Egyptians — Design and Technology

Vocabulary Word **Definition** An assembly of mov-Mechaing parts which perform a complete funcnisms tional motion A slide or roller attached to a rotating Cam shaft to give a particular type of motion Part of the cam mecha-Slider nism which is attached to the follower Mechanism in contact **Follower** with the cam Linear Moving in a straight line, up or down movement Rotary Turning around in a circle movement A rod or spindle Axel through the cam

Previous Knowledge

In KS1 and Year 3 and 4 you have:

- Evaluate your own and existing products
 - Research and develop design criteria to plan your own product
- Select and use a wider range of materials

Design and Technology Key Concepts				
design	research	Mechanism	Textiles	
prototype	Functionality	structures	Reflect	

Key concepts

- A cam mechanism is made of three components: a cam, slider and a follower
- The mechanism causes components to move. Cams can be made from metal, plastic or wood
- A cam mechanism is made of a cam, axel, follower, slider and handle
- Cams come in different shapes which create different motions
 - Cam mechanisms create linear and rotary movements

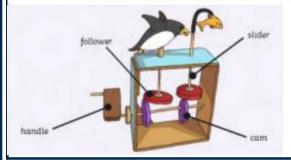
When a circular cam is placed at the edge of another circular cam at 90° it will rotate the movement through 90°, commonly used in simple spinning toys.





Non-circular cams are used to create different types of linear movement. The shape of these non-circular cams will influence how smoothly or quickly the follower rises and falls. If the non-circular cam is placed directly underneath the follower, only linear move-

ment will occur. If it is placed towards the edge, then the follower will rotate, as well as going up and down. This means it is easy to create linear and rotational movement in one cams mechanism.



Spellings: attach, amateur, develop, equip, equipped, equipment, system, sufficient

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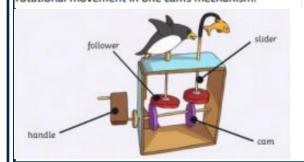
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