|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | Reading  Reflection | 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 Brief  Problems | Reading Writing | Communicate  project 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 | | Reflection  Creativity |
| 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** | Design  Communicate | Sketching 2D & 3D | Expressing ideas  from research | Individual &  1-1 support | Art | | Problem solving |
| Week 5 | Modelling  Testing 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 | Writing  Calculations | Planning finalising | Possible manufacture  **LO/s: Student modifying idea** | Planning for manufacture | Sequences  Processes | Written NEA evidence | * 1. support   Classwork | Historical means of engineering plans | | Sequential planning |
| Modelling & Planning for Manufacture | | | | | | | | | | | |
| Week 7 | Producing  drawings | 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 Manufacture  Flow Charts | Reading Writing | Planning  Organising | Identifying materials etc.  **LO/s: Create flow chart. Prepare materials** | Ordering  Preparing | Calculating  Setting up | Sustainability  Efficiency  Access higher marks | Individual &  1-1 support | History of industrial practices, recycling. | | Being safe & responsible |
| **October ½ Term** | | | | | | | | | | | |
| Manufacturing (Team Teaching with Technician) | | | | | | | | | | | |
| Week 9 | Cutting  materials | Reading Measuring | Marking out  Shaping | Using right tools for job  **LO/s: Measuring & marking out** | Working safely | Use of PPE  Safe work | Safety comes first. | Individual &  1-1 support | Modern versus traditional tools skills | | Being safe & accountable |
| Week 10 | Shaping & Forming | Passion  Measuring | Accuracy  Checking | Quality control  **LO/s: Making** | Precision tool use, formers  CAD/CAM | Safe use of tooling & machines | NEA Evidence  Precision | Individual &  1-1 support | Imperial metric measuring | | Checking & correcting |
| Week 11 | Drilling  Making | 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 product  Higher marks | Individual &  1-1 support | History of electronics Advances Standards | | Ingenuity |
| Week 14 | Mechanisms | Reading  Writing | Mechanism designs | Mechanical solutions  **LO/s: Planning & fitting mechanism** | Mechanical design | Levers, pivots etc. | To fit in product  Higher 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 | Checking  tools | Accuracy  Quality  **LO/s: advancing work, using jigs etc** | Design & production | Simple devices | Workshop  Efficiency | Individual &  1-1 support | Historical use of template design | | Effectiveness  Efficiency |
| Week 17 | Making & assembly | Reading Measuring | Planning  Organisation | 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 | Workshop  NEA evidence | Individual &  1-1 support | N/A | | Perseverance  Patients |
| Week 19 | Modifying | Reading Measuring | Adapting & consolidating | Prototype  Working  **LO/s: advancing work, modifying** | Problem solving | Modification | Workshop  NEA evidence | Individual &  1-1 support | History engineering prototyping | | Persistence |
| Week 20 | Product final  development | Reading  Writing | Checking  Finalising | Quality control  **LO/s: making final tweaks to fit** | Evaluating  Consolidate | Checks on drawing | Workshop essential | Individual &  1-1 support | N/A | | Persistence |
| **Spring ½ Term** | | | | | | | | | | | |
| Project Finalisation, Evaluation & Completion | | | | | | | | | | | |
| Week 21 | Finishing  Aesthetics | 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 | Photography  Final outcome | Writing to mark criteria  **LO/s: Evidencing own work** | Report writing | Portfolio  work | 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 | | Reflecting  Self-assessing |
| Week 24 | Hand in NEA  assignment | 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 deadlines  Quality work |
| Exam Revision & Techniques | | | | | | | | | | | |
| Week 24 | Exam revision & techniques | Reading  Writing | Revision techniques | Engineering Concepts  **LO/s: Consolidate learning methods** | How to revise & remember | Provide examples | Exam techniques | Classwork Group work  1-1 support | International student performance & achievement | | Analysing questions |
| Week 25 | Exam Revision  Past 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 | Classwork  Group work  1-1 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 | Classwork  Group work  1-1 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 | Classwork  Group work  1-1 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 | Classwork  Group work  1-1 support | N/A | | Learning from peers |
| Week 29 | Past Papers  & Exam conditions | Reading Analysing  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 worth  60% of the final marks! | Classwork  1-1 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 worth  60% of the final marks! | Classwork  1-1 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 | Classwork  1-1 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)