



KEY
VOCABULARY

mechanism

component part

pivot

lever

fixed pivot

moving pivot

base structure

slider

linkage

prototype

a **system of component parts** working together in a machine

part of a mechanism

a **point** around which an object can **move or rotate**

a mechanism which uses a **bar and a pivot** to **move heavy loads**
a lever moves in an **oscillating motion** (in a curve, backwards and forwards) around a pivot – a see saw is an example of a lever

a pivot which is **fixed in place** to a base structure, it **moves at one point only**

a pivot which is **not fixed** to a base structure and **moves freely**

the bottom layer of something, to which a pivot can be fixed

a mechanism made up of a **bar** which moves in a **linear motion** (up and down or across) sometimes through a **slot**

a mechanism that **joins together levers** to **change the direction of motion** – linkages have fixed and moving pivots and create different types of motion

a **model** to try out or test a product – making prototypes can be part of the **design process**

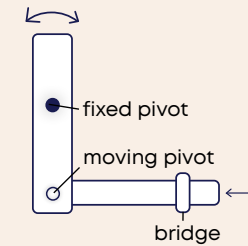


toolbox using linkages

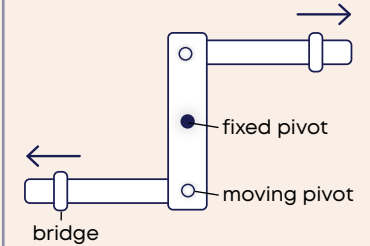


page of a pop-up book
using levers and sliders

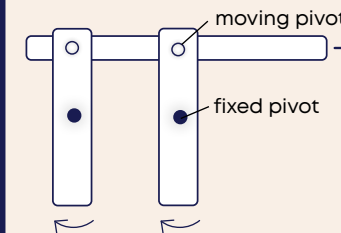
linkage mechanisms



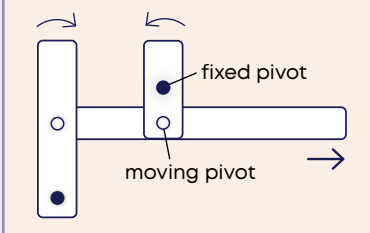
oscillating motion



reverse motion



parallel motion



opposite motion

each different type of linkage creates
a different type of motion

design criteria

user

who is the product for?

purpose or function

what is the product for?

aesthetic appeal

how is the design of the product pleasing to look at?