



# Eden Park Primary School Knowledge Organiser



## Prior Knowledge

During this enquiry, you will need to use your knowledge from Year 1 when you learnt about moving mini-beasts.

Here is a reminder of the prior knowledge that you will use:

- Your recognition of what sliders, levers, pivots and wheel mechanisms look like.
- Your introduction into how to make a sliding mechanism.
- How to use levers and pivots to create a moving mechanism.
- Your use and manipulation of resources such as scissors, sticky tack, paper fasteners and beads.

## The Powerful Knowledge we will take away from this Learning Enquiry:

There are various ways and means of being a good storyteller, including using expression, actions, props and use of resources such as books containing moving mechanisms.

There are a variety of different mechanisms you can apply when creating a story with moving parts such as a lever, pivot, rotation and concertina (see definitions on table).

Levers work by reducing the amount of force needed to move an object or lift a load.

## Our Key vocabulary

Word	Meaning	Image
Mechanism	any tool used to convert or control motion or transmit control or power.	
Lever	A lever is a long, sturdy body that rests on a support called a fulcrum.	<p><b>Levers</b></p> <p>Load Fulcrum Effort</p>
fulcrum	The fulcrum is the place where the lever pivots.	
Pivot	a shaft or pin on which something turns	<p>PIVOT FIXED PIVOT POINT</p>
linkage	A mechanical linkage is a collection of parts joined together to change or help movement.	
Rotate	Rotation is the movement of an object in a circular motion	
concertina	A spring created through the overlapping of two paper strips	

### Key Dates/Facts:

An example of an invention that uses a lever mechanism is a wheelbarrow. This invention can be traced back to third century ancient Asia. In 231 A.D, Zhuge Liang of Shu Han in China created a single wheel cart for an efficient way of transporting food and supplies to the front lines of battle.



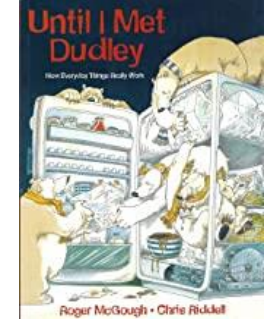
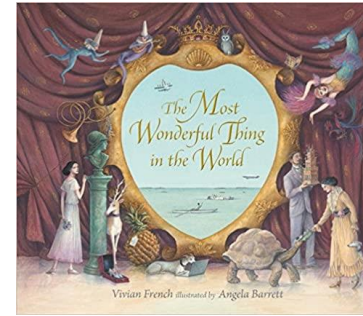
An example of an invention that uses a linkage mechanism is a windscreen wiper. This was invented by Mary Anderson in 1903. Mary invented it because she thought that it was so annoying that drivers had to keep stopping to get out of their cars to manually wipe the windcreens during rainy or snowy weather. The linkage performs two major functions. Firstly, it holds the wiper arm and blade in position and maintains proper contact between the blade and the windscreen. Secondly, it converts the rotary motion obtained from the motor into suitable form. And to do this, it employs a worm gear. Worm gear reduces the speed of output shaft of motor and converts it into suitable torque required to operate wiper arm.



### Focussed Literacy texts:

'The Most Wonderful Thing in the World' by Vivian French.

'Until I met Dudley' by by Roger McGough and Chris Riddell



### Visitor

Malou the Storyteller will be coming in to 'kick start' our learning enquiry through leading a workshop involving all of Year 4! She will be demonstrating her own story-telling skills and then sharing her expertise with us! By the end of the morning, we will all be tremendous story tellers!

