

Objectives

- use research and develop design criteria to inform the design of a pop up book
- generate, develop, model and communicate their ideas through discussion
- evaluate their ideas and products against their own design criteria and consider the views of others to improve
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- select from and use a wide range of materials and components including construction materials to create basic pop up mechanisms [for example, levers and linkages] according to their functional qualities and aesthetic qualities



Sticky Knowledge

To understand and be able to use lever and linkage mechanisms.

- to know that a fixed pivot is a paper fastener that joins card strips to the backing card and a loose pivot is a paper fastener that joins card strips together.

- to know and use technical vocabulary relevant to the project

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.

Vocabulary

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|---------------|--|
| Sliders | Move in one direction - side to side or up and down |
| spacers | Small pieces of card to help keep the slider in place |
| Specification | A design specification is the details about a project including sizes, materials and what a project would look like. |
| lever | Directional movement based on a fixed or loose pivot |
| input | The 'input movement' is where the user pushes or pulls a card strip. |
| output | The 'output movement' is where one or more parts of the picture move. |
| Structure | A structure is usually something that stands on its own |
| mechanism | A mechanism is a system of parts working together |

Design

- To develop a design brief using detailed specifications - sliders, levers pivots
- To manipulate materials to achieve a planned effect.
- To select appropriate resources and adapt work where necessary.

Make

To design and make a book that has a moving mechanism (a slider or lever) for children to read.



Evaluate

- To evaluate my ideas as I am going through the project.
- To evaluate my final product