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| **Week****Plan****(4 Periods per****Week;****1 Double, 2 Singles)** | **Theme / topic / unit****& link to****specification** *(where appropriate)* | **Whole school priority***(E.g. reading, literacy, passion for subject)* | **Skills being developed***(E.g. reading, writing, measuring and marking out, drawing)* | **Knowledge****being introduced, developed and / or consolidated****Learning Objective/s** | **Understanding** | **Implementation***(Includes explanation of why you are teaching the way you are)* | **Differentiation**(e.g. through curriculum intent) | **Aspects of the wider curriculum** | **Personal Development** |
| **Application of skills** | **Application of knowledge** | **Arts, music, culture, RS history, geography, MFL** | **Cultural Capital**[[1]](#footnote-1) |
| **Autumn Term** |
| AQA Exam-board Project Task, Analysis, Research & Student Intent |
| Week 1 | Assignment analysis | ReadingReflection | Planning &preparing | Design processing**LO/s: Understanding the AQA task & expectations** | Brain-storming | Identifying tasks to do | Exploring possibilities | Group & 1-1 support | Historical reasons behind assignment | Research & reflection  |
| Week 2 | Context BriefProblems | Reading Writing | Communicateproject intent | How to write a brief?**LO/s: Student writes own project intention / brief** | English writing | Big Write skills | Clarity of project intent | Teacher led examples | Cultural meeting other’s needs | Communicate intentions |
| Week 3 | Research analyse ideas | Reading recording | Internet Book research | Existing solutions**LO/s: Finding & recording existing similar products** | Analysis | Find create inspiration | Abstract pupil thinking | Individual & 1-1 support | Cultural, historical solutions products | ReflectionCreativity |
| Design & Development of an idea into a Problem Solving Solution |
| Week 4 | Designing solutions | Reading Writing | Drawing & communicate | Engineered solutions **LO/s: Producing design solutions to AQA problem** | DesignCommunicate | Sketching 2D & 3D | Expressing ideasfrom research | Individual & 1-1 support | Art | Problem solving |
| Week 5 | ModellingTesting Trials | Reflection Measuring | Measuring marking out | Modelling techniques**LO/s: Student produce card model of idea** | Design model solutions | Working models | Practical solutions | * 1. support

Classwork | Art | Perseverance |
| Week 6 | Developing an idea | WritingCalculations | Planning finalising | Possible manufacture**LO/s: Student modifying idea** | Planning for manufacture | SequencesProcesses | Written NEA evidence | * 1. support

Classwork | Historical means of engineering plans | Sequential planning |
| Modelling & Planning for Manufacture |
| Week 7 | Producingdrawings | Reading Analysing | CAD Eng. drawings | 2D & 3D CAD drawings**LO/s: Producing engineering drawings.** | Drawing techniques | CAD Modelling  | NEA planning evidence | Individual & 1-1 support | Art, History of drawings | Portray concepts |
| Week 8 | Planning for ManufactureFlow Charts | Reading Writing | PlanningOrganising | Identifying materials etc.**LO/s: Create flow chart. Prepare materials** | OrderingPreparing | CalculatingSetting up  | SustainabilityEfficiencyAccess higher marks | Individual & 1-1 support | History of industrial practices, recycling. | Being safe & responsible |
| **October ½ Term** |
| Manufacturing (Team Teaching with Technician) |
| Week 9 | Cuttingmaterials | Reading Measuring | Marking outShaping | Using right tools for job**LO/s: Measuring & marking out** | Working safely | Use of PPESafe work | Safety comes first. | Individual & 1-1 support | Modern versus traditional tools skills | Being safe & accountable |
| Week 10 | Shaping & Forming | PassionMeasuring | AccuracyChecking | Quality control**LO/s: Making**  | Precision tool use, formersCAD/CAM | Safe use of tooling & machines | NEA EvidencePrecision | Individual & 1-1 support | Imperial metric measuring | Checking & correcting |
| Week 11 | DrillingMaking | Reading Measuring | Marking out Measuring  | Safe working practises**LO/s: All making** | Marking out holes, drilling | Correct procedures | Workshop essential | Group & 1-1 support | N/A | Working on own |
| Week 12 | Making & modifications | Reading Measuring | Adjusting errors / adapt | Resolving problems**LO/s: All making** | Finding solutions | Problem solving | Workshop essential | Individual & 1-1 support | Old & modern equipment use | Safe machine working |
| Week 13 | Electronics | Reading Calculating | PCB Design &components | Electronic kits**LO/s: E-Kits made available** | PCB Design &Making | Electrical theory | To fit in productHigher marks | Individual & 1-1 support | History of electronics Advances Standards | Ingenuity |
| Week 14 | Mechanisms | ReadingWriting | Mechanism designs | Mechanical solutions**LO/s: Planning & fitting mechanism** | Mechanical design | Levers, pivots etc. | To fit in productHigher marks | Individual & 1-1 support | European & USA drawing standards | Quality control |
| **Xmas** |
| **Spring Term** |
| Week 15 | Making & assembly | Reading Measuring | Fabrication skills | Manual & CNC work**LO/s: advancing work** | Effective use of machines | Right choices | Workshop Speed accuracy | Group & 1-1 support | Art & Historical machinery | Safe machine working |
| Week 16 | Making, & assembly, Jig Templates | Reading Measuring | Checkingtools | AccuracyQuality**LO/s: advancing work, using jigs etc** | Design & production | Simple devices | Workshop Efficiency | Individual & 1-1 support | Historical use of template design | EffectivenessEfficiency |
| Week 17 | Making & assembly | Reading Measuring | PlanningOrganisation | Sequencing**LO/s: advancing work, fitting parts** | Assembly planning | Assembly plan | Workshop space & plan | Individual & 1-1 support | N/A | Logical step planning |
| Week 18 | Assembling | Reading Measuring | Component assembly | Using hand tools**LO/s: advancing work, fitting parts** | Precision work | Safe assembly | WorkshopNEA evidence | Individual & 1-1 support | N/A | PerseverancePatients |
| Week 19 | Modifying | Reading Measuring | Adapting & consolidating | PrototypeWorking**LO/s: advancing work, modifying** | Problem solving | Modification | Workshop NEA evidence | Individual & 1-1 support | History engineering prototyping  | Persistence |
| Week 20  | Product finaldevelopment  | ReadingWriting | Checking Finalising | Quality control **LO/s: making final tweaks to fit** | EvaluatingConsolidate | Checks on drawing | Workshop essential | Individual & 1-1 support | N/A | Persistence |
| **Spring ½ Term** |
| Project Finalisation, Evaluation & Completion |
| Week 21 | FinishingAesthetics | Reading Writing | Painting, varnishing etc | Finish techniques**LO/s: Painting, cleaning, etc.** | Fit & finish | Quality control | Workshop essential | Individual & 1-1 support | Historical finishing v modern processes | Quality work & outcomes |
| Week 22 | Photoshoot | Reading Writing | PhotographyFinal outcome | Writing to mark criteria**LO/s: Evidencing own work** | Report writing | Portfoliowork | Class & CAD room work | Individual & 1-1 support | Presenting work in historical / art format | Personal achievement |
| Week 23 | Presenting & evaluation | Reading Writing | Assignment completion | Writing to mark criteria**LO/s: Evaluating & recording outcome** | Report writing | Portfolio work | Class & CAD room | Individual & 1-1 support | N/A | ReflectingSelf-assessing |
| Week 24 | Hand in NEAassignment | Reading Checking | Quality assurance | Writing to mark criteria**LO/s: Handing in NEA on time** | Report writing | Portfolio work | To meet AQA deadline | Individual & 1-1 support | N/A | Meeting deadlinesQuality work |
| Exam Revision & Techniques |
| Week 24 | Exam revision & techniques | ReadingWriting | Revision techniques | Engineering Concepts**LO/s: Consolidate learning methods** | How to revise & remember | Provide examples | Exam techniques | Classwork Group work1-1 support | International student performance & achievement | Analysing questions |
| Week 25  | Exam RevisionPast Papers | Reading Writing | How to respond to exam questions | Engineering Concepts**LO/s: Consolidate learning, explain & justify answers** | How to answer exam questions | Provide examples | Exam techniques | ClassworkGroup work1-1 support | International student performance & achievement | Responding to questions |
| **Easter** |
| **Summer Term** |
| Week 26 | Past Papers & AQA Mark Schemes | Reading Writing | Responding to question styles | Exam know how**LO/s: To provide detailed & correct type of answers.** | Correct exam answer writing | Justifying answers with examples | AQA Exam Feedback | ClassworkGroup work1-1 support | N/A | Self-marking |
| Week 27 | Past Papers & AQA Mark Schemes | Reading Writing | Exam timing techniques | Exam success skills**LO/s: Build confidence** | Exam familiarity | Reproducing typical set answers | AQA Exam Feedback | ClassworkGroup work1-1 support | Historical - Feedback from moderators & exam-board | Self-confidence |
| Week 28 | Past Papers **NEA Submission this week 7/5/25** | Reading Analysing Writing | Applying own experience to answers | Exam success skills**LO/s: To provide correct answers** | Correct exam answer writing | Justifying answers & examples | Exam technique reminders | ClassworkGroup work1-1 support | N/A | Learning from peers |
| Week 29 | Past Papers& Exam conditions | Reading AnalysingWriting | Exam theory into practise | Exam paper techniques**LO/s: To perform under exam conditions** | Correct exam answer writing | Quality answers | Exam style simulation Exam is worth60% of the final marks! | Classwork1-1 support | N/A | Time management |
| AQA Past Paper Exam Practise (NEA Coursework Submission 7th May & Exam 2 June 2025) |
| Week 30 | Past Papers& Exam conditions | Reading Writing | Exam theory into practise | Exam paper techniques**LO/s: To perform under exam conditions** | Correct exam answer writing | Quality answers | Exam style simulation Exam is worth60% of the final marks! | Classwork1-1 support | N/A | Student exam confidence |
| **May ½ Term** |
| Week 31 | Exam Review**Exam this week 2/6/25** | Reading Writing | On the day tips | Exam crib work | Exam hacks | Answer all questions | Exam technique reminders | Classwork1-1 support | N/A | Exam experience |
| Week 32 |  |  |  |  |  |  |  |  |  |  |
| Week 33 |  |  |  |  |  |  |  |  |  |  |
| Week 34 |  |  |  |  |  |  |  |  |  |  |
| Week 35 |  |  |  |  |  |  |  |  |  |  |
| Week 36 |  |  |  |  |  |  |  |  |  |  |
| Week 37  |  |  |  |  |  |  |  |  |  |  |
| **Summer****Holidays** |

1. Cultural capital: “It is the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement.” [↑](#footnote-ref-1)