

D&T Learning Journey

Cycle A Autumn Term - 2020 Year 5



THEME OVERVIEW	BUILDING ON PRIOR LEARNING	PREPARING FOR FUTURE LEARNING	KEY VOCABULARY
<p>The children will be creating a product that incorporates an electric circuit. They will try and add in hydraulics and pneumatics into their product. They will have planned the product and then compare and evaluate their products with their peers.</p>	<p>In Year 4 the children will have looked at creating a step-by-step plan that shows what tools and equipment they will need. They will also have looked at a range of materials so will be aware of what makes a good structure and what wouldn't.</p>	<p>In Year 6 the children will look more in depth at a user's individual views and how this can impact upon the product they then go on to design. They will also look at what alternative designs and evaluate which is the best.</p>	<p>Electrical Components Hydraulic Pneumatic Switch Evaluate Circuit</p>
NC COVERAGE and SKILLS PROGRESSION	SEQUENCE OF KNOWLEDGE		
<p>Overall – Design, Make, Evaluate, Technical Knowledge Do they take a user's views into account when designing? Can they produce a detailed step-by-step plan? Can they explain how their product will appeal to the audience? Can they use a range of tools and equipment expertly? Do they check whether anything could be improved?</p>	<p>Knowledge Skills</p> <p>To identify how a user's views may affect the design of a product. Look at different products. Identify the users of particular products.</p> <p>To create a plan for a product based on a specific user. Create a plan based on a particular user's wants. Identify what equipment would be needed to create the product.</p> <p>To incorporate a switch into their product. Understand how a switch works. Identify how a switch could change their product.</p> <p>To refine the product after testing,</p>		

<p>Can they evaluate appearance and function against the original criteria?</p> <p>Electrical and mechanical components</p> <p>Can they incorporate a switch into their product?</p> <p>Can they refine their product after testing it?</p> <p>Can they incorporate hydraulics and pneumatics?</p>	<p>Find any problems with the product. Make any changes to improve the product.</p> <p>To understand and incorporate hydraulics and pneumatic. Test different products that use these. Plan how these could be added to the design.</p> <p>To create a step-by-step plan to make their product. Using what they have learnt, create a plan of how they will make their product. Use a model plan to support. Have a product to understand how this could have been put together.</p> <p>To evaluate the final product. Compare the product against their peers. Discuss any changes they could make to improve their product.</p>
<p>CONNECTIONS/DEEPENING IN OTHER AREAS OF THE CURRIULUM</p>	<p>BY THE END OF THIS UNIT...</p>
<p>Science – building electric circuits</p>	<p>By the end of this topic the children will have created a product which contains a switch and hydraulics and pneumatics. They will have tested these out first in order to understand how they work and how they could be incorporated into a product. They will have extensively planned their product so they know how to create it step-by-step.</p>