|  |
| --- |
| Year 4Topic to be covered: Around the world in 80 daysSpring Term 2 DT FocusDesign a form of transportation to travel the world |
| Vocabulary Design. Flight, prototype, plan, build, template, prototype, construct, evaluate, create, scale, produce, model,  |
| PeopleInventors: wright brothers |
| PlacesBentley- designsAmericaManchester aiportLiverpool airportAvro heritage museum |
| EventsWilbur and Orville Wright were American inventors and pioneers of aviation. In 1903 the Wright brothers achieved the first powered, sustained and controlled airplane flight; they surpassed their own milestone two years later when they built and flew the first fully practical airplane |
| Knowledge and Skills- Basic Level  |
| Knowledge* Can I study the work of the Wright Brothers using the information I have been given?
* Can I use research to inform the design of a mode of transportation to travel the world?
* Can I evaluate my ideas and products against a given criteria?
 |
| Skills* Can I design my own round the world transportation using given designs to support my ideas?
* Can I draw simple cross sections to show my designs?
* Can I begin to build my own prototypes of my invention by following simple guidelines and instructions?
* Can I use a small selection of tools and equipment to build my prototype?
* Can I use simple construction material?
 |
| Knowledge and skills- Core Intermediate level  |
| Knowledge* Can I study the work of the Wright Brothers?
* Can I use research and develop design criteria to inform the design of a mode of transportation to travel the world?
* Can I evaluate my ideas and products against my own design criteria and consider the views of others to improve my work ?
 |
| Skills* Can I design my own round the world transportation?
* Can I draw cross sections and exploded diagrams to show my designs?
* Can I begin to build my own prototypes of my invention?
* Can I use a wide range of tools and equipment to build my prototype?
* Can I use construction material with confidence?
 |
| Knowledge and Skills- Advanced Level  |
| Knowledge* Can I study the work of the Wright Brothers and compare to other engineers?
* Can I use research and develop design criteria to inform the design of a mode of transportation to travel the world using a range of sources to support my evidence?
* Can I evaluate my ideas and products against my own design criteria and consider the views of others to improve my work and develop a further design of my improved transportation?
 |
| Skills* Can I design my own round the world transportation in detail and with accuracy using research to support my ideas?
* Can I draw detailed and accurate cross sections and exploded diagrams to show my designs?
* Can I build my own prototypes of my invention with accuracy?
* Can I use a wide range of tools and equipment accuracy and precisely to build my prototype in detail?
* Can I use wide range of construction material with confidence?
 |