

National Curriculum subject content:

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, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

- ✓ explore and evaluate a range of existing products.
- ✓ evaluate their ideas and products against design criteria.

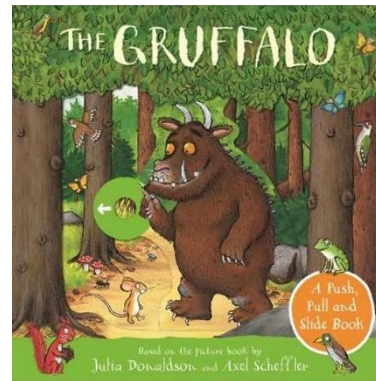
Technical Knowledge

- ✓ explore and use mechanisms [for example, levers, sliders], in their products.

National Curriculum theme:

- ✓ Design
- ✓ Make
- ✓ Evaluate
- ✓ Technical knowledge

Design and Technology: Yr1 summer 1 Mechanisms: levers and sliders

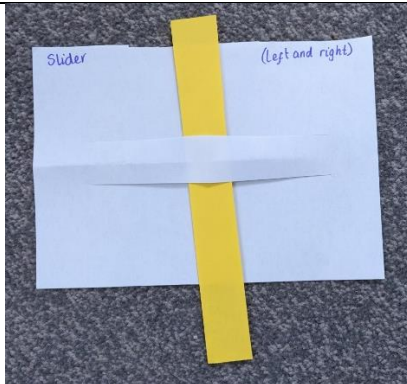


Key Vocabulary:

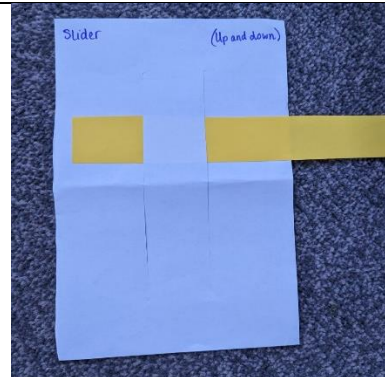
Mechanism	a device used to create movement
Slider	a rigid bar which moves backwards and forwards along a straight line
Slot	a long, narrow gap or slit for something to be inserted
Lever	a rigid bar resting on a pivot. When pressure is applied to one end the other end moves
Pivot	the central point on which a mechanism turns
Split pin/ paper fastener	a metal pin that can be split after being pushed through a hole, in order to hold the sheets of paper together
To join	connect things together
Moving	in motion
Direction	the way something moves
Fold	to bend (something flexible and relatively flat) over on itself so that one part of it covers another
Cut	to make an opening or incision, in something with a sharp-edged tool or object
Pull	a force drawing something in a particular direction

Technical Knowledge: Mechanisms (levers and sliders)

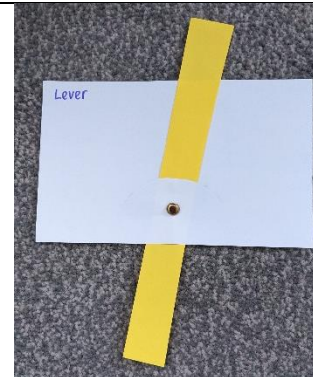
Slider (left/ right)



Slider (up/down)



Lever



Wheel



**Design and Technology:
Yr1 summer 1
Mechanisms: leavers and sliders**

Sequence of Learning:					
Objectives (key knowledge):					
Making a moving picture					
<p>Lesson 1: Explore existing products</p> <p>To learn how moving parts in books work.</p>	<p>Lesson 2: Technical Knowledge (mechanisms)</p> <p>To learn how to make sliders.</p>	<p>Lesson 3: Technical Knowledge (mechanisms)</p> <p>To learn how to make moving parts using a pivot point.</p>	<p>Lesson 4: Design</p> <p>To design a picture with moving parts.</p>	<p>Lesson 5: Make</p> <p>To select appropriate materials and techniques to make a moving picture.</p>	<p>Lesson 6: Evaluate</p> <p>To evaluate the effectiveness of my product against the design criteria.</p>
<p>Task: Explore moving picture books.</p> <p>(e.g. Pop Goes the Weasel Pop-up book by Robert Crowther, The Gruffalo: A Push, Pull and Slide Book by Julia Donaldson)</p>	<p>Task: Explore materials and tools (card, paper, cardboard, plastic, tape, glue, split pins Can you join materials? Can you make them move? Teach how to make a slider (up/down and side to side)</p>	<p>Task: Make a lever with a pivot point. Make a wheel (seasons wheel).</p>	<p>Task: Create design criteria considering audience, purpose etc. Must include a minimum of one moving part. Design a moving picture to tell part of a story (traditional tale).</p>	<p>Task: Make a moving picture. Use cutting and joining techniques to make moving parts.</p>	<p>Task: Test and peer asses your products. Evaluate the effectiveness of your product. Refer back to design criteria.</p>