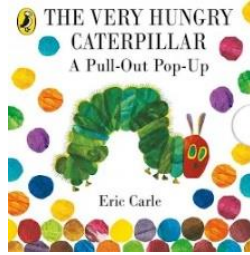
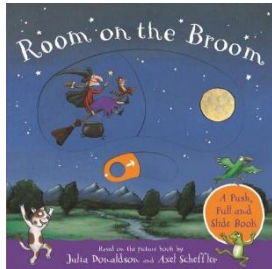


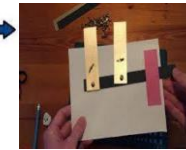
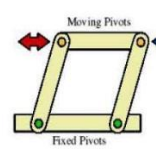
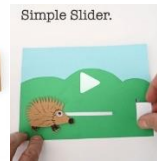
# DT Knowledge Organiser

## Mechanical Systems - Pop-up Books

### Did you know?



Some famous books have been turned into books with moving parts. Their mechanisms can slide, rotate, pop out and wiggle! How do you think the mechanisms below work?

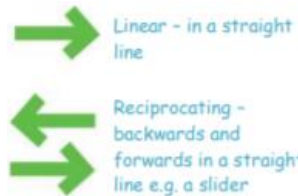


### Key Vocabulary

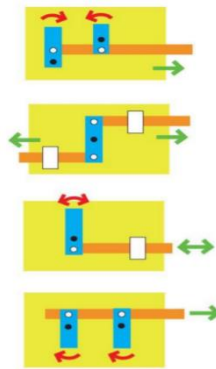
**Guide:** shows the way  
**Input:** movement in  
**Lever:** stiff rod or stick  
**Linkage:** connection/joined part  
**Mechanism:** piece of machinery  
**Output:** movement out  
**Pivot:** fixed point

### Designing

\* You need to think about who your product is for - what is its purpose and who is going to use it?  
 \* Consider what kind of movement is useful to tell your story.



### Making



\* Levers and linkages can be made using card, cardboard, lollipop sticks, or another thin, firm material.  
 \* Guides can be made using fixed strips of card.  
 \* They should be strong and move smoothly.

### Evaluating

\* How well do your mechanisms work? Do they move smoothly?  
 \* Does your book meet its purpose? Will the user like it and be able to work it?  
 \* What could you do to make the mechanisms even better?



Character	Critical thinking	Creativity	Communication	Citizenship	Collaboration
Who are pop-up books aimed at?	What everyday objects have lever and linkage mechanisms?	Can you invent your own mechanism with multiple movements?	How will you make sure that your intended user can read and use the book easily?	What parts of your work can you make using recycled materials?	How will you share your book once it is finished?