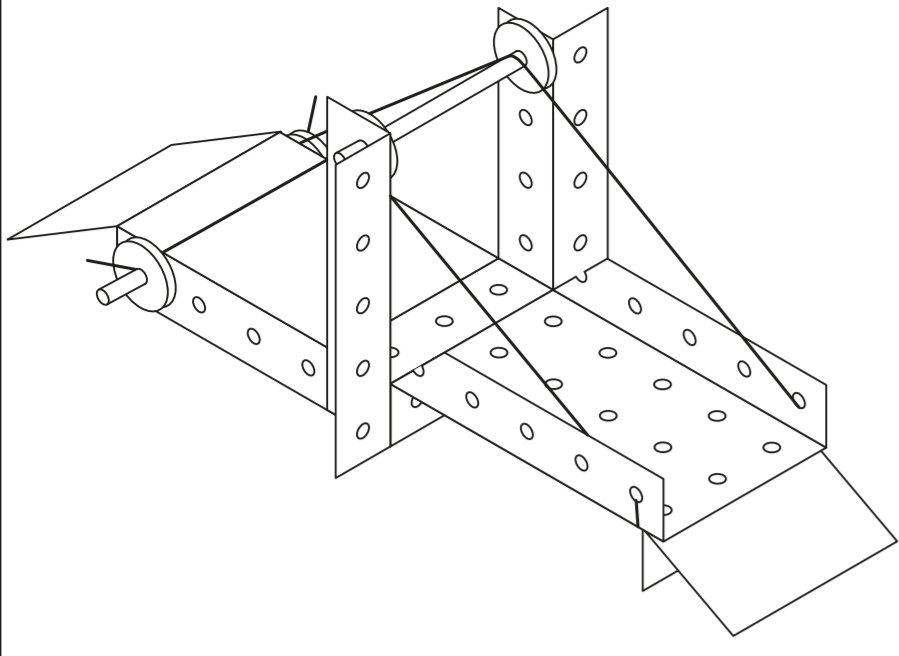


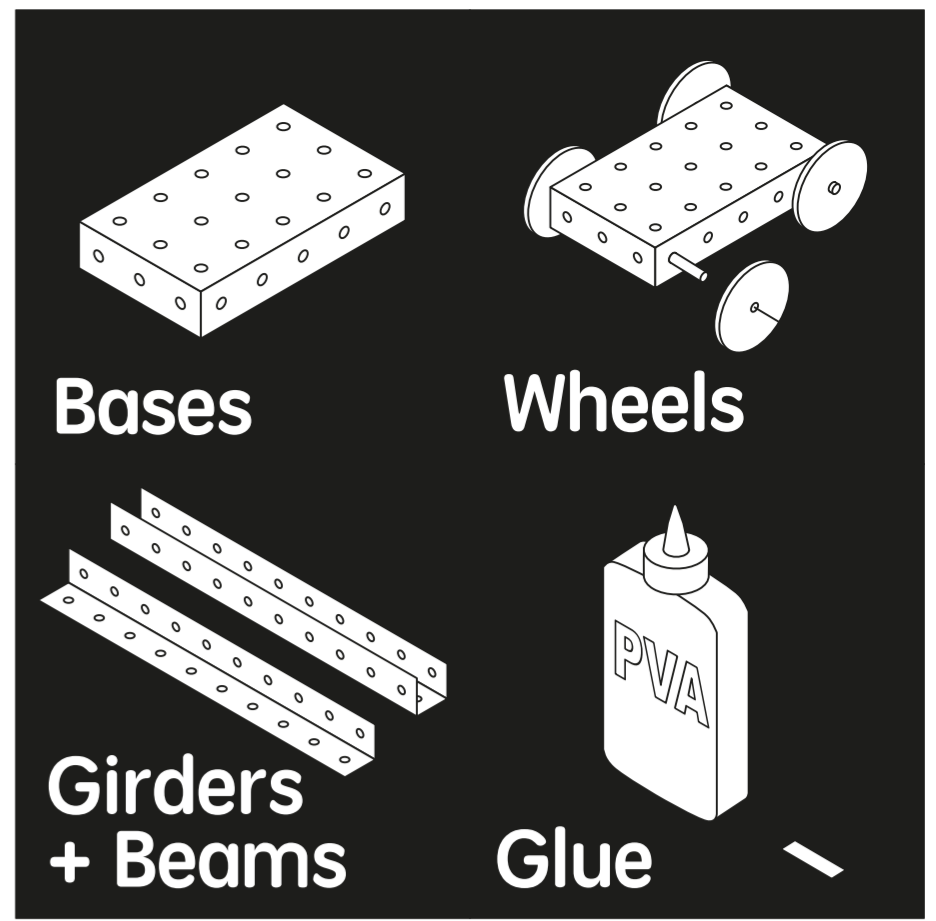
# Drawbridge



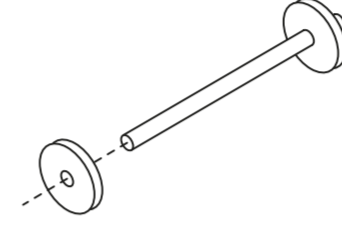
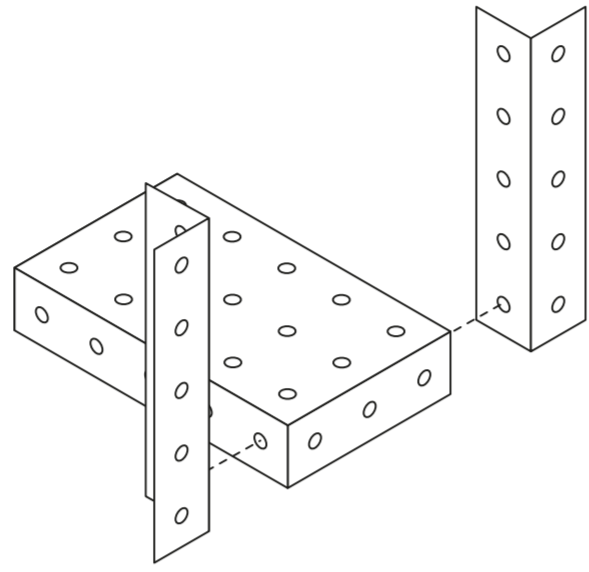
## Parts

- 2 x Bases
  - 2 x 12.5cm Girders
  - 4 x 2.5cm Discs
  - 2 x 10cm Axles
- You will also need  
80cm of thin string

For building tips go back and click these windows:



Make the base. Fold the two girders and glue them to a base where shown.

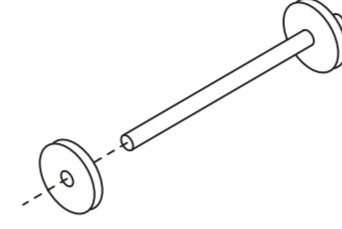
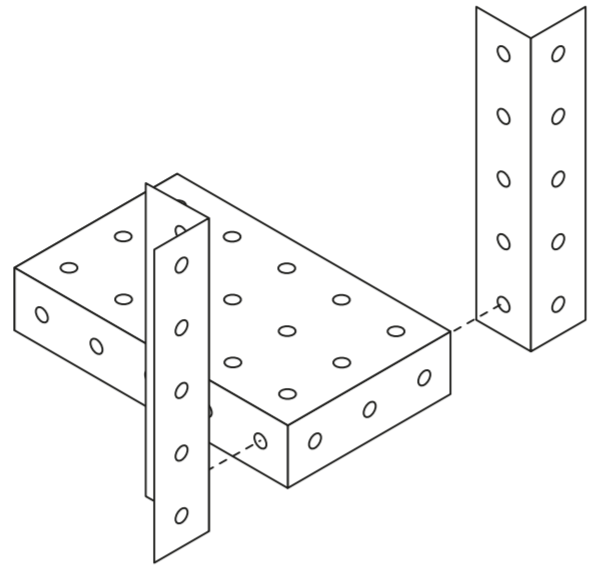


Fit two 2.5cm discs to the 10cm axle as shown.

Fit the axle between the tops of the girders

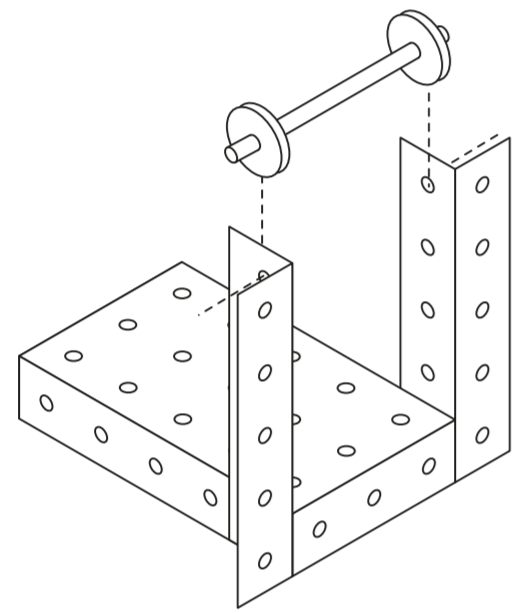


Make the base. Fold the two girders and glue them to a base where shown.

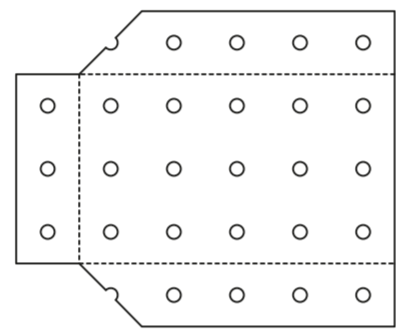


Fit two 2.5cm discs to the 10cm axle as shown.

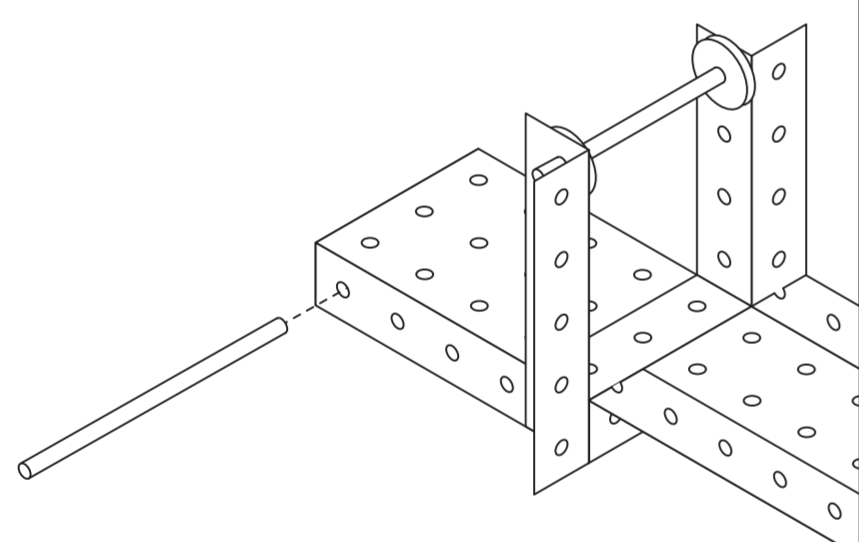
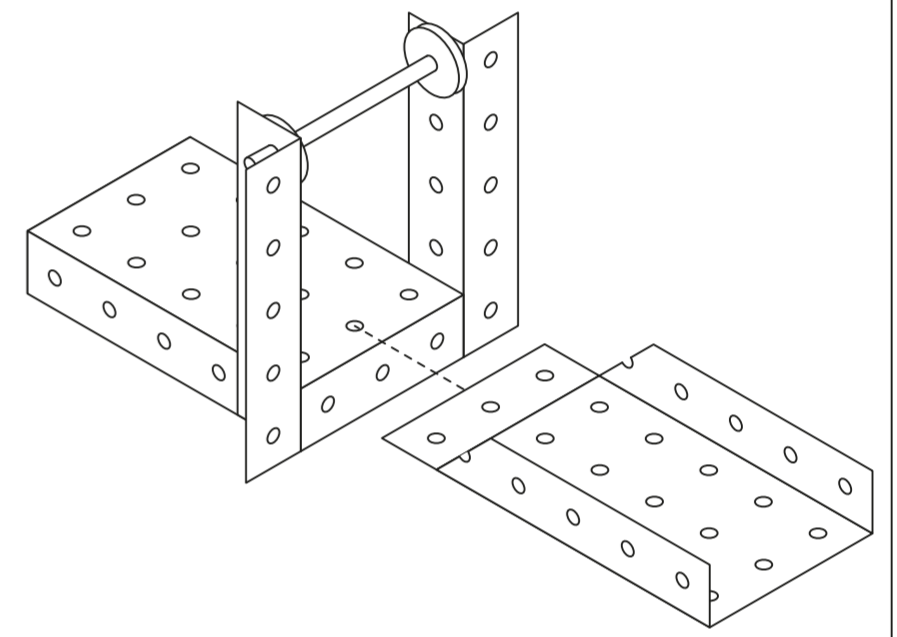
Fit the axle between the tops of the girders



Trim the second base to this shape.

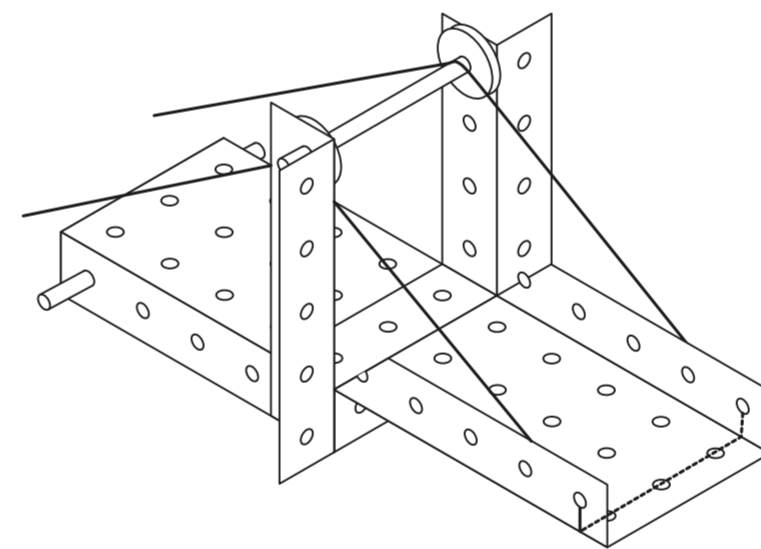


Fold the second base to shape and glue it in place.

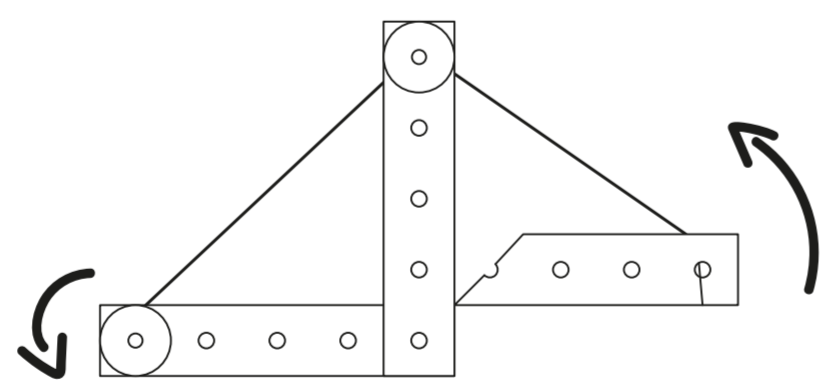
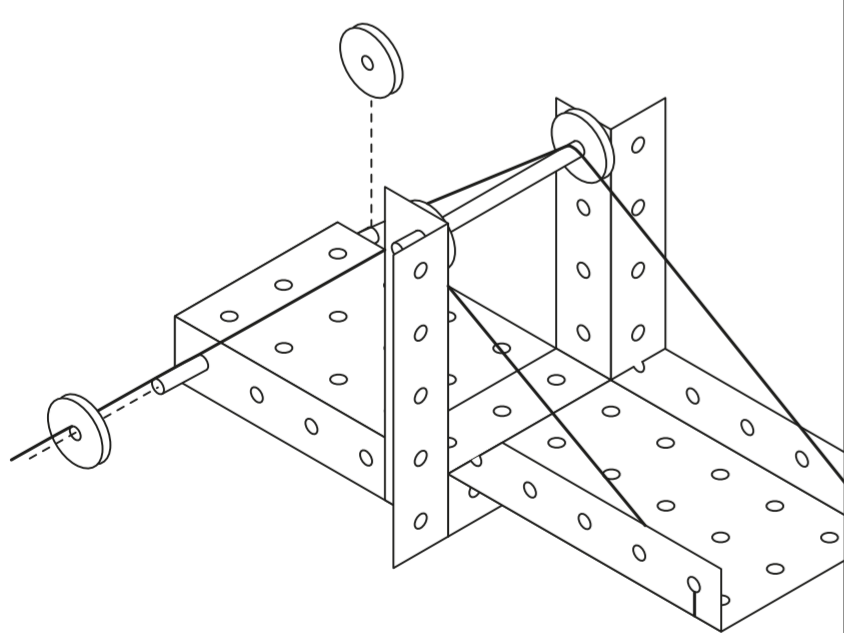


Fit the second 10cm axle where shown.

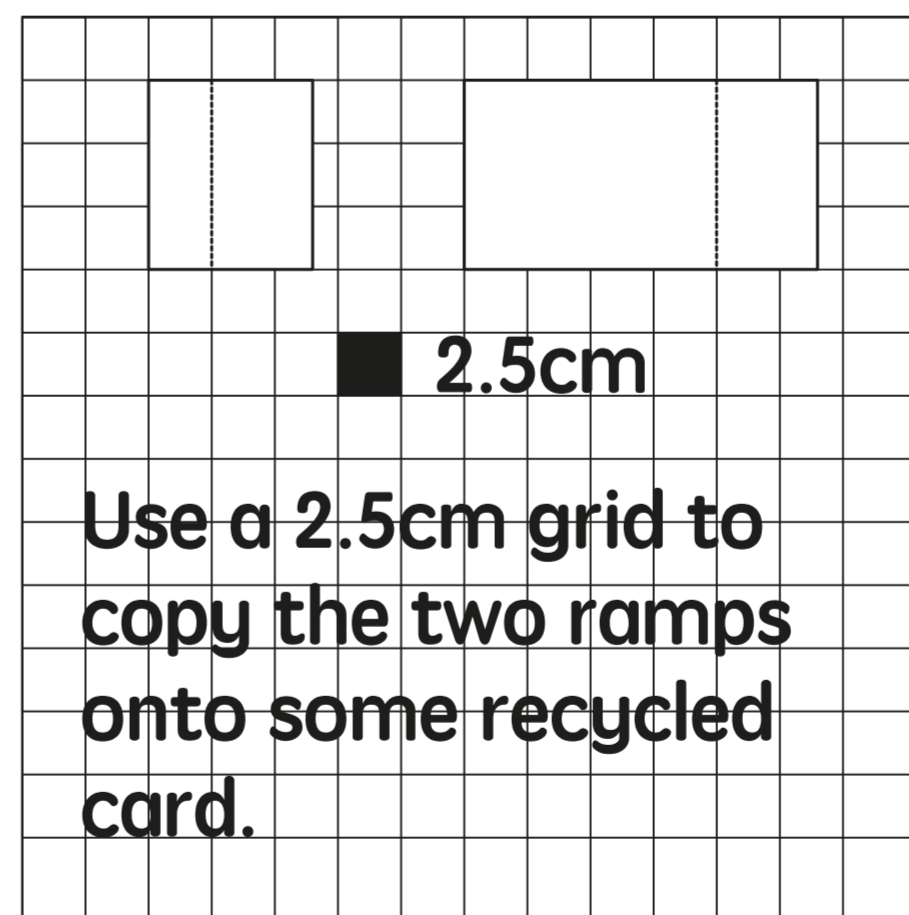
Pass the string through the second base where shown and over the top axle.



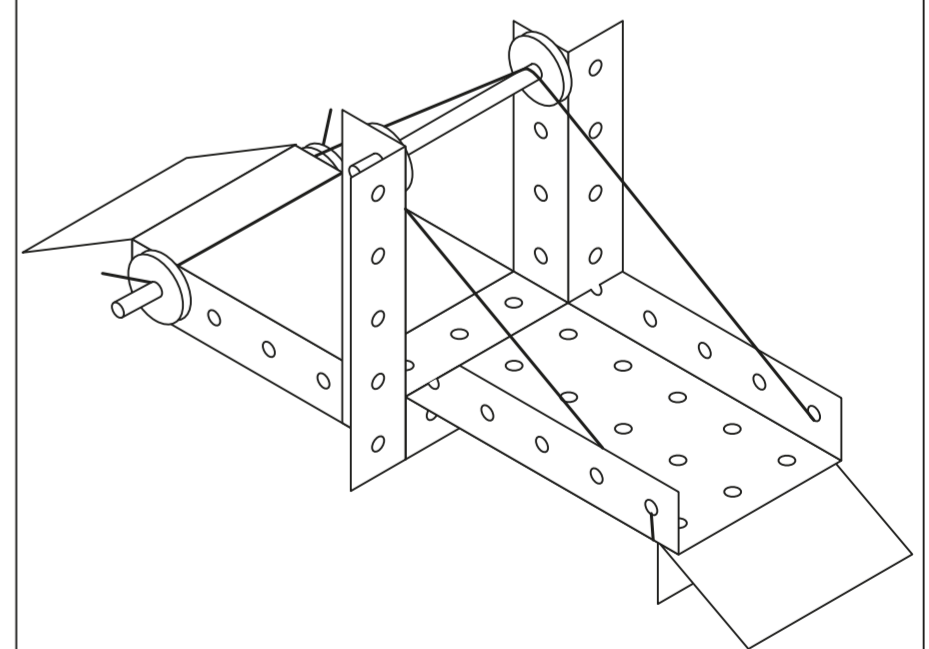
Pass each end of the string through a disc and push these onto the ends of the lower axle.



Turn the winder to make the bridge go up and down.



Use a 2.5cm grid to copy the two ramps onto some recycled card.



Your drawbridge has two important moving parts. Do you know what they are?

1. A Winder. This rotates to control the cable.
2. A Hinge. This connects the bridge deck and allows it to move up and down.

What makes the bridge deck go down when you lower it with the winder?

The force of gravity pushes the deck down! It is controlled by the cable and the winder.