

Year 6 Knowledge  
Organiser –  
Automata Toys



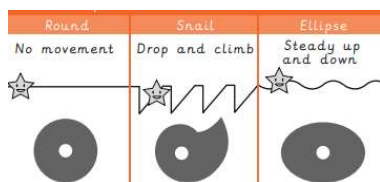
Key vocabulary:

- Assembly-diagram** - An exploded view diagram of an object, that shows you how to construct an object or order of assembly of various parts.
- Automata** - Automata toys are sometimes known as mechanical toys or kinetic art. They use hand-powered mechanisms to create movement in a scene of characters.
- Axle** - In an Automata the axle rotates, turning the cam with it. It is attached to the handle.
- Bench hook** - A tool which hooks onto the edge of the workbench. It's used to hold woodwork still when sawing.
- Clamp** - A tool for holding objects together, such as when you are waiting for glue to dry on something that you have glued together.
- Cam** - A cam is a rotating or sliding piece in a mechanism. It changes rotary motion to linear motion.
- Component** - One of several parts of which something is made.
- Cutting list** - An outline drawn true to size on paper, which shows the size and how many of each piece which you need to make for the project.

- Dowel** - Wood in the shape of a cylinder. Dowels come in all different sizes and thicknesses.
- Drill bits** - The cutting tools that go in drill to make different sized holes.
- Exploded-diagram** - A diagram which shows all of the internal and external parts of a product.
- Finish** - To complete your product with a high quality appearance.
- Follower** - The post which traces the shape of the cam, rising and falling in a linear or reciprocating motion.
- Frame** - The rectangular structure which holds the Automata together.
- Function** - How an object or product operates or works.
- Hand drill** - A small portable drilling machine for making holes which is operated by hand.
- Jelutong** - A type of softwood, it is lightweight, easy to cut and shape.
- Linkage** - A set of bars linked together to form a mechanism.
- Mark out** - To measure and mark where a piece of material needs to be cut or shaped.
- Set square or Engineer's square** - A right-angle triangular plate, wood or metal tool used for drawing lines at 90°, 45, 60°, or 30°.
- Tenon saw** - A saw with a flat blade, used for cutting wood in straight lines or angles.

Cam Shapes

Changing the shape of the **cam** in your **Automata**, will create different movements.



Automata toy **components:**

1. Character
2. Follower
3. Cam #frame
4. Axle attached to handle

