

# Storybooks

Design & Technology

Year 3/4

Lesson 1 of 6

Learning Objective		Resources	
To investigate and evaluate products with lever and linkage systems.		Slides Selection of books with moving parts Worksheet 1A/1B/1C/1D	
Teaching Input			
<ul style="list-style-type: none"><li><b>NB: You will need to provide each table with a selection of books that have moving parts (flaps, pop-ups, rotating pictures).</b></li><li>Ask children what their favourite storybook is. Invite them to discuss the book with a partner.</li><li>tell children that over the course of the unit they will be designing and making their own storybook with moving parts. Have you read a book with moving parts? What was it called?</li><li>Provide tables with a selection of books with moving parts such as aa, pop-up pages, flaps to open, pictures to rotate, etc. Invite children to look at the books and the moving parts they have.</li><li>Ask children to discuss how they think each of the moving mechanisms were made, what materials were used and which part moves and doesn't move.</li><li>Invite children to also discuss the layout, wording, fonts and style of the book to help them with ideas for their own story book.</li><li>Display some of the vocabulary needed when talking about moving mechanisms: lever, pivot, linkage, rotate. Check children understand what each of these words means.</li><li>Explain to your class the definition of the four words introduced and show them examples of these mechanisms.</li><li>Can they explain how they work to a partner?</li></ul>			
Main Activity			
<u>Lower ability:</u>  Ask children to choose a book on their table to look at more closely. On worksheet 1A, children to sketch each moving part, then describe how they think it was made.	<u>Middle ability:</u>  Ask children to choose a book on their table to look at more closely. On worksheet 1B, children to sketch each moving part, label each part, then describe how they think it was made. Ensure children use the correct technical vocabulary.	<u>Higher ability:</u>  Ask children to choose a book on their table to look at more closely. On worksheet 1C, children to sketch and label each moving mechanism, then design a similar mechanism for a different purpose (as stated on the worksheet). Children to describe why their design fits the design criteria.	
Fancy something different...?			
<ul style="list-style-type: none"><li>Tell children that products with lever and linkage systems are not just found in storybooks. They are all around us.</li><li>Today they will be hunting for these moving mechanisms in everyday objects.</li><li>Give each child a copy of worksheet 1D and tell them that they need to look around the classroom (or around the school) for different lever and linkages systems. These could be found on toys with moving parts, doors with fire-safety closers, push-top biros, etc.</li><li>Challenge children to see how many they can find and to sketch and describe them on their worksheet.</li></ul>			
Plenary		Assessment Questions	
Invite children to look at the moving picture books on their tables again. Who do you think these books are aimed at? Who do you think would most enjoy a book with lever and linkage systems? Why?		<ul style="list-style-type: none"><li>Can children recognise products that contain lever and linkage systems?</li><li>Can children explain why a particular mechanism has been used for a particular purpose?</li><li>Can children use technical vocabulary to describe lever and linkage systems?</li></ul>	