

# Mechanical systems:

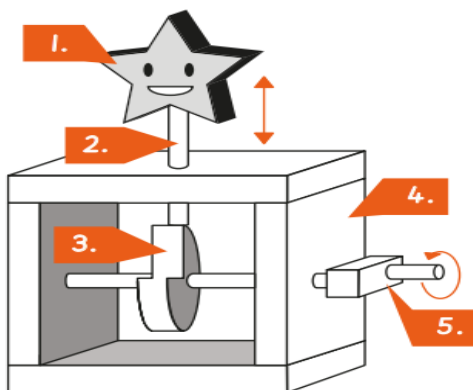
## Automata Toys

### Key Concepts

- To master practical skills
- To design, make, evaluate and improve.
- To take inspiration from design throughout history.

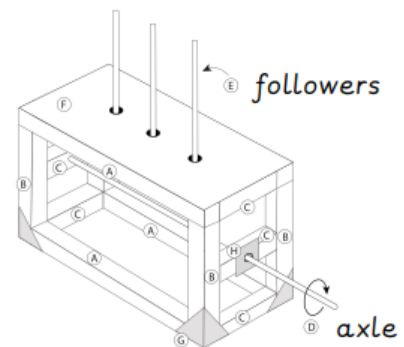
### **Automata toy components:**

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



### Key knowledge

- To know which mechanisms are working together to make a mechanical system.
- To know that there are different directions of movement.
- To know that mechanisms can change one type of movement to another.



### Key Vocabulary

Automata	A moving mechanical device.
Axle	A rod connected to the centre of a circular object such as a wheel that allows or causes it to turn
Cam	A cam is a simple mechanism that converts rotary motion (movement that goes round in a circle) into linear motion (movement in a straight line).
Cam profile	A cam is generally a disc or a cylinder mounted on a rotating shaft, which gives a special motion to a follower, through direct contact. The cam profile is determined by the required follower motion and the design of the type of follower.
Component	A part of something.
Dowel	A rod used for fastening together two pieces of wood.
Follower	Followers are mechanisms which are in contact with the shape of the cam and, as a result, produce a pattern of motion.
Mechanism	A device used to create movement.