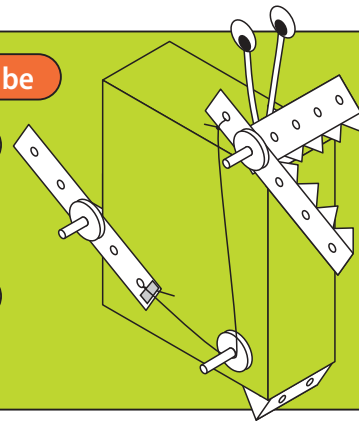




Visit TechCard at [techcard.co.uk](http://techcard.co.uk) & Instagram & YouTube

# Barking Dog

Maker Pack: Skill Level ● ● ● ○ ○



Upcycle an empty box and build a barking dog!

Explore important mechanisms like levers, linkages & cables.

See how to make with TechCard on our website.



Assembly videos on YouTube!

## Parts to make 1 model

### Structural Parts

|                 |   |
|-----------------|---|
| TechCard Strip  | 2 |
| TechCard Girder | 1 |
| TechCard Beam   | 1 |

### Mechanical Parts

|                  |   |
|------------------|---|
| 25mm Disc        | 5 |
| 300mm Dowel Axle | 1 |

### Additional Materials

300mm thin string.  
Upcycled box about 200mm x 160mm x 60mm.  
Thin card, paints, pipe cleaners, lolly sticks, upcycled bottle tops and packaging.

You will have parts left over towards other models.

## Parts to make 10 models

### Structural Parts

|                 |    |
|-----------------|----|
| TechCard Strip  | 15 |
| TechCard Girder | 2  |
| TechCard Beam   | 7  |

### Mechanical Parts

|                  |    |
|------------------|----|
| 25mm Disc        | 50 |
| 300mm Dowel Axle | 5  |

### Additional Materials

3M thin string.  
10 x Upcycled boxes about 200mm x 160mm x 60mm.  
Thin card, paints, pipe cleaners, lolly sticks, upcycled bottle tops and packaging.

Based on pupils sharing off-cuts between them.

# Make the Barking Dog



Before you start see  
'Make with TechCard'  
on our website.

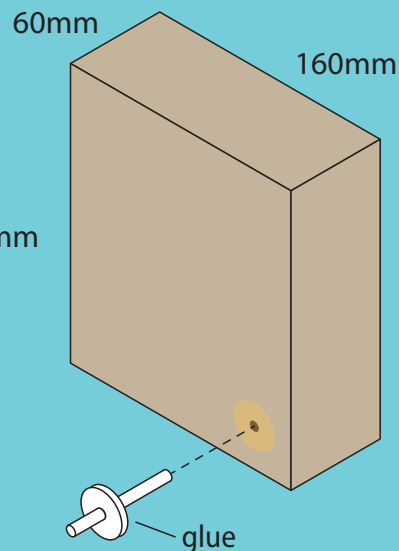
## 1 Prepare the box.

Choose a box about 200mm high  
by 160mm wide by 60mm deep.

Cut a 50mm axle.

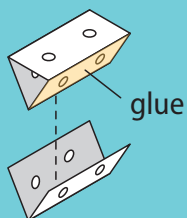
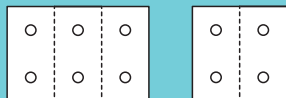
Fit a 25mm disc half  
way along the axle.

Make a hole in the box where shown  
and glue the disc and axle in place.



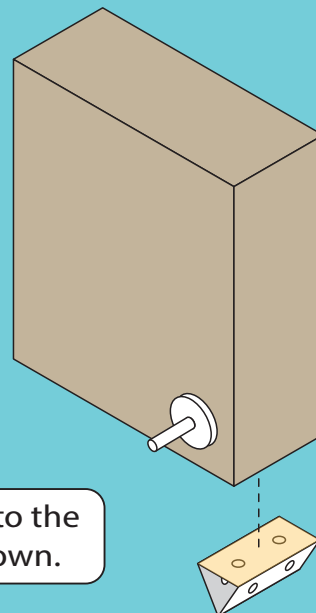
## 2 Make the foot.

Cut a 50mm beam  
and girder.



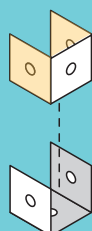
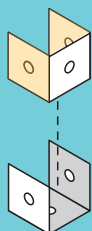
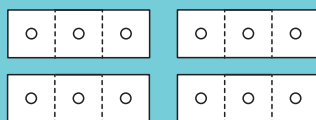
Fold and glue the girder  
and beam as shown.

Glue the foot to the  
box where shown.



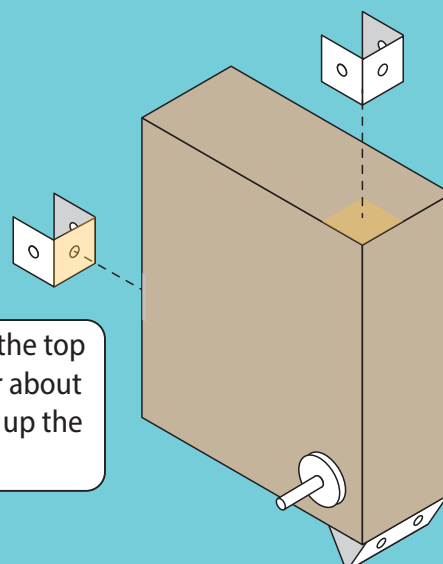
## 3 Make the brackets.

Cut four 25mm  
beams.

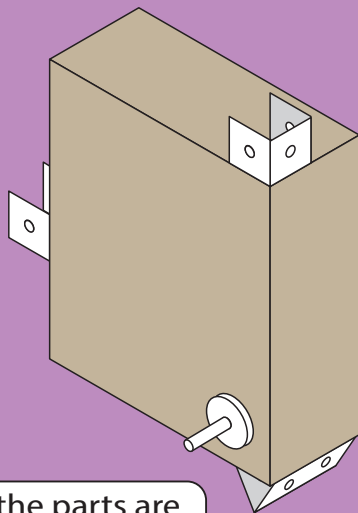


Fold and glue the beams as  
shown to make two brackets.

Glue one bracket to the top  
corner and the other about  
one third of the way up the  
box where shown.



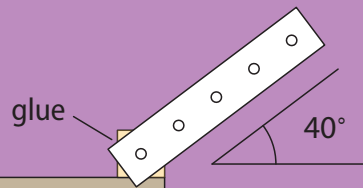
4 Check the body.



Check all the parts are in place correctly.

5 Fit the upper jaw.

Cut a 125mm strip.



Glue the strip onto the top bracket.

The strip should be at a 40 degree angle as shown.

6 Fit the lower jaw.

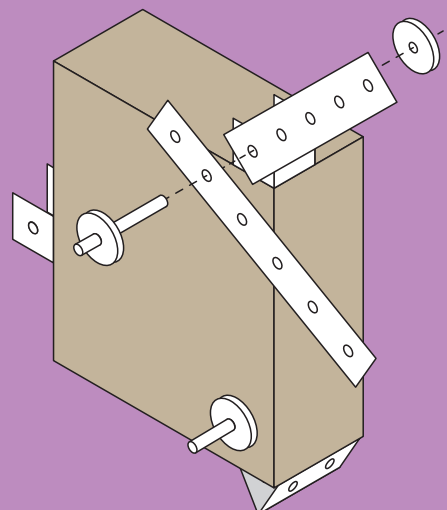
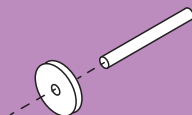


Cut a 150mm strip.



Cut a 50mm axle.

Fit a 25mm disc to the end of the axle.



Pass the axle through the jaw and bracket where shown.

Fit a second 25mm disc to the axle.

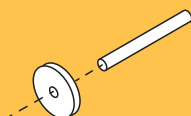
7 Fit the tail.



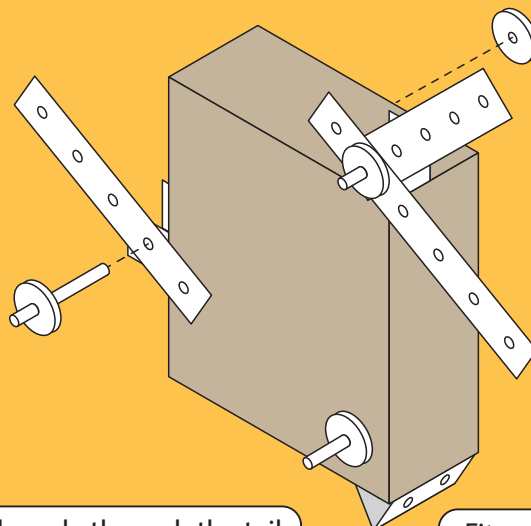
Cut a 125mm strip.



Cut a 50mm axle.



Fit a 25mm disc to the end of the axle.



Pass the axle through the tail and bracket where shown.

Fit a second 25mm disc to the axle.

## 8 Tie the string.

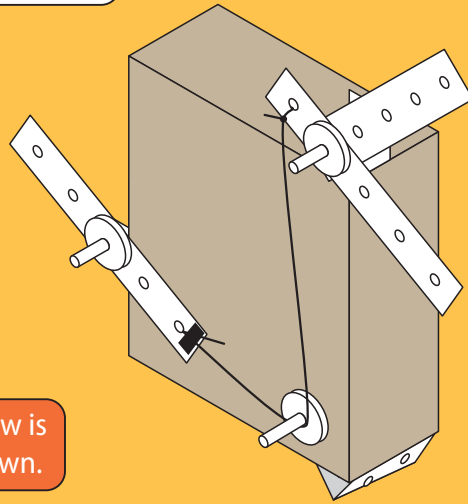
Cut a 300mm length of string.

Tie the string to the jaw as shown.

Pass the string under the dowel and through the tail where shown.

Pull the string without moving the jaw or tail and tape the end of the string.

Adjust the string so the jaw is closed when the tail is down.

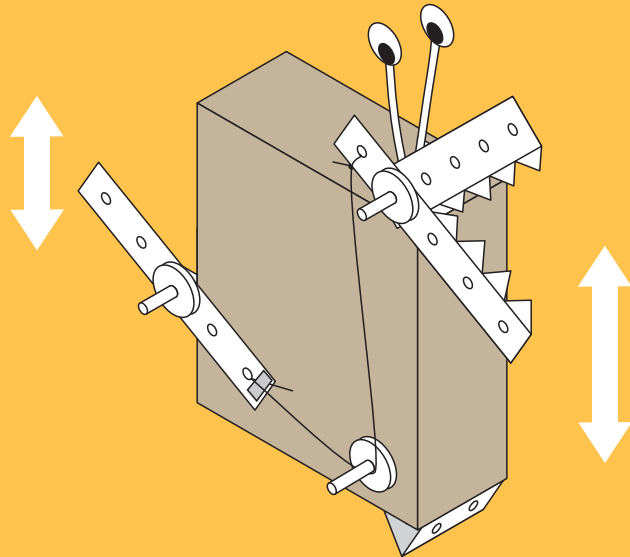


## 9 Finish the model.

Add teeth, eyes and decorate your model to make it your own!

When you pull down on the tail the force is transferred along the string and pulls the jaw.

The jaw moves more than the tail because the jaw pivots near one end and acts like a lever.



## Card Panels

Print and cut along the solid lines of the two panels.

Alternatively, copy the panels onto thin card and cut in the same way. Or you can design and make your own body panels!

