



# Buglawton Primary School

Be the Best We Can

Topic: Mechanisms

Subject: DT

Year: 5

Term: Autumn

### What should I already know?

- Understand and use lever and linkage mechanisms.
- Distinguish between fixed and loose pivots.
- Know and use technical vocabulary relevant to the project.
- Know about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.
- Start to understand whether products can be recycled or reused.
- Start to understand that mechanical and electrical systems have an input, process and output.
- Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement.






### What will I know by the end of the unit?

- Understand that mechanical and electrical systems have an input, process and an output.
- Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement.
- Know and use technical vocabulary relevant to the project.

### What should I be able to do by the end of the unit?

- Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.
- Begin to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.
- With growing confidence select appropriate materials, tools and techniques.
- Select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately.
- Understand how mechanical systems such as cams or pulleys or gears create movement.
- Begin to measure and mark out more accurately.
- Demonstrate how to use skills in using different woodwork tools and equipment safely and accurately with growing confidence cut and join with accuracy to ensure a good-quality finish to the product.
- Evaluate their work both during and at the end of the assignment.

### Key Vocabulary

design	evaluate
thinking of new ideas	discuss strengths and weaknesses
vehicle	wheel
	
used to transport people or objects	a circular object that allows an object to move
axel	chassis
	
a rod that holds a wheels of a vehicle	the base frame of a car or vehicle
Fixed pivot	dowel
	
a fixed point around which something turns or rotates	a cylindrical rod made of wood or plastic

Agreed Real-Life Outcome: Research, design, make and evaluate an exploratory rover that can explore the surface of another planet.

