

KEY VOCABULARY

mechanism

a **system of component parts** working together in a **machine**

component part

part of a mechanism

cams mechanism

a particular **type of mechanism** which **transfers rotary motion to linear motion**

rotary motion

when an object **moves in a circular way** around a fixed axis

axis

a real or imaginary **line around which an object rotates**

linear motion

when an object **moves up and down** or **left to right** in a straight line

cam

the **rotating part of a cams mechanism** – a cam can have different profiles (shapes) which cause the follower to move in different ways

follower

part of a cams mechanism which is **moved by the cam** – it moves in **linear motion**

slider

part of a cams mechanism which **keeps the follower in position**

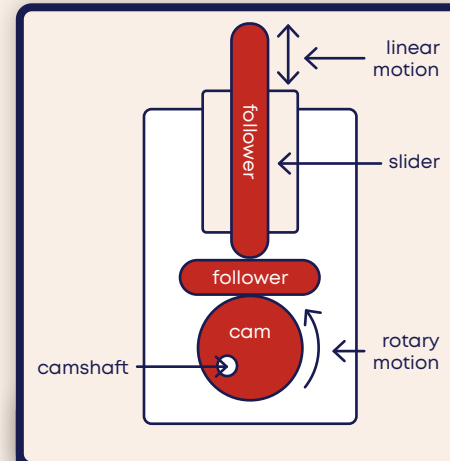
camshaft

a part of the cams mechanism which is **attached to the cam and used to turn it**

cross-sectional diagram

a **diagram** showing the shape of an object as if it has been **sliced through the middle**

cams mechanism



cross-sectional diagram showing a cams mechanism



cams mechanism inside a cardboard structure

design criteria

user
who is the product for?

purpose or function
what is the product for?

aesthetic appeal
how is the design of the product pleasing to look at?

the elephant clock

an invention by al-Jazari (the 'father of robotics')

