Technical Knowledge:

* Understand and use mechanical systems in their products [sliders, levers and linkages]
* Understanding that an input is the motion used to start a mechanism.
* Understanding that output is the motion that happens as a result of starting the input.
* Describing mechanisms that can be used to change one kind of motion into another.
* Use simple lever and linkages to create movement.

What should I already know?

Discuss and evaluate the existing products to understand their purpose. Discus the given design brief and the design criteria.

Design their own product using labelled drawings. Be able to discuss what resources they require for their products.

Based on their individual designs, choose from a variety of materials and perform practical skills e.g cutting joining and finishing the product with some independence etc

Testing their products. Evaluate their ideas and products against the design criteria provided using a sheet with sentence starters.

Key Vocabulary:

|  |  |
| --- | --- |
| Slider | a knob or lever that is moved horizontally or vertically to control a variable. |
| Lever | a rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end when pressure is applied to the other. |
| Pop – up | appear or occur suddenly. |
| Measure | ascertain the size, amount, or degree of (something) by using an instrument or device marked in standard units |
| Pivot | he central point, pin, or shaft on which a mechanism turns or [oscillates](https://www.google.com/search?safe=active&sa=X&sca_esv=561015036&bih=651&biw=1366&rlz=1C1GCEV_enGB949GB950&hl=en&q=oscillates&si=ACFMAn9-5A9OMKPWcg180I9o9MndqA5ulukhhgD2tN1h33EVruSPSbi3y2QfGjt8UhSlmxNXNJQ78eOQ44QEBWYUTRhQGD_jwA%3D%3D&expnd=1). |
|  |  |

DT Skills:

Design:

Investigate and evaluate the existing products to understand their purpose. Discus the given design brief. As a class, create their design criteria. Design their own product using labelled drawings. List all the resources that they require for the product.

Make:

Based on their individual designs, choose from a variety of materials and perform practical skills e.g measuring, cutting joining and finishing the product independently.

Evaluate:

Testing their products. Evaluate their ideas and products against the design criteria using a given sheet with leading questions.

Blooms Taxonomy – Specific Verbs to Use in Lesson Aims

Knowledge: Describe, find, identify, list, locate, name, recognise, retrieve Comprehension: Classify, compare, explain, infer, interpret, paraphrase, summarise Application: Carry out, implement, use Analysis: Deconstruct, Organise, outline, structure Synthesis: Construct, design, devise, invent, make, plan, produce, Evaluation: Appraise, assess, choose,

Focused designer/ company

Key Knowledge

  