

Subject: Design and Technology **Topic:** Moving Pictures (Slider and Levers) **Year Group:** 1

Prior Learning: In Reception I explored books with moving parts. I had experience of simple cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape. I had experience of making simple hinges and flaps from card and paper.

Vocabulary:

Slider: Helps to move things side to side or up and down.

Lever: A rigid bar which moves around a pivot. Levers are used in many everyday products. In this unit, children will use card strips for levers and paper fasteners for pivots.

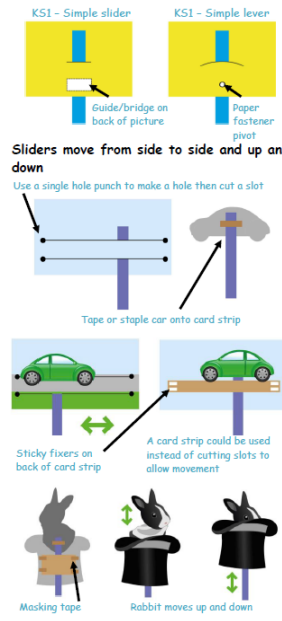
Pivot: The central point the lever rests on.

Mechanisms: A device used to create movement in a product.

Slot: The hole through which the lever or slider is placed to enable part of the picture to move.

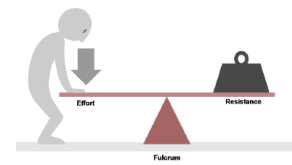
Guide or bridge: A short card strip used to keep sliders in place and control movement.

Sliders

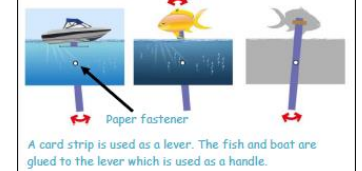


Levers

Understanding Levers



Levers can be used with or without a slot



Simple mechanisms move:

- in a straight line
- in a straight line, backwards and forwards
- round and round
- in a curve

Effective sliders and levers should move smoothly. You will need to consider where to place the slot and how long it should be.

Design Brief: To make Christmas card with a moving part.

Functional Considerations: The moving part must use a slider or a lever.

Aesthetic Considerations: The card must look appealing to its intended recipient.

What I will know by the end of the unit:

How to make a lever. How to make a slider. How to make a guide/bridge to control the movement of a slider.

Design: design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make: select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing select from and use a wide range of materials and components

Evaluate: explore and evaluate a range of existing products evaluate their ideas and products against design criteria

Technical knowledge: build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products