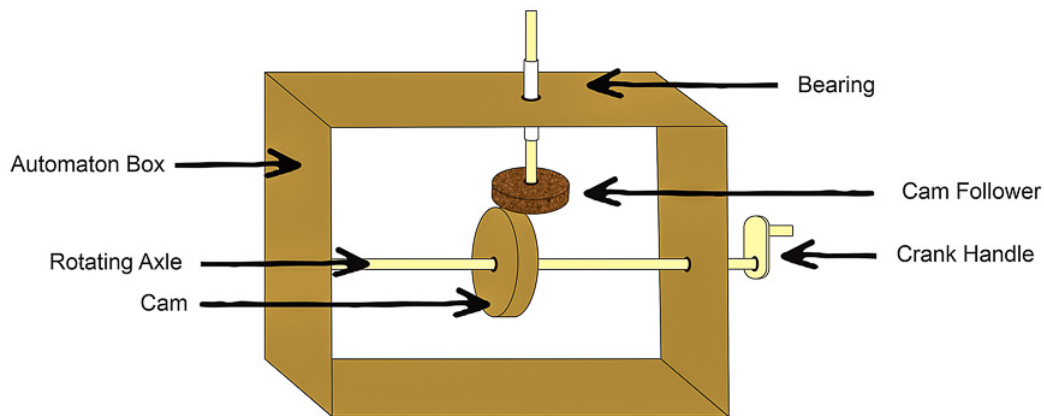


## Automata Final Project

For our final project, you will design and build an automaton (plural is automata). Automata are mechanicals toy or sculptures that move by themselves once you wind it up or turn a handle. Think of it as a magical puppet show where the puppets move on their own, dancing, tapping, or turning gears to tell a story.

They are often made of wood or cardboard and use simple machines like levers, gears, and cams (wheels) inside a box to make the figures above move up and down or spin around.

### THE PARTS OF AN AUTOMATON



**\*you will turn in this sheet with completed ideation the day of the final as you complete your automata**

Automata animated a STEM concept or a character/scene from children's literature	50
Automata demonstrated creative, thoughtful, and intentional use of materials to carry out design.	10
Clearly and effectively presented their automata.	10
Automata operated as expected.	10
Automata was easy to operate and would stand up to repeated use.	10
It was evident that the engineering design process was utilized to create the automata.	10
Total	/100

**Automata Final Project Ideation Guide Name:** \_\_\_\_\_

**Step 1: Define Your Idea**

- **Book/Big Idea:** What STEM concept or story will inspire your automata?
  -
- **Scene or Action to Animate:**
  -
- **Key Mechanism:** What motion will it perform (e.g., up and down, spinning)?
  -

**Step 2: Brainstorm and Evaluate**

- **List Three Ideas for Your Automata:**
  - 1.
  - 2.
  - 3.
- **Pick Your Best Idea:** Which idea is creative, feasible, and durable?

**Step 3: Plan and Prepare**

- **Materials Needed:**
  -

**Sketch Area** (*Use this space to sketch your ideas and illustrate your selected design*)

*(Make sure to include labels for mechanisms and movements.)*