


KEY VOCABULARY
mechanism

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

 a **part** of a mechanism

pivot

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

 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

fixed pivot

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

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

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

slider

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

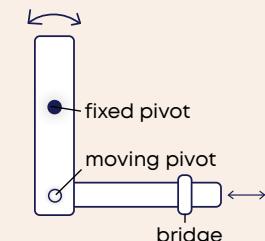
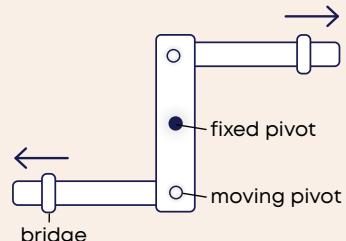
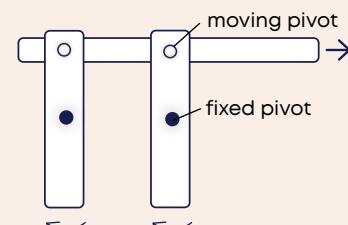
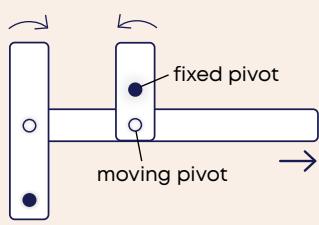
 a mechanism that **joins together levers** to **change the direction of motion** – linkages have fixed and moving pivots and create different types of motion

prototype

 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?