how products are made, who will use them, the materials that will be used and their appearance. They will develop their understanding of making and expand their practical skills	They will use a range of tools, machinery and materials. The main aim of this project is to develop pupils understanding of manufacture, through the use of traditional production techniques and their understanding of CAD/CAM techniques from the previous projects (Yr 7)	In this project pupils will work out their ideas with some precision, taking into account how products are made, who will use them, the materials that will be used and their appearance. They will develop their understanding of making and expand their practical skills	They will use a range of tools, machinery and materials. The main aim of this project is to develop pupils understanding of manufacture, through the use of traditional production techniques and their understanding of CAD/CAM techniques from the previous projects (Yr 7)
<b>Skills</b>	Students will be given a focused practical task to make a Souvenir coin display stand to a set process.  The project allows pupils to understand basic principles of, wood, wood to other materials joints, hand tools and equipment, joining techniques, health & safety, CAD/CAM techniques.	The project builds upon design and making skills previously learnt and helps to combine the traditional with the modern. Pupils will also be introduced to other areas of design including: To enable pupils to develop their practical skills.	Students will be given a focused practical task to make a Souvenir coin display stand to a set process.  The project allows pupils to understand basic principles of, wood, wood to other materials joints, hand tools and equipment, joining techniques, health & safety, CAD/CAM techniques.	The project builds upon design and making skills previously learnt and helps to combine the traditional with the modern. Pupils will also be introduced to other areas of design including: To enable pupils to develop their practical skills.	Students will be given a focused practical task to make a Souvenir coin display stand to a set process.  The project allows pupils to understand basic principles of, wood, wood to other materials joints, hand tools and equipment, joining techniques, health & safety, CAD/CAM techniques.	The project builds upon design and making skills previously learnt and helps to combine the traditional with the modern. Pupils will also be introduced to other areas of design including: To enable pupils to develop their practical skills.
<b>Connections to previous learning</b>	Building on the basic foundations of CAD/CAM exposure in yr7	Using the H&S knowledge from yr7 to engage with materials and machinery in a safe and controlled environment	Building on the basic foundations of CAD/CAM exposure in yr7	Using the H&S knowledge from yr7 to engage with materials and machinery in a safe and controlled environment	Building on the basic foundations of CAD/CAM exposure in yr7	Using the H&S knowledge from yr7 to engage with materials and machinery in a safe and controlled environment
<b>Assessment</b>	<p><i>Point 1</i> Be able to demonstrate accurate skills in using the machinery and with safety in mind at all times</p> <p><i>Point 2</i> To be able to independently draw using the skills developed throughout the computer lessons an accurate CAD design of their chosen theme</p> <p><i>Point 3</i> Record an appropriate plan, outlining the methods and processes used to achieve a favorable outcome</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i> End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</p>	<p><i>Point 1</i> Be able to demonstrate accurate skills in using the machinery and with safety in mind at all times</p> <p><i>Point 2</i> To be able to independently draw using the skills developed throughout the computer lessons an accurate CAD design of their chosen theme</p> <p><i>Point 3</i> Record an appropriate plan, outlining the methods and processes used to achieve a favorable outcome</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i> End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</p>	<p><i>Point 1</i> Be able to demonstrate accurate skills in using the machinery and with safety in mind at all times</p> <p><i>Point 2</i> To be able to independently draw using the skills developed throughout the computer lessons an accurate CAD design of their chosen theme</p> <p><i>Point 3</i> Record an appropriate plan, outlining the methods and processes used to achieve a favorable outcome</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i> End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</p>
<b>Homework</b>	Produce a convincing and thoughtful marketing strategy to be able to sell their chosen themed souvenir	Redesign an existing souvenir based on the knowledge they have gained about the process of 'design'	Produce a convincing and thoughtful marketing strategy to be able to sell their chosen themed souvenir	Redesign an existing souvenir based on the knowledge they have gained about the process of 'design'	Produce a convincing and thoughtful marketing strategy to be able to sell their chosen themed souvenir	Redesign an existing souvenir based on the knowledge they have gained about the process of 'design'
<b>Capital Cultural enrichment including Trips, Visits,</b>	Souvenirs around the world and their symbolism/significance. How the availability of materials and methods determines the design/product on offer	Watch: Industrial processes which shaped our lives. Discussion on the nature of the processes which are devised or modified to help create the products	Souvenirs around the world and their symbolism/significance. How the availability of materials and methods determines the	Watch: Industrial processes which shaped our lives. Discussion on the nature of the processes which are devised or modified to help create the products	Souvenirs around the world and their symbolism/significance. How the availability of materials and methods determines the	Watch: Industrial processes which shaped our lives. Discussion on the nature of the processes which are devised or

# MOOR PARK HIGH SCHOOL: CURRICULUM

<b>Experiences, Extra-curricular</b>			design/product on offer		design/product on offer	modified to help create the products
<b>Numeracy</b>	Measuring: Using the template accurately. Ensuring the waste is minimized. Time: Ensuring the most efficient processes are utilised	Measuring: Drawing accurately on the CAD software the rectangles, circles and designs so that they all fit correctly.	Measuring: Using the template accurately. Ensuring the waste is minimized. Time: Ensuring the most efficient processes are utilised	Measuring: Drawing accurately on the CAD software the rectangles, circles and designs so that they all fit correctly.	Measuring: Using the template accurately. Ensuring the waste is minimized. Time: Ensuring the most efficient processes are utilised	Measuring: Drawing accurately on the CAD software the rectangles, circles and designs so that they all fit correctly.
<b>CIAG</b>	Product Designers: What do they need to take into consideration when designing a new product? Sales Forecasting: How do they collect evidence from the public/sales/manufacturing?	Manufacturing: Why do manufacturers exist, how do they make money, what is their cost outlay?	Product Designers: What do they need to take into consideration when designing a new product? Sales Forecasting: How do they collect evidence from the public/sales/manufacturing ?	Manufacturing: Why do manufacturers exist, how do they make money, what is their cost outlay?	Product Designers: What do they need to take into consideration when designing a new product? Sales Forecasting: How do they collect evidence from the public/sales/manufacturing ?	Manufacturing: Why do manufacturers exist, how do they make money, what is their cost outlay?

## Key Stage 3 Long Term Planning

### Year 9 2021-2022 INTENT: Designing Your Own Maze (Hand Held Maze)

#### Faculty Area: Business Technology (Design Technology)

Year 9	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Knowledge</b>	In this project pupils will work out their ideas with some precision, taking into account how products are made, who will use them, the materials that will be used and their appearance.	They will develop their understanding of making and expand their practical skills. They will use a range of tools, machinery and materials. The main aim of this project is to develop pupils understanding of manufacture, through the use of traditional production techniques in cooperating more than two material substrates.	In this project pupils will work out their ideas with some precision, taking into account how products are made, who will use them, the materials that will be used and their appearance.	They will develop their understanding of making and expand their practical skills. They will use a range of tools, machinery and materials. The main aim of this project is to develop pupils understanding of manufacture, through the use of traditional production techniques in cooperating more than two material substrates.	In this project pupils will work out their ideas with some precision, taking into account how products are made, who will use them, the materials that will be used and their appearance.	They will develop their understanding of making and expand their practical skills. They will use a range of tools, machinery and materials. The main aim of this project is to develop pupils understanding of manufacture, through the use of traditional production techniques in cooperating more than two material substrates.
<b>Skills</b>	Students will be given a focused practical task to make a challenging multi layered maze game, based on a standard format which the pupils will then expand upon. The project allows pupils to understand basic principles of, wood to wood, wood to other materials joints, hand tools and equipment, joining techniques, health & safety, user defined briefs which challenge the designer.	The project builds upon design and making skills previously learnt and helps to combine the traditional with the age old art of modelling with card (used to build the actual maze [recycled]). Pupils will also be introduced to other areas of design including:	Students will be given a focused practical task to make a challenging multi layered maze game, based on a standard format which the pupils will then expand upon. The project allows pupils to understand basic principles of, wood to wood, wood to other materials joints, hand tools and equipment, joining techniques, health & safety, user defined briefs which challenge the designer.	The project builds upon design and making skills previously learnt and helps to combine the traditional with the age old art of modelling with card (used to build the actual maze [recycled]). Pupils will also be introduced to other areas of design including:	Students will be given a focused practical task to make a challenging multi layered maze game, based on a standard format which the pupils will then expand upon. The project allows pupils to understand basic principles of, wood to wood, wood to other materials joints, hand tools and equipment, joining techniques, health & safety, user defined briefs which challenge the designer.	The project builds upon design and making skills previously learnt and helps to combine the traditional with the age old art of modelling with card (used to build the actual maze [recycled]). Pupils will also be introduced to other areas of design including:
<b>Connections to previous learning</b>	Building on the techniques of 'hand skills' developed from Yr8. The use of traditional measuring and marking methods.	Using the H&S knowledge from yr7 to engage with materials and machinery in a safe and controlled environment	Building on the techniques of 'hand skills' developed from Yr8. The use of traditional measuring and marking methods.	Using the H&S knowledge from yr7 to engage with materials and machinery in a safe and controlled environment	Building on the techniques of 'hand skills' developed from Yr8. The use of traditional measuring and marking methods.	Using the H&S knowledge from yr7 to engage with materials and machinery in a safe and controlled environment
<b>Assessment</b>	<p><i>Point 1</i> Be able to demonstrate accurate skills in using the measuring equipment with accuracy in mind at all times</p> <p><i>Point 2</i> To be able to independently model using the skills developed throughout the Yr8</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i></p>	<p><i>Point 1</i> Be able to demonstrate accurate skills in using the measuring equipment with accuracy in mind at all times</p> <p><i>Point 2</i> To be able to independently model</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i></p>	<p><i>Point 1</i> Be able to demonstrate accurate skills in using the measuring equipment with accuracy in mind at all times</p> <p><i>Point 2</i> To be able to independently model</p>	<p><i>Point 1</i> End of unit test. Exam style questions where possible in which they use their knowledge of what we have been learning about in this rotation</p> <p><i>Point 2</i></p>

# MOOR PARK HIGH SCHOOL: CURRICULUM

	<p><i>practical lessons. Be able to work safely.</i> Point 3 <i>Record an appropriate plan, outlining the methods and processes used to achieve a favorable outcome</i></p>	<p><i>End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</i></p>	<p><i>using the skills developed throughout the Yr8 practical lessons. Be able to work safely.</i> Point 3 <i>Record an appropriate plan, outlining the methods and processes used to achieve a favorable outcome</i></p>	<p><i>End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</i></p>	<p><i>using the skills developed throughout the Yr8 practical lessons. Be able to work safely.</i> Point 3 <i>Record an appropriate plan, outlining the methods and processes used to achieve a favorable outcome</i></p>	<p><i>End of unit evaluation on the project. An analysis of how well the project was delivered, based on the specification points</i></p>
<b>Homework</b>	<b>History of Maze design, why were they invented, who invented them, the types, specific facets explained.</b>	<b>Methods of joining different materials. Wood to Wood, Wood to Metal, Metal to Metal, etc</b>	<b>History of Maze design, why were they invented, who invented them, the types, specific facets explained.</b>	<b>Methods of joining different materials. Wood to Wood, Wood to Metal, Metal to Metal, etc</b>	<b>History of Maze design, why were they invented, who invented them, the types, specific facets explained.</b>	<b>Methods of joining different materials. Wood to Wood, Wood to Metal, Metal to Metal, etc</b>
<b>Capital Cultural enrichment including Trips, Visits, Experiences, Extra-curricular</b>	How products have evolved over time and how the method of assembly has changed from labour intensive to automation. What were the methods which were most common at the time before automation	Watch: Joining methods, both traditional and new. The invention of the robot assembly system. Why was this system developed, what are the benefits, drawbacks and what does the future hold?	How products have evolved over time and how the method of assembly has changed from labour intensive to automation. What were the methods which were most common at the time before automation	Watch: Joining methods, both traditional and new. The invention of the robot assembly system Why was this system developed, what are the benefits, drawbacks and what does the future hold?	How products have evolved over time and how the method of assembly has changed from labour intensive to automation. What were the methods which were most common at the time before automation	Watch: Joining methods, both traditional and new. The invention of the robot assembly system Why was this system developed, what are the benefits, drawbacks and what does the future hold?
<b>Numeracy</b>	Measuring: Using the measuring equipment accurately. Ensuring the waste is minimized. Time: Ensuring the most efficient processes are utilised	Tolerance: Ensuring the measurements undertaken are accurate and the cutting process is also accurate so that they all fit correctly.	Measuring: Using the measuring equipment accurately. Ensuring the waste is minimized. Time: Ensuring the most efficient processes are utilised	Tolerance: Ensuring the measurements undertaken are accurate and the cutting process is also accurate so that they all fit correctly.	Measuring: Using the measuring equipment accurately. Ensuring the waste is minimized. Time: Ensuring the most efficient processes are utilised	Tolerance: Ensuring the measurements undertaken are accurate and the cutting process is also accurate so that they all fit correctly.
<b>CIAG</b>	Product Designers: How are new materials and methods of production tested, why? R&D: Why bother, who pays for it, what is the benefit?	Manufacturing: different parts to a manufacturing business and impact on society?	Product Designers: How are new materials and methods of production tested, why? R&D: Why bother, who pays for it, what is the benefit?	Manufacturing: different parts to a manufacturing business and impact on society?	Product Designers: How are new materials and methods of production tested, why? R&D: Why bother, who pays for it, what is the benefit?	Manufacturing: different parts to a manufacturing business and impact on society?

# MOOR PARK HIGH SCHOOL: CURRICULUM

## Key Stage 4 Long Term Planning

### Year 10 2021-2022 SYLLABUS: AQA GCSE 3D Design (8205)

#### Curriculum Area: Business Technology (Design Technology)

Year 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Syllabus</b>	AQA GCSE Art and Design (Three-Dimensional Design) 3D Net design and CAD/CAM awareness sessions	AQA GCSE Art and Design (Three-Dimensional Design) Theory surrounding the different materials available, their properties and uses	AQA GCSE Art and Design (Three-Dimensional Design) <b>Project 1- Sculpture Project</b>	AQA GCSE Art and Design (Three-Dimensional Design)	AQA GCSE Art and Design (Three-Dimensional Design) <b>Project 2- Jewelry Project</b>	AQA GCSE Art and Design (Three-Dimensional Design)
<b>Knowledge</b>	Understand and re-cap from Ks3 the various skills associated with CAD design and modelling	A more in-depth look at materials (Wood, Plastic, Metal). Their uses, how to work with them and finishes available	How sources relate to historical, contemporary, cultural, social, environmental and creative contexts	How ideas, feelings, forms, and purposes can generate responses that address specific needs be these personal or determined by external factors such as the requirements of an individual client's expectations, needs of an intended audience or details of a specific commission.	How sources relate to historical, contemporary, cultural, social, environmental and creative contexts	How ideas, feelings, forms, and purposes can generate responses that address specific needs be these personal or determined by external factors such as the requirements of an individual client's expectations, needs of an intended audience or details of a specific commission.
<b>Skills</b>	Model making, modelling 3D with specific CAD software. Tools which aid accurate construction and nomenclature which is industry standard	Testing materials and their various properties, cutting, sanding and finishing	Students must demonstrate the ability to: use three-dimensional techniques and processes, appropriate to students' personal intentions, for example: model making, constructing, surface treatment, assembling, modelling	Use media and materials, as appropriate to students' personal intentions, for example: drawing, materials, wood, metal, plaster, plastic and foundry materials.	Students must demonstrate the ability to: use three-dimensional techniques and processes, appropriate to students' personal intentions, for example: model making, constructing, surface treatment, assembling, modelling	Use media and materials, as appropriate to students' personal intentions, for example: drawing, materials, wood, metal, plaster, plastic and foundry materials.
<b>Assessment</b>	Point 1 (Wk 1-8) Being able to describe or explain a concept, method or action when using the software. Point 2 Critiquing a given design, pointing to the flaws or strengths of the design Point 3 Producing an outcome which is accurate based on a given time limit	Point 1 (Wk 9-16) Written through worksheets and discussion. Being able to describe or explain a concept Point 2 End of unit test	(Wk 17-20) Complete a fully detailed portfolio of work. This can be hand written or a combination of electronic and hand-written portfolio. Assessed based on written work against AO1-AO4	(Wk 21-27) A practical piece of work which is either fully complete or partial complete but shows very good development work that has been carried out in the portfolio. Assessed based on written work and practical work against AO1-AO4	(Wk 28-33) Complete a fully detailed portfolio of work. This can be hand written or a combination of electronic and hand-written portfolio. Assessed based on written work against AO1-AO4	(Wk 34-39 continue) A practical piece of work which is either fully complete or partial complete but shows very good development work that has been carried out in the portfolio. Assessed based on written work and practical work against AO1-AO4
<b>Homework</b>	Establish the importance of rapid prototyping. Use examples from school.	Homework related from the materials module on the properties of Wood, Metals and Plastics	Establish a selection of designers, what they do, make, design and their philosophy. Produce a critical review of their work and what inspires you	Produce a set of designs which complement the designers you have chosen. Explain how you may make such designs within the context of the school resources available	Establish a selection of designers, what they do, make, design and their philosophy. Produce a critical review of their work and what inspires you	Produce a set of designs which complement the designers you have chosen. Explain how you may make such designs within the context of the school resources available

# MOOR PARK HIGH SCHOOL: CURRICULUM

<b>Cultural enrichment including Trips, Visits, Experiences, Extra-curricular</b>	Watch: 3D Printing and its benefits to society	Watch: Testing materials to destruction	Watch: History of designers and their influences  Internet: research around the different designers.	Develop your designs at home and bring in at least two developed designs. Get some opinions on your designs from three family members.	After school session on practical workshop lessons.	After school session on practical workshop lessons.
<b>Literacy</b>						
<b>Numeracy</b>	Measuring with a ruler and using the measuring tools from the CAD software	Looking at ratios of weight to strength for the different materials				
<b>CIAG</b>						



## Key Stage 4 Long Term Planning

### Year 11 2021-2022 SYLLABUS: AQA GCSE 3D Design(8205)

#### Curriculum Area: Business Technology (Design Technology)

Year 11	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1 [ (Externally assessed work by moderator (May/June))]
<b>Syllabus</b>	AQA GCSE Art and Design (Three-Dimensional Design)	<b>Component 2: Externally set assignment (Wk 9-15)</b> AQA will provide a separate externally set assignment for each title, each with seven different starting points. Students must select and respond to one starting point from their chosen title.	<b>Component 2: Externally set assignment (Wk 16-22)</b> AQA will provide a separate externally set assignment for each title, each with seven different starting points. Students must select and respond to one starting point from their chosen title.	<b>Component 2: Externally set assignment (Wk23-29)</b> AQA will provide a separate externally set assignment for each title, each with seven different starting points. Students must select and respond to one starting point from their chosen title.	<b>Component 2: Externally set assignment (Wk 30-38)</b> AQA will provide a separate externally set assignment for each title, each with seven different starting points. Students must select and respond to one starting point from their chosen title.
<b>Knowledge</b>	How ideas, feelings, forms, and purposes can generate responses that address specific needs be these personal or determined by external factors such as the requirements of an individual client's expectations, needs of an intended audience or details of a specific commission.	The externally set assignment provides students with the opportunity to demonstrate, through an extended creative response, their ability to draw together different areas of knowledge, skills and/or understanding in response to their selected starting point.	The externally set assignment provides students with the opportunity to demonstrate, through an extended creative response, their ability to draw together different areas of knowledge, skills and/or understanding in response to their selected starting point.	The externally set assignment provides students with the opportunity to demonstrate, through an extended creative response, their ability to draw together different areas of knowledge, skills and/or understanding in response to their selected starting point.	The externally set assignment provides students with the opportunity to demonstrate, through an extended creative response, their ability to draw together different areas of knowledge, skills and/or understanding in response to their selected starting point.
<b>Skills</b>	Use media and materials, as appropriate to students' personal intentions, for example: drawing, materials, wood, metal, plaster, plastic and foundry materials.	The extended creative response must explicitly evidence students' ability to draw together different areas of knowledge, skill and/or understanding from initial engagement with their selected starting point through to their realisation of intentions in the 10 hours of supervised time.	The extended creative response must explicitly evidence students' ability to draw together different areas of knowledge, skill and/or understanding from initial engagement with their selected starting point through to their realisation of intentions in the 10 hours of supervised time.	The extended creative response must explicitly evidence students' ability to draw together different areas of knowledge, skill and/or understanding from initial engagement with their selected starting point through to their realisation of intentions in the 10 hours of supervised time.	The extended creative response must explicitly evidence students' ability to draw together different areas of knowledge, skill and/or understanding from initial engagement with their selected starting point through to their realisation of intentions in the 10 hours of supervised time.
<b>Assessment</b>	(Wk 1-8 continue) A practical piece of work which is either fully complete or partial complete but shows very good development work that has been carried out in the portfolio. Assessed based on written work and practical work against AO1-AO4	<i>Students must ensure that the total submission for Component 2 evidences coverage of all four assessment objectives and evidence of drawing activity and written annotation. Students must identify and acknowledge sources which are not their own.</i>	<i>Students must ensure that the total submission for Component 2 evidences coverage of all four assessment objectives and evidence of drawing activity and written annotation. Students must identify and acknowledge sources which are not their own.</i>	<i>Students must ensure that the total submission for Component 2 evidences coverage of all four assessment objectives and evidence of drawing activity and written annotation. Students must identify and acknowledge sources which are not their own.</i>	<i>Students must ensure that the total submission for Component 2 evidences coverage of all four assessment objectives and evidence of drawing activity and written annotation. Students must identify and acknowledge sources which are not their own.</i>
<b>Homework</b>	Produce a set of designs which complement the designers you have chosen. Explain how you may make such	Respond to time scales: this could be carrying out research activities on designers, methods of assembly or finishes, sketching	Respond to time scales: this could be carrying out research activities on designers, methods of assembly or finishes, sketching	Respond to time scales: this could be carrying out research activities on designers, methods of assembly or finishes, sketching ideas,	Respond to time scales: this could be carrying out research activities on designers, methods of assembly or finishes, sketching ideas,

# MOOR PARK HIGH SCHOOL: CURRICULUM

	designs within the context of the school resources available	ideas, developing the ideas or writing up the portfolio. Look into and critique a given set of designers from the externally set assignment	ideas, developing the ideas or writing up the portfolio. Identify the parallels between the given designers. Establish the types of methods they use in designing, modelling and eventually making.	developing the ideas or writing up the portfolio. How can you develop your design based on a one of the chosen designers? Show through sketch work and annotation your methodology for designing and modelling	developing the ideas or writing up the portfolio. Put together your portfolio explaining the changes which have occurred because of the investigations carried out in class.
<b>Cultural enrichment including Trips, Visits, Experiences, Extra-curricular</b>	After school session on practical workshop lessons.	Potential visit to the local DIY store, car showroom, Art gallery, manufacturing facility. Working with a designer or client who acts as the customer/user	Potential visit to the local DIY store, car showroom, Art gallery, manufacturing facility	Potential visit to the local DIY store, car showroom, Art gallery, manufacturing facility Working with a designer or client who acts as the customer/user	Potential visit to the local DIY store, car showroom, Art gallery, manufacturing facility
<b>Literacy</b>					
<b>Numeracy</b>		Ensuring the time scale is understood, the tasks required and begin planning the stages	Establishing the required materials before starting their practical work	Potential cost of each element of the product from material cost to the use of paints/finishes	
<b>CIAG</b>					