

Design Technology: My Moving Mechanism Project

Learning objective: To design and describe a functional mechanism using levers, linkages, or cams.

Use this writing frame to plan your project. Remember to think like Max the monkey—consider how your parts fit together like a math puzzle!

My design project is a moving character toy that uses a simple mechanism to bring it to life.

Word bank: pivots · levers · linkages · cams · sturdy · friction · movement · consequently · furthermore · in addition · therefore

1. The Purpose: What is the main goal of your mechanism and which character will it feature? Start by saying: My design is intended to... (2 marks)

2. Materials Needed: What resources will you need to build your frame and moving parts? List them here: I will require the following materials... (2 marks)

3. How it Works: Describe how the input movement (the part you push or pull) creates the output movement. Start by saying: When the user pushes the lever, it causes... (3 marks)

4. Evaluation: Why did you choose this specific mechanism for your project? Explain your choice by saying: I decided to use a linkage system because... (2 marks)

5. Safety and Stability: How will you ensure your mechanism is strong enough to work repeatedly? Write: To make my mechanism durable, I will... (2 marks)

Draw: Sketch a labelled diagram of your mechanism, showing clearly where the pivot points are located.



Extension challenge: Imagine your mechanism is being sold in a store. Write a short advertisement explaining why a customer should buy it, including a price in dollars and cents.