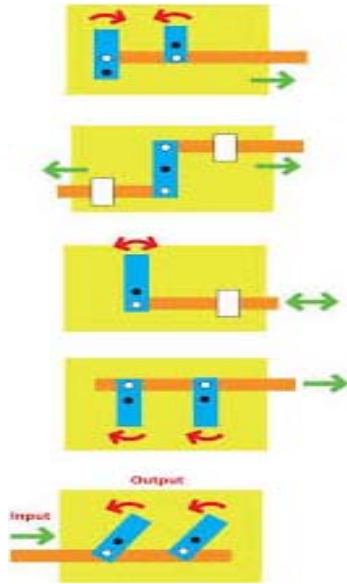


## Year 3/4: Levers and Linkages-How would you use a moving model to explain a volcano?

Subject Specific Vocabulary		Prior Learning Y1/2	Sticky Knowledge
<b>mechanism</b>	a device used to create movement in a product.	Explored and used mechanisms such as flaps, sliders and levers. Gained experience of basic cutting, joining and finishing techniques with paper and card.	<ul style="list-style-type: none"> <li>• How can different levers and linkages work to create different effects</li> <li>• How can you construct a lever and linkage system</li> <li>• Measuring accurately</li> <li>• Joining carefully using split pins</li> <li>• Using annotated sketches to communicate their plans</li> <li>• Creating prototypes to test ideas</li> <li>• Produce and finish a product to a good standard</li> <li>• Take constructive feedback from an end user before evaluating their page</li> </ul> 
<b>lever</b>	a rigid bar which moves around a pivot. Levers are used in many everyday products. In this project children will use card strips for levers and paper fasteners for pivots.	<b>Future Learning Y5/6</b>	
<b>linkage</b>	the card strips joining one or more levers to produce the type of movement required. The term 'linkage' is also used to describe the lever and linkage mechanism as a whole.	Will need to measure and construct with greater accuracy. Will use more complex systems and need to apply techniques to a 3d context. Creative innovative products. Solve design problems. Understand more advanced mechanical systems.	
<b>slot</b>	the hole through which a lever is placed to enable part of a picture to move.		
<b>guide or bridge</b>	a short card strip used to keep lever and linkage mechanisms in place and control movement.		
<b>fixed pivot</b>	a paper fastener that joins card strips to the backing card		
<b>loose pivot</b>	a paper fastener that joins card strips together.		
<b>system</b>	a set of related parts or components used to create an outcome. Systems have an input, process and an output. In a lever and linkage mechanism, the 'input movement' is where the user pushes or pulls a card strip. The 'output movement' is where one or more parts of the picture move.	<p><b>Pop-Up Page</b></p> 