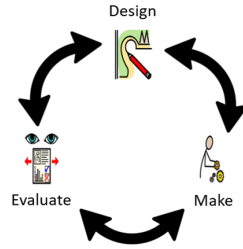In the Owls classes, the children will be exploring mechanisms through learning about levers and sliders. They will find examples of sliders and levers in their classroom environment, and then explore books with moving pictures. What does this add to the book? They will learn about the different parts of these mechanisms through deconstruction.

Using the design, make, evaluate model the children will make a product to fulfil a design criteria set for them. They will learn to safely use a variety of tools and techniques to construct their own moving pictures.

We will use the Design, Make and Evaluate continuous cycle during every Design and Technology lesson. The cycle shows how we will be constantly evaluating during the design and make stages to improve our products or dishes along our invention journey. As well as evaluating our final product or dish at the end of our long enquiry to conclude what went well, what we would improve next time and what challenges we have faced along the way.

Design

Evaluate

Make

Preston Primary School Knowledge Organiser

Topic: DT—mechanisms. How can I make a moving picture?	Term: Autumn 1	Year: Unit 2	Duration: 4 Weeks

How can I <u>make</u> a moving picture?

Week 1 and 2: Exploration

My goals:	I think...	My teacher thinks...
I know what a mechanism is.	☆☆☆	☆☆☆
I can explain what a slider does.	☆☆☆	☆☆☆
I can explain what a lever is.	☆☆☆	☆☆☆

How can I <u>make</u> a moving picture?

Week 3 and 4: Construction and Evaluation

My goals:	I think...	My teacher thinks...
I can make a product to meet a design <u>criteria</u>	☆☆☆	☆☆☆
I can evaluate my product against the design criteria	☆☆☆	☆☆☆

What I have already learnt:

In Puffins and Penguins children will have had the opportunity to create with materials - safely using and exploring a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - to share their creations, explaining the process they have used.

What I will learn:

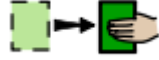In Year 3/4, the children will learn about the mechanisms of moving toys.

Children explore moving vehicles and will learn about making cars with moving wheels. Constructing the mechanisms with wheels and axles to make moving cars.

Word	Image	Meaning
moving		changing from one place or position to another
lever		a long piece of wood, metal, etc. used for lifting or opening something by somebody placing one end of it under an object and pushing down on the other end
slider		a device for moving something, which you slide up and down or from side to side
pivot		the central point, pin or column on which something turns or balances
wheel		one of the round objects under a car, bicycle, bus, etc. that turns when it moves
evaluate	Evaluate	to form an opinion of the amount, value or quality of something after thinking about it carefully
product		a thing that is grown, produced or created, usually for sale
design	Design	the art or process of deciding how something will look, work, etc. by drawing plans, making computer models, etc.

Evaluate	Explore and evaluate a range of existing moving books
Mechanisms	
Mechanisms Make	Deconstruct a simple slider and lever and describe how it works.
	Explore and use mechanisms (for example sliders), using a slider to make a picture move.
	Explore and use mechanisms (for example levers) using a lever to make a picture move.
Design	Design purposeful, functional, and appealing products for themselves and other users based on design criteria designing an appealing moving picture. Generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups drawing an annotated sketch to show their ideas about a moving picture.
Make	Explore and use mechanisms (for example levers, sliders) in their products making a moving picture.
Evaluate	Evaluate their ideas against design criteria evaluating a moving picture.

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