



Yr 5 DT: Structures & Mechanisms



Key Vocabulary

CAM Shaft : A shaft with one or more cams attached to it

Wooden Snail CAM : Cam that produces a slow rise and quick drop movement.

Eccentric CAM : An eccentric cam is a disc with its centre of rotation positioned 'off centre'. This means as the cam rotates the flat follower rises and falls at a constant rate.

Movement : A change of direction and speed.

Hand-powered Mechanism: A mechanism that is controlled by turning a handle.

Linear Motion: Movement in a straight line .

Rotary Motion: A motion turning round in a circle.

Oscillating Motion: A motion swinging from side to side.

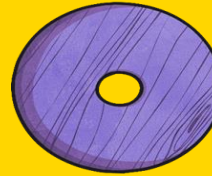
Reciprocating Motion: A repetitive back-and-forth

Follower : The follower is in contact with the cam and causes the slider to move the object from rotational to linear motion

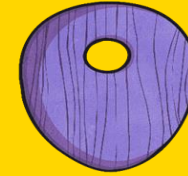
Slider: A slider converts rotational movement into linear movement

Component: A part or element of a larger whole, especially a part of a machine or vehicle.

Types of CAMS



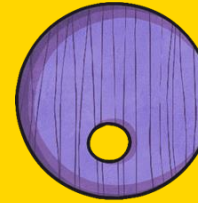
Round



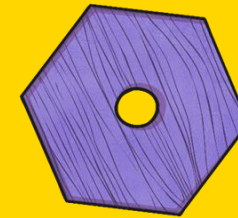
Egg Shaped



Ellipse



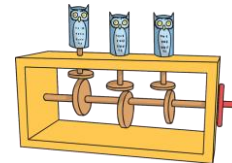
Eccentric



Hexagon



Wooden Snail



The eccentric cam rotates as it fixed to the axle.
The follower cam moves up and down (linear) and rotates.
The owls – they have linear and rotary movement caused by the eccentric cams and followers.

