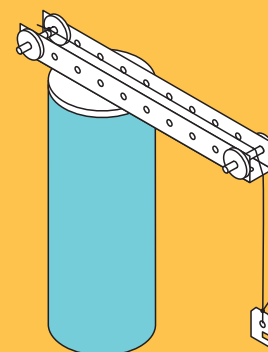




Visit TechCard at techcard.co.uk & Instagram & YouTube

Tower Crane

Make and Create: Skill Level ● ○ ○ ○ ○ ○



Build a tower crane with a crisp container or cardboard tube.

Explore axles & winders and using cables to move a force.

See how to make with TechCard on our website.

The winder controls the cable.



The load goes up and down.

Assembly videos on YouTube!

Parts to make 1 model

Structural Parts

For Crisp Tube version:

TechCard Beam 1

For Card Tube version:

TechCard Beam 1

TechCard Girders 2

TechCard Strip 1

Mechanical Parts

25mm Disc 4

50mm Dowel Axle 2

Additional Materials

600mm String

Crisp tube or card paper towel tube.

You will have parts left over towards other models.

Parts to make 10 models

Structural Parts

For Crisp Tube version:

TechCard Beam 10

For Card Tube version:

TechCard Beam 10

TechCard Girders 20

TechCard Strip 10

Mechanical Parts

25mm Disc 40

300mm Dowel Axle 4

Additional Materials

6m String

10 x Crisp tubes or card paper towel tubes.

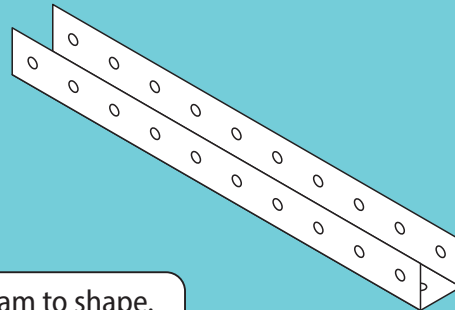
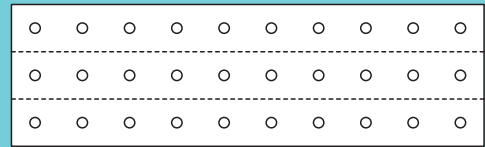
Based on pupils sharing off-cuts between them.

Make the Tower Crane



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

1 Make the boom.



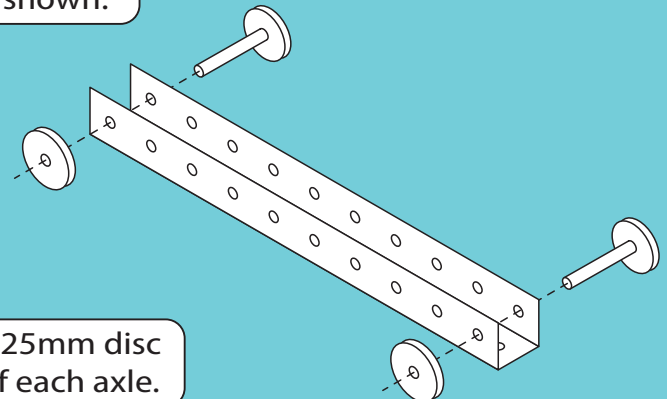
Fold a beam to shape.

2 Fit the axles.



Fit a 25mm disc onto the
end of two 50mm axles.

Fit the axles into the
beam where shown.

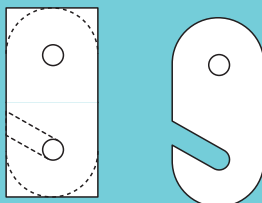


Fit a second 25mm disc
to the end of each axle.

3 Fit the string and hook.

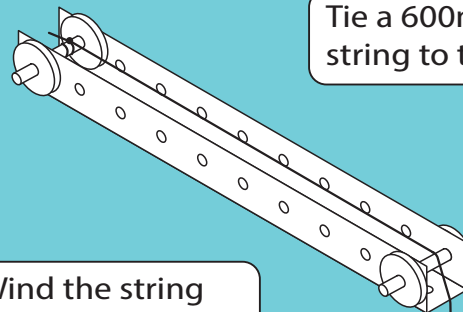


Cut a 50mm Strip.



Cut a hook shape
from the strip.

Tie a 600mm length of
string to the rear axle.



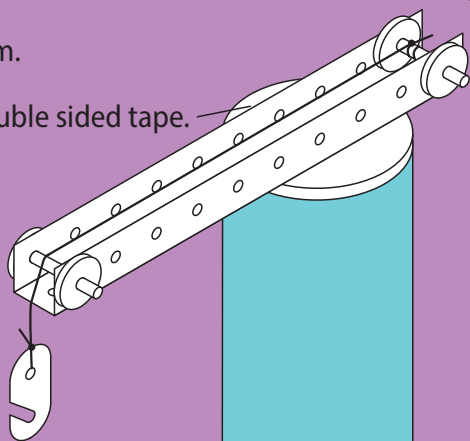
Wind the string
onto the rear axle.

Tie the string
onto the hook.



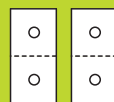
4 Fit the boom.

Use glue or double sided tape.

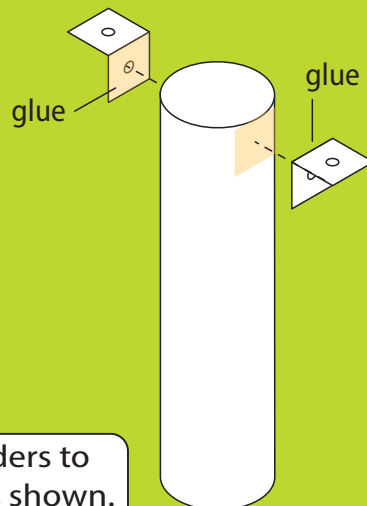


If you have a crisp tube
then fix the boom to the top.

5 Using a paper towel tube.

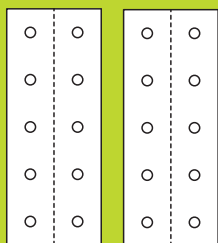


Cut two
25mm girders.



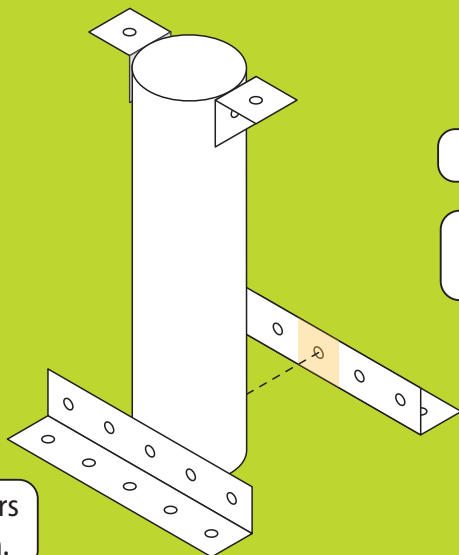
Fold and glue the girders to
the top of the tube as shown.

6 Make the base.



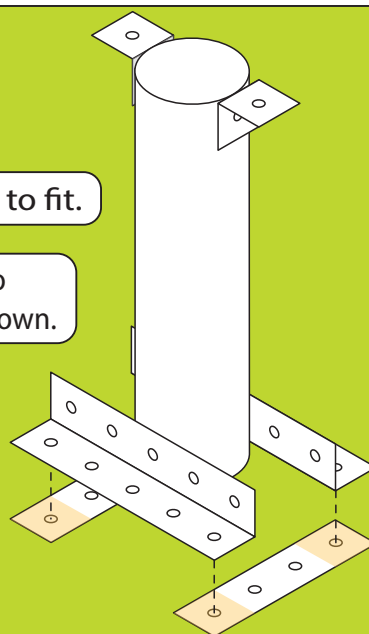
Cut two
125mm girders.

Fold and glue the girders
onto the tube as shown.



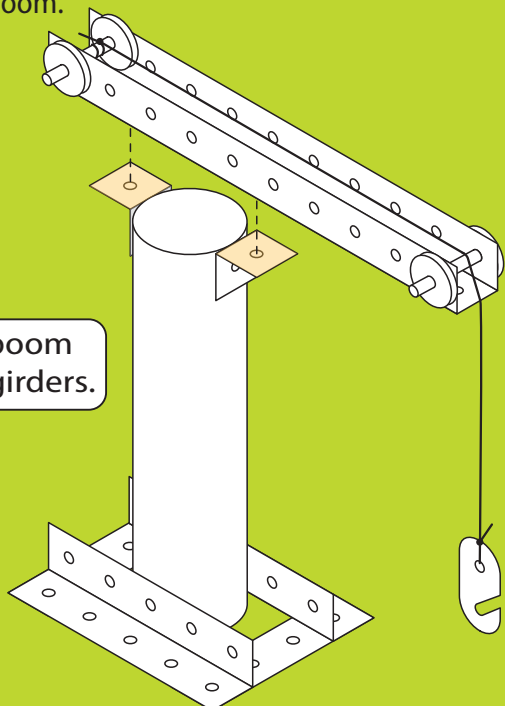
Cut two strips to fit.

Glue the strips to
the girders as shown.

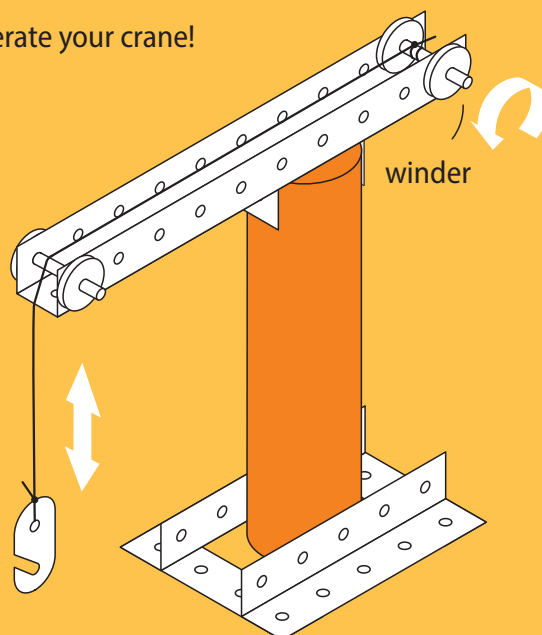


7 Fit the boom.

Glue the boom
onto the girders.



8 Operate your crane!



Turn the winder and the force is transferred
along the string to raise the load.