KS2 Design Technology Knowledge Organiser - Mechanisms Cams

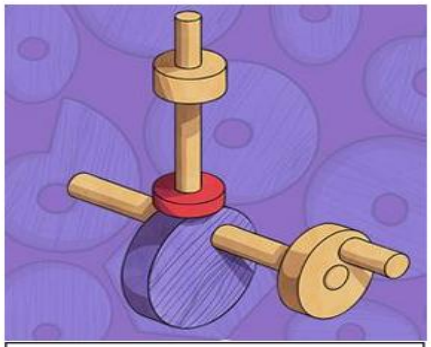
Moving Toys

In DT this term, we will be combining our new science topic 'Forces and Motions' with our DT knowledge to create our very own moving toys.

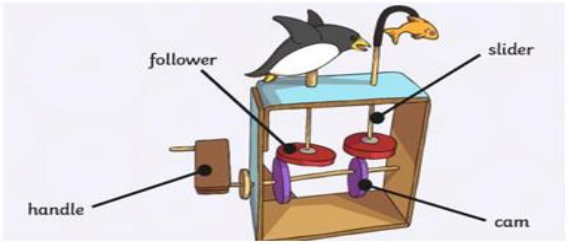
During this topic, children will be:

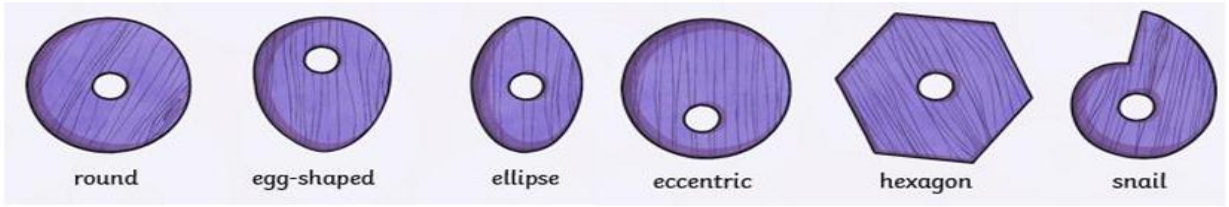
- Investigating toys with moving cam mechanisms.
- Investigating different types of cam mechanisms,
- Investigating ways of strengthening structures for a moving toy.
- Designing and following a design to create a moving toy, with a cam mechanism.
- Evaluating their own moving toy.

Different types of cams can create different movements. (see below)



A cam mechanism



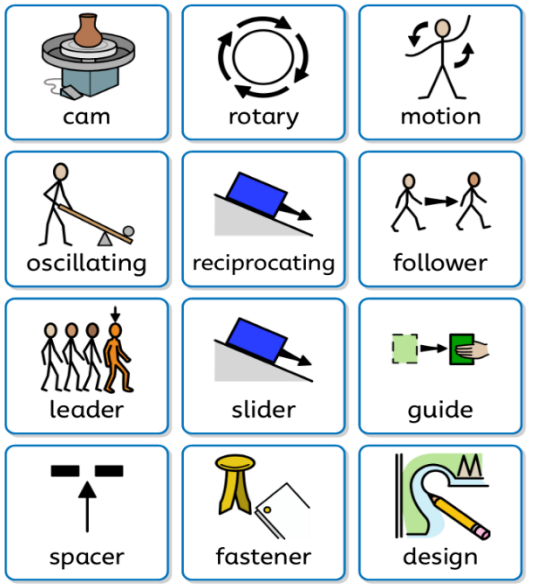


What is a 'Cam mechanism'?

A cam mechanism is made up of three components:
-a cam
-a slider
-a follower

The mechanism causes components to move. Cams can be made from metal, plastic or wood.

Key words/ vocabulary:



Year 3	Year 4	Year 5	Year 6
I CAN identify a cam mechanism and explain how it creates movement.	**I CAN** explain how different cam shapes create different movements.	**I CAN** design and construct a cam mechanism to achieve a specific effect.	**I CAN** evaluate and refine a mechanical product using knowledge of cams and followers.
I CAN make a simple cam mechanism with support.	**I CAN** create a moving product using a cam and follower system.	**I CAN** accurately measure, cut and assemble a cam mechanism independently.	**I CAN** justify design decisions and improve a product based on testing and feedback.