**Unit / Project Overview**

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| Curriculum Area / Skills  AQA Combined Science – materials, forces, energy resources  CNAT Engineering design / manufacturing / testing / materials / CAD  AQA English Language – identifying and interpreting information, writing skills  Learning Outcomes  Students will take an interdisciplinary approach to develop their subject knowledge and workplaces skills, during their application to the design of a train to meet customer specification. | | Subject / Course: Science / English  Teacher: Jack Usher  Class/Year group Year 10  Number of Students 14  Start date 06.01.20  Length of project 12 weeks  Additional Info |
| Driving Question: What factors need to be considered in the design of a high speed train. | | |
| How can the learning from the employer visit be applied to the project idea?  Appreciation of components, scale of the business and logistics, aspects of train design etc. Real life application | | |
| Which Stakeholders could help deliver the project?  Hitachi staff  UTC Design staff  UTC Sixth form students | Foreseen Challenges / solutions?  CAD: Build out of other materials? Source sixth from help?  Laptop availability – book in good time  IPads / filming devices – book in good time. | |
| Draft activity timeline (specific delivery times / flexibility)  Please see project plan | | |
| Products / outputs?  Written evidence of all tasks in booklet. Project poster. Mood boards etc. created during tasks. Prototypes. Advertising campaign. Increased subject knowledge, workplace skills and soft skills e.g. teamwork, confidence | | How will you celebrate, showcase learning with wider stakeholders?  Project presentations |
| How will the work be assessed? How will you measure the impact, what are the success criteria?  Completion of workbook, poster for presentation, pre and post task WPS evaluation. Student voice. Comments by judges at presentation morning. | | Differentiation  All tasks have scaffolded support given to aid organization of written tasks.  Tasks planned with low ability in mind.  Groups made up of students with mixture of literacy and numeracy strengths to support each other. |
|  Is the idea clear to communicate with potential partners? Yes   Has a timeline been drafted? Yes   Have outcomes and evaluation process been agreed? Yes   Have key contacts agreed a communication strategy? Yes | | Key Contact details: |