

	Year group: Year 1	Area/topic: Mechanisms- Moon Buggy
	(objectives from NC/ELG/Development matters)	<ul style="list-style-type: none"> ➤ Explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products.

Prior learning	Future learning
<ul style="list-style-type: none"> ➤ Children have had some experience of mechanisms when creating split pin products in Reception and slider cards in Autumn 2. 	<ul style="list-style-type: none"> ➤ Children will be able to name the different types of mechanism covered within our school curriculum. ➤ Children will think about how they might want to include them within their own products.

What pupils need to know or do to be secure	
Key knowledge and skills	Possible evidence
<ul style="list-style-type: none"> ➤ Children learn about a wheel and axle mechanism. ➤ The children will be able to create a moon buggy according to a loose design criteria. ➤ practice the skill of doing so over a series of lessons to build the skill. ➤ Children to explore different types of wheel and axle products like those used in Children's toys. ➤ Children will evaluate and assess what is needed in their design before creating the finished product. ➤ Some children may identify ways to make adaptions or improvements. 	Children to explore the wheel and axle mechanism to create a moon buggy. Photographs Quotes Designs and design criteria
Key vocabulary	
Mechanism, lever, linkages, propel, payload, counterweight, tripod, strong, prototype, materials	
Common misconceptions	Books linking to this area
Children may not be familiar with push/pull products. Children may not understand safely use tools they might need to use.	Look up

Memorable first hand experiences	Opportunities for communication
➤ Making a moon buggy	➤ Critiquing/evaluating their designs ➤ Group discussions around existing products ➤ Pointing and labelling

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Reasonable adjustments for pupils with SEND

Communication and Interaction	Cognition and Learning
Visual aids Modelling - through the use of visualiser or 1:1 Simple instructions Use of WAGOLL Pre-teaching vocabulary Coloured paper	Repetition of skills Photo examples Check understanding regularly Verbal responses being scribed by adults Large scale if fine motor is a barrier
Social, Emotional and Mental health	Sensory and Physical
Allow access to a quiet area Give them a special role to boost their self-esteem Seat pupil with more confident friend - talking partners Now and next board Sand timer Step by step guides with visuals/pictures/photos	Chunky pencils A range of tools/scissors Gloves for sensory issues Explore new materials Carpet space position Reduce background noise