Dean Bank Primary and Nursery School KS1 and KS2 D.T Long Term Plan

| Year | Autumn | Spring | Summer |
| :---: | :---: | :---: | :---: |
| 1 |  | Mechanisms Moving vehicles. | Construction <br> Re-designing London after the great fire. |
| 2 |  | Construction <br> Create reusable recycle bins linked to science topic 'Uses of everyday materials' | Mechanisms Moving toys |
| 3 |  | Electrical and Mechanical components <br> Pulley system - how did they lift heavy stone to create <br> Stonehenge <br> Recap on mechanisms from Year 2 simple cog and wheel motion | Construction - mouldable materials Creation of an Egyptian Monolith/Obelisk |
| 4 |  | Construction - mouldable materials Create own monument/catapult | Electrical and Mechanical components Chariot making - moveable |
| 5 |  | Electrical and Mechanical components Design and make space buggy and evaluate against criteria. | Construction - mouldable materials Design and make own unique bridge and compare other builds around the world. Trip to Newcastle exploring the range of bridges found there. |
| 6 |  | Electrical and Mechanical components <br> To research, design and make a controllable vehicle which includes mechanisms and electronics. <br> Recap on the circuits from previous year groups and allow children to delve into previous knowledge. Move into the mechanics of a car and what allows the vehicle to move (wheels, motor, battery etc). Could the children reciprocate a basic design by using previous knowledge of circuits? Explore and allow children to create their own vehicle in groups/pairs. | Construction - mouldable materials <br> To research, design, make and evaluate an air raid shelter. <br> Research purpose of a shelter and discuss through research best shelters found. Look at appeal through looks and innovation. Suggest ways to improve. From research, design own shelter in a group and Justify the use of selected materials and explain why they have chosen to use it. Provide a budget and children to work within. Provide a design criteria for children to go up against whilst designing their final piece |

