

# ALDER COPPICE PRIMARY SCHOOL UNIT INFORMATION

SUBJECT: DT		YEAR 3	FOCUS: Mechanics	SPRING TERM	
				UNIT 2: <b>Mechanics – linkages/levers</b>	
Knowledge Focus	Design	Make	Technical Knowledge	Evaluate	
<b>National Curriculum Knowledge</b>	<ul style="list-style-type: none"> <li>• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</li> </ul>	<ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately.</li> <li>• select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</li> </ul>	<ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.</li> </ul>	<ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products.</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul>	
<b>Year 3</b>	<p>What Pupils will Know:</p> <p>Linkages/levers</p> <ul style="list-style-type: none"> <li>• To know what a mechanical system is</li> <li>• To know how to use lever and linkage mechanism</li> <li>• To know how to recognise fixed and loose pivots</li> <li>• To know that a mechanism provides movement</li> <li>• To know how levers when combined create linkages to change motion direction</li> <li>• To know the names of different forms of motion including:</li> </ul> <p><b>Linear</b></p> <p><b>Oscillating</b></p> <p><b>Reciprocating</b></p> <p><b>Rotary</b></p>			 	