

D&T: Mechanisms

Year group:	5&6	Term:	SPRING 2	Theme:	Mechanisms																		
Prior learning					Cross-curricular and visits/visitors																		
This learning consolidates learning from EYFS & KS1 (levers and pivots, and sliding mechanisms). It also builds on prior learning from LKS2 mechanical systems. In addition, it consolidates learning about forces in science (this unit is studied alongside the science unit) and uses previous learning about space in science (movement of the planets).					Science: Forces																		
					Key Vocabulary																		
					<table><tr><td>cams</td><td>fulcrum</td><td>Heath Robinson machines</td></tr><tr><td>gears</td><td>axle</td><td>system</td></tr><tr><td>pulleys</td><td>guide rope</td><td>mechanical engineer</td></tr><tr><td></td><td></td><td></td></tr></table>	cams	fulcrum	Heath Robinson machines	gears	axle	system	pulleys	guide rope	mechanical engineer									
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Knowledge																							
- How to use a storyboard to plan sequence of making - An exploded diagrams and/or cross-sectional diagram can communicate a mechanism to communicate ideas. - Uses of pulleys and how to make a simple pulley - Levers and how they are used in everyday life including making a simple lever mechanism - Gears can be used to change speed, direction or force - An orrery is a simple mechanism																							
Disciplinary Knowledge					Revised Vocabulary																		
- Develop a technical vocabulary appropriate to the project. - Use mechanical systems such as cams, pulleys and gears. - Make prototypes. - Develop one idea in depth. - Use researched information to inform decisions. - Produce detailed lists of materials and tools. - Select from and use tools. - Cut accurately and safely to a marked line. - Refine their product – review and rework/improve.					<table><tr><td>orbit</td><td>mechanism</td><td>lever</td></tr><tr><td>rotation</td><td>ellipse</td><td>pivot</td></tr><tr><td>push</td><td>sphere</td><td>engineer</td></tr><tr><td>pull</td><td>prototype</td><td>designing</td></tr><tr><td>evaluating</td><td>improving</td><td>testing</td></tr><tr><td></td><td></td><td></td></tr></table>	orbit	mechanism	lever	rotation	ellipse	pivot	push	sphere	engineer	pull	prototype	designing	evaluating	improving	testing			
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