

Mechanisms - The Great Fire of London (Y2)

Prior Learning		Concepts	
<ul style="list-style-type: none"> - EYFS Junk Modelling. - Can you remember any ways of joining materials? - Year 1 materials - Distinguish what materials would be used for what purpose. 	Design	A plan or drawing to show the look and function of a product.	
	Make	Form something by putting parts together and combining materials.	
	Evaluate	Establishing whether something was successful and how it could be improved.	

Key Vocabulary		Images and Techniques	
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Mechanism	a system of parts working together in a machine; a piece of machinery.
Movement	The act of moving.
Axles	a rod or spindle (either fixed or rotating) passing through the centre of a wheel or group of wheels
Key Facts	
Simple mechanisms (wheels and axles) are used to make something move along a surface.	
Wheels can be fixed to an axle or rotating.	
Vehicles have many different purposes. Fire engines are used to transport fire fighters and their equipment.	
Fire engines have changed over time. In Victorian times fire engines were made from wood. Now, they are made from metal.	
Fire engines have many different features like storage, hoses and ladders.	

Example of two different ways to fix wheels

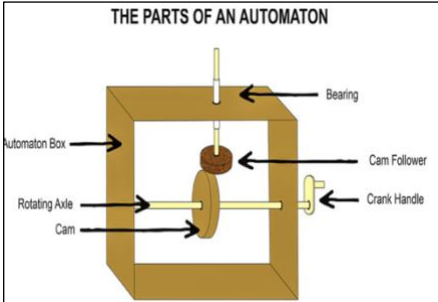
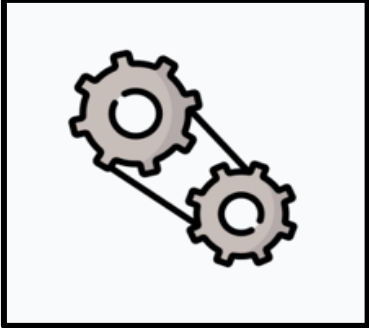
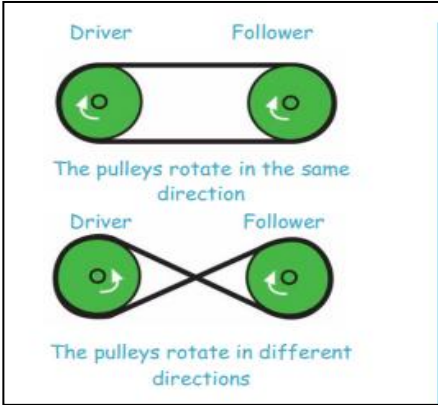
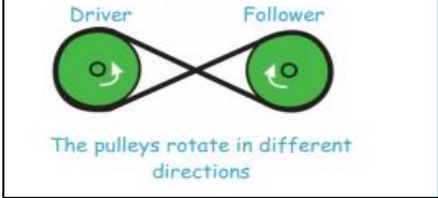
Types of wheels

Wood/card/MDF Plastic Cotton reels Foam covered reels

Mechanisms – The Lake District (Y4)

Prior Learning		Concepts	
		Design	A plan or drawing to show the look and function of a product.
		Make	Form something by putting parts together and combining materials.
		Evaluate	Establishing whether something was successful and how it could be improved.
Key Vocabulary		Images and Techniques	
Pivot	The central point, pin, or shaft on which a mechanism turns		
Pulley	a wheel on an axle or shaft that is designed to support movement and change of direction		
Fastener	a device that closes or secures something.		
Key Facts			

Mechanisms – Early Islamic Civilisation (Y6)

Prior Learning		Concepts	
<p><u>Year 2 – Mechanisms</u> – What is an axel? How do wheels on a vehicle work? What makes them move?</p> <p><u>Year 3 – Mechanisms</u> – What is a pivot? How does a pulley work? What materials and techniques can you use to fasten materials?</p>		Design	A plan or drawing to show the look and function of a product.
		Make	Form something by putting parts together and combining materials.
		Evaluate	Establishing whether something was successful and how it could be improved.
Key Vocabulary		Images and Techniques	
CAM	A rotating or sliding part in machinery designed to create movement.	 	
Follower	The peg or roller which follows the curvature of a cam and to which the motion of the cam is thereby directly communicated		
Automaton	A moving mechanical device that follows a set of rules to create motion.		
Key Facts		 <p>The pulleys rotate in the same direction</p>  <p>The pulleys rotate in different directions</p>	
1) Different types of CAMs such as round, snail and egg shaped will create different types of movement with the follower.			
2) An automaton is a mechanical device.			
3) A mechanism is a mechanical device for doing something. It includes the idea of tools and machines, but is used for a wider range of objects, processes and idea. Simple modern mechanisms can be pulleys or CAMs.			