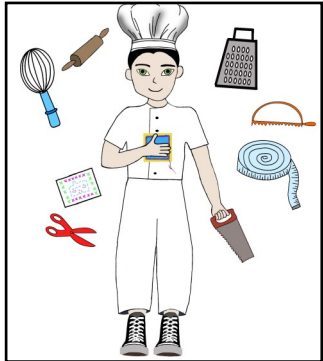




Knowledge Organiser					
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Concept



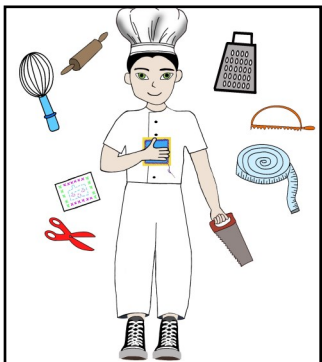
Technical knowledge	
•	A moving picture book can be made using a mechanical system of levers and linkages.
•	Levers are attached to material and move around a pivot. These can be used to create moving parts of an object.
•	Pivots can be loose or fixed. A loose pivot joins the lever to another lever so they both move at the same time. A fixed pivot fixes the lever to the material and main object. We will need to use both kinds to make our mechanical moving picture books.

Prior experiences or knowledge learnt
• Explored and used mechanisms such as flaps, sliders and levers. • Gained experience of basic cutting, joining and finishing techniques with paper and card. • Experience of axles, axle holders and wheels that are fixed or free moving.

Project
Example only

Skills I am practising
• Appraise and analyse mechanisms in existing products (moving scene) • Identify how mechanisms work in existing products e.g. sliders/levers. • Make prototype mechanisms. • Design using pictures and labels • Create a product which includes sliders and levers / wheels and axels. • Evaluate my product against function

Sequence of learning	
1)	Appraise and analyse a selection of existing products.
2)	identify how mechanisms work (fixed pivots/axles).
3)	identify how mechanisms work (loose pivots/axles).
4)	Generate and develop ideas using exploding diagrams to design an end product.
5)	make a product to a brief .
6)	Evaluate a finished product against a design brief.



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Key vocabulary

Tier 2	Tier 3
Slider—a mechanical, moving part which slides in order to create movement. Can be used as part of a linkage mechanism. A slider reciprocates (moves in and out in a straight line).	Linkage—a linkage usually has levers, sliders and pivots. The pivots are a mix of fixed and floating pivots. A linkage has several parts that are linked together that create movement.
Lever—a mechanical, moving part which pivots in order to create movement. Can be used as part of a linkage mechanism. Levers turn around a fixed pivot.	
Pivot—a point where a pivot moves. A lever turns on the pivot point.	