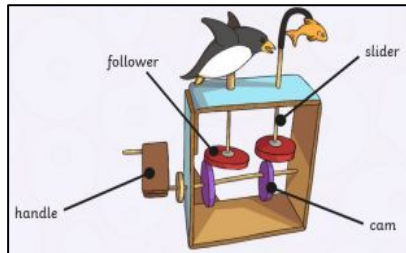
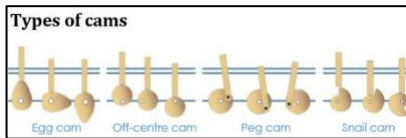
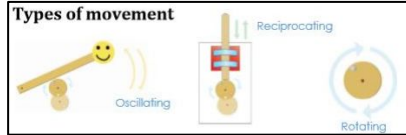


# Key Question: What's in the toy box?

Explore how Cams work and design and make own to create a moving toy (*Cams*)

## Vocabulary

<b>Cam</b>	A mechanism that changes one sort of movement to another.
<b>Follower</b>	The device that follows the movement of the Cam.
<b>Rotary motion</b>	A movement that goes round.
<b>Guide</b>	A piece of material used to guide the movement of another.
<b>Spacer</b>	A piece of material used to create extra space to allow moving parts to move freely.
<b>Reciprocating motion</b>	A backwards and forwards movement in a straight line (slider).
<b>Oscillating movement</b>	A moving to and fro around a pivot point (lever).

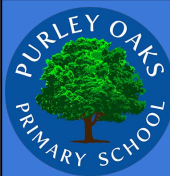


In this topic, **we are learning to:**

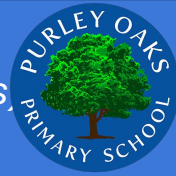
- **Explore** different types of Cams and their movements.
- **Generate** different designs and evaluate their practicalities.
- **Decide** upon a final idea and include detailed plans of how to make the Cam.
- **Create** a final product using appropriate Cam.
- **Evaluate** our final products deciding upon successes and area for improvement.

## Skills required:

- Cutting
- Measuring
- Sawing
- Joining
- Painting



# Key Question: What's in the toy box?



Explore how cams work and design and make own to create a moving toy.(Cams

## Assessment Focus:

### **Explore:**

- Use research and develop design based on Cams and their different movements.
- Evaluate the key designs of individuals in design and technology has helped shape the world.

### **Generate:**

- Generate, develop, model and communicate our ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.
- Confidently select appropriate Cams, tools, materials, components and techniques and use them.

### **Decide:**

- Draw up a specification for our design- link with Mathematics and Science.
- Plan the order of our work, choosing appropriate Cams, materials, tools and techniques.
- Aim to make and to achieve a quality Cam product

### **Create:**

- Accurately apply a range of finishing techniques, including those from art and design
- Suggest alternative methods of making Cam if the first attempts fail.
- Identify the strengths and areas for development in our ideas and products.
- Use tools safely and accurately.
- Demonstrate when to make modifications as we go along.
- Construct Cam using permanent joining techniques.

### **Evaluate:**

- Evaluate our products, identifying strengths and areas for development, and carrying out appropriate tests.
- Evaluate our work both during and at the end of the assignment.
- Record our evaluations using drawings with labels.
- Evaluate against our original criteria and suggest ways that our product could be improved