
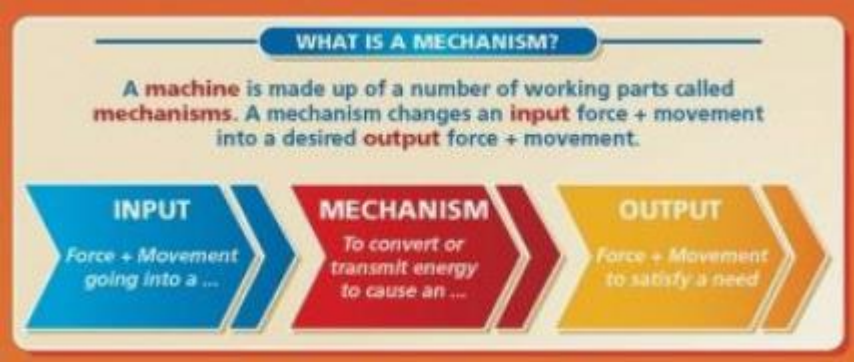

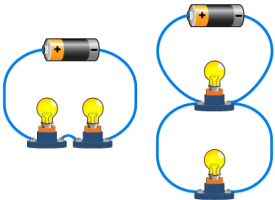




Area: Construction	Year: 6	Subject: Design and Technology
What should I already know? → how gears, pulleys and cams work → to use a range of tools safely → how to strengthen products	How will I use this learning in the future? In Key Stage 3, you will learn how more advanced mechanisms and electrical systems work. You will investigate new and emerging technologies.	What vocabulary should I learn?
What should I be able to do by the end?		cam a mechanism that rotates to create movement
Designing Plan the sequence of work and develop step by step plans which someone else could follow to make an intended product. Evaluating Consider how a product can be improved using existing products.	Use power tools safely and accurately, mostly independently.  <p>electric drill pillar drill sheet sander disc sander planer circular saw</p> Choose when to use mechanisms in products, selecting which is most appropriate for the product's purpose: 	chuck the part of a drill that spins
How do electrical systems enhance products? Traffic Lights: Traffic lights work on a timer system (e.g. giving a minute on green for each direction) to ensure that there is a consistent flow of traffic in all directions. Sometimes sensors are used to sense when cars need to be let through. 	Use electrical circuits and computer programming (where useful) to enhance products: 	circuit to move all the way around a path
		conductor a material that permits a flow of energy
		follower the part that moves as a result of a handle turning an axis containing cams and the cams moving a slider
		guard a part on equipment that protects the user from damage or harm
		plane to make a surface smooth or even
		slider the middle element of a cam mechanism that is moved by the cam to move the follower
		trigger the part of a drill that is pressed to make the drill bit rotate
		What should I know by the end?
		Careers using construction skills: Builder: builders build and repair buildings Engineer: engineers work in a variety of fields to develop products and make them fit for purpose Electrician: electricians install and maintain electrical systems Firefighter: firefighters use equipment to control and put out fires Locksmith: locksmiths are skilled in the installation and repair of locks and security devices Set Designer: set designers create the overall look of a theatre, television or film production. 