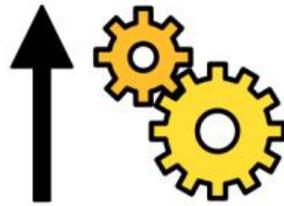




Gear



Drive belt



Gearing up



Gearing down

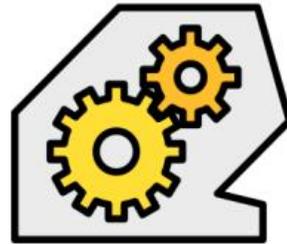


Mechanical system

Driver Follower



Driver



D&T:

# Mechanical Systems

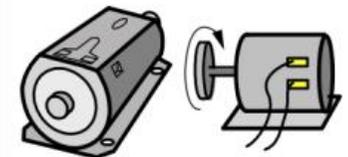
Driver Follower



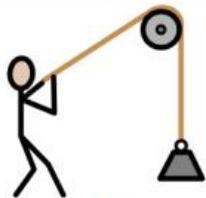
Follower



Mesh



Motor spindle



pulley



chassis



reversing switch

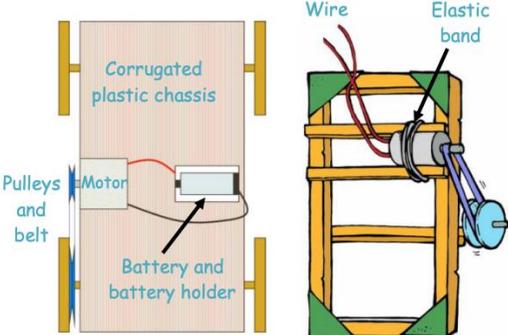
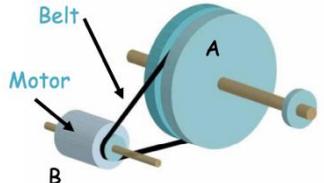


rotation



teeth

# D&T – Mechanical Systems: Y6 Topic Vocabulary Mat

Subject Specific Vocabulary		Relevant Pictures	Exciting Books/Websites
<b>mechanical system</b>	A set of related parts or components used to create movement.		<a href="https://www.science-sparks.com/how-to-make-a-catapult/">https://www.science-sparks.com/how-to-make-a-catapult/</a>  <b>The Kids' Book of Simple Machines</b> – Kelly Doudna  <b>How Was That Built? The stories behind awesome structures</b> Written by Roma Agrawal, illustrated by Katie Hickey  <b>Mr Shaha's Marvellous Machines</b> Written by Alom Shaha
<b>gear</b>	A wheel with teeth around its circumference		
<b>teeth</b>	The 'bump-like' projections around the outside of a gear that allow gears to join together (mesh).		<b>Other information</b>    The small pulley (B) rotates much more quickly than the large pulley (A)
<b>mesh</b>	The point where two gears join together and transfer movement.		
<b>pulley</b>	A grooved wheel over which a drive belt can run.	<b>What I've learnt already</b>	<b>Key Knowledge</b>
<b>drive belt</b>	The belt which connects and transfers movement between two pulleys.		
<b>gearing up and down</b>	Changing the rotational speed of a product by the use of pulleys or gears. When a small pulley or gear is used to drive a larger one the rotational speed is reduced and the product has been geared down.	Y2: <ul style="list-style-type: none"> <li>Wheels and axles form a mechanism to create movement.</li> </ul>	<ul style="list-style-type: none"> <li>Gears and pulleys can be used to speed up, slow down or change the direction of movement.</li> <li>Fixed axles must allow the wheels to rotate freely and continuously when a pulley is attached.</li> </ul>
<b>motor spindle</b>	The rod on the end of the motor onto which a gear or pulley is attached.	Y3: <ul style="list-style-type: none"> <li>A pneumatic system is one that uses gasses, and a hydraulic system uses water.</li> <li>A system is a set of related parts or components used to create an outcome.</li> </ul>	<ul style="list-style-type: none"> <li>A frame structure can be reinforced and strengthened with triangular shapes at the corners.</li> <li>To know how to measure and cut different materials, including dowel, accurately and safely</li> </ul>
<b>driver</b>	The gear or pulley that provides the input movement to the system.	The point about which a lever turns is called a pivot.	<ul style="list-style-type: none"> <li>To know how to implement a review process and understand the reasons for this.</li> </ul>
<b>follower</b>	The gear or pulley that provides the output movement to the system.		