

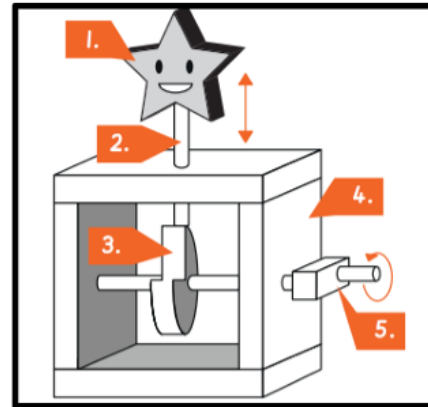


Key Knowledge

Automated Toys

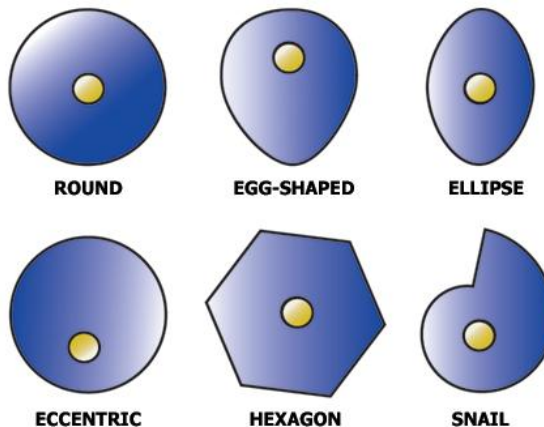
An automata toy is a hand powered mechanical toy. The mechanism in this automata has the following components:

1. Character
2. Follower
3. Cam
4. Frame
5. Axle attached to handle



Cam shapes

A cam is a rotating mechanism which is used to change the type of movement. Cams are most commonly used to convert rotary movement into linear movement. Cams come in many different shapes and sizes. Changing the shape of the cam in an automata toy will create different movements.



The Design Process

Explore Design Ideas Make Test Evaluate



design criteria



user



product



iterative process



evaluate



innovation



Key Questions

What is a cam?

[Find out more!](#)

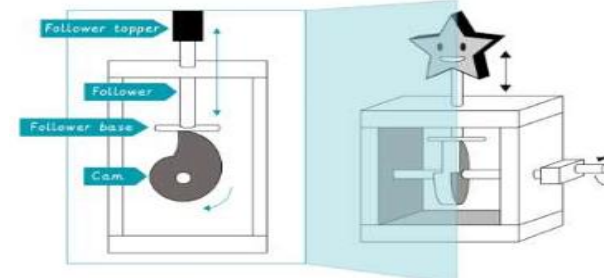
What types of products are they used in?

Key Vocabulary

Meaning

automata	self-moving
axle	a rod that connects rotating parts
clamp	a tool for holding objects together, for example, when you have glued something together a clamp can be used to hold the objects in place until the glue dries
drill	a machine or hand tool used to bore round holes into materials like wood, plastic, or metal
rotary movement	movement that goes around in a circle
linear movement	movement that goes in a straight line

Did you know...



A cross-sectional drawing shows the inside of an object. It reveals hidden layers, materials, and parts that you cannot see from the outside.