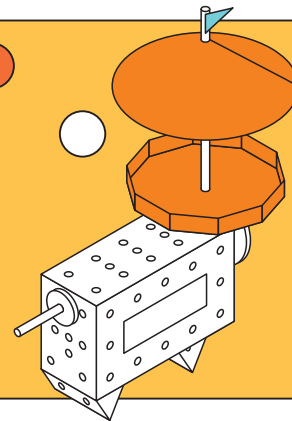




Visit TechCard at techcard.co.uk & Instagram & YouTube

Merry-Go-Round

Make and Create: Skill Level ● ● ● ○ ○



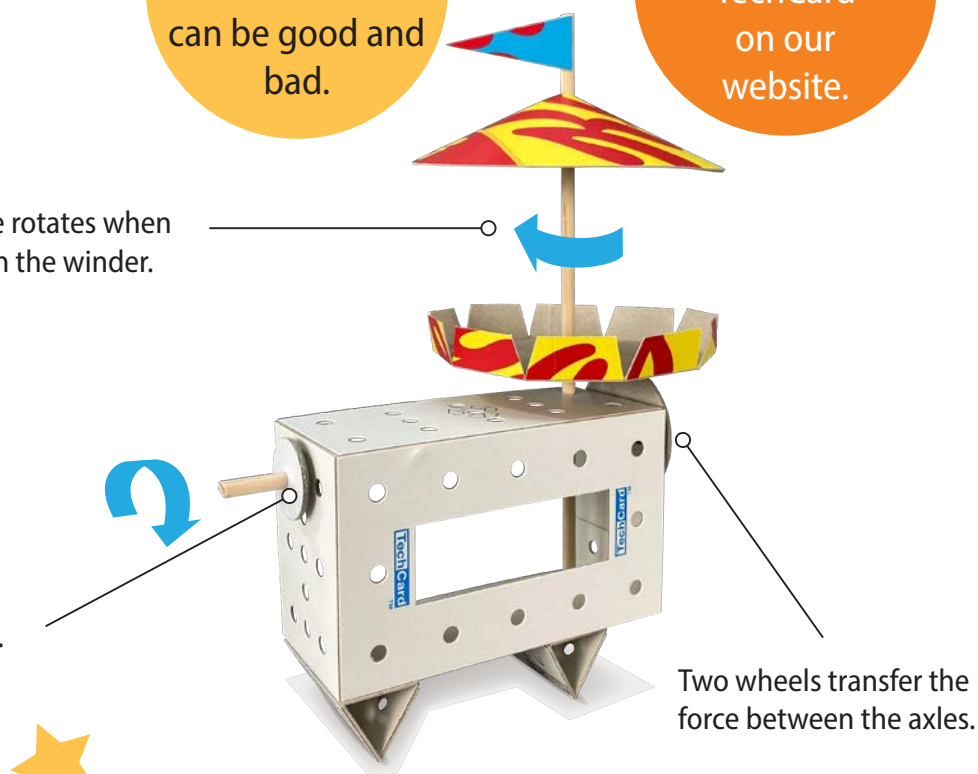
Build a fun Merry-Go-Round and decorate it to make it your own!

Explore wheels and axles, and how friction can be good and bad.

See how to make with TechCard on our website.

The ride rotates when you turn the winder.

Turn the winder to operate the ride.



Assembly videos on YouTube!

Parts to make 1 model

Structural Parts

TechCard Girder	1
TechCard Beam	1
TechCard Project Base	1

Mechanical Parts

25mm Disc	3
50mm Wheel	2
200mm Dowel Axle	2

Additional Materials

A4 Size Thin Card

You will have parts left over towards other models.

Parts to make 10 models

Structural Parts

TechCard Girder	2
TechCard Beam	2
TechCard Project Base	10

Mechanical Parts

25mm Disc	30
50mm Wheel	20
300mm Dowel Axle	20

Additional Materials

A4 Size Thin Card x 10

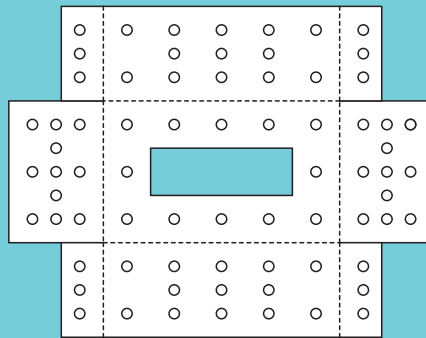
Based on pupils sharing off-cuts between them.

Make the Merry-Go-Round

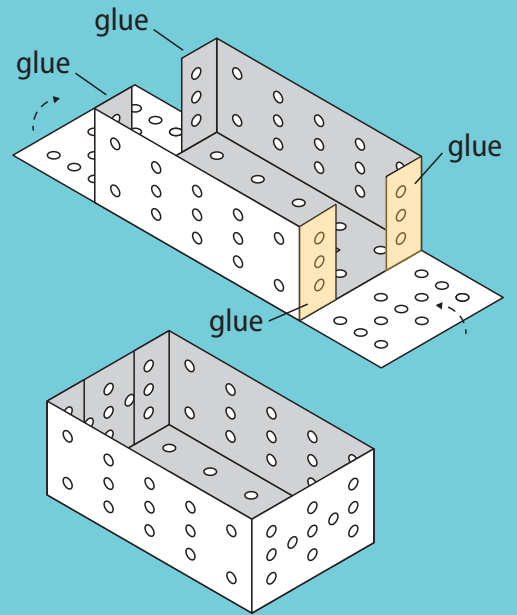


Before you start see
'Make with TechCard'
on our website.

1 Make the base.

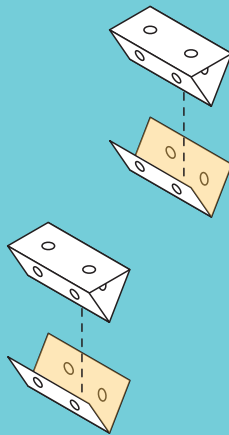
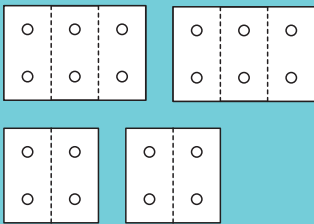


Fold and glue a TechCard
Project Base.



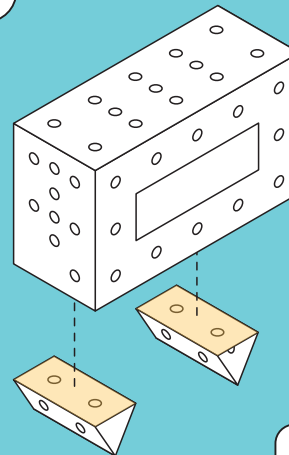
2 Make the feet.

Cut two 50mm
girders and beams.



Fold and glue the girders
onto the beams as shown.

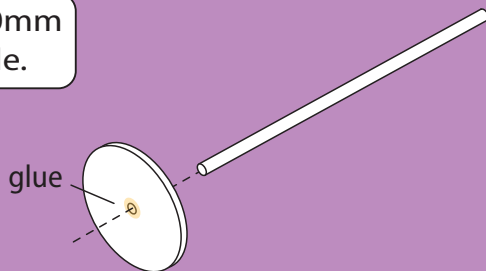
3 Fit the feet.



Glue the feet under the
base where shown.

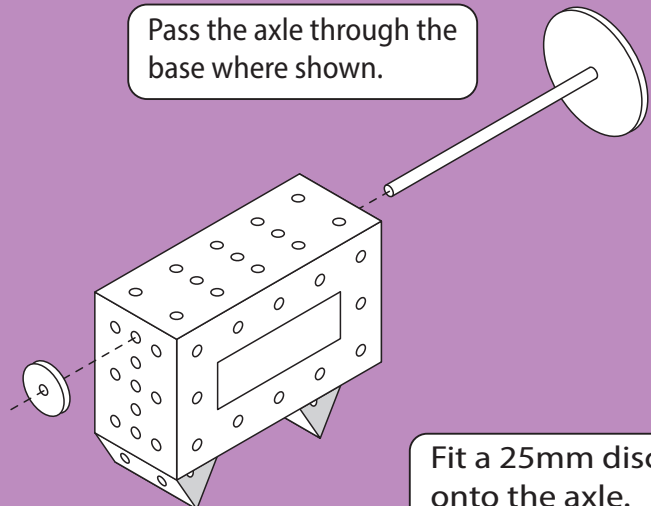
4 Fit the wheel and axle.

Use a 200mm
dowel axle.



Fit a 60mm wheel to one end of the axle.
Check the wheel is straight and glue.

Pass the axle through the
base where shown.



Fit a 25mm disc
onto the axle.

5 Fit the vertical axle.

Fit a 50mm wheel half way up a 200mm axle.

Check parts are straight and glue.

Fit a 25mm disc near the top of the axle.

Glue a 25mm disc under the wheel.

glue

100mm

6 Test the model.

Turn the axle and the vertical axle will turn.

Fit the axle through the base where shown.

Check the axles turn easily.

7 Finish the model.

glue

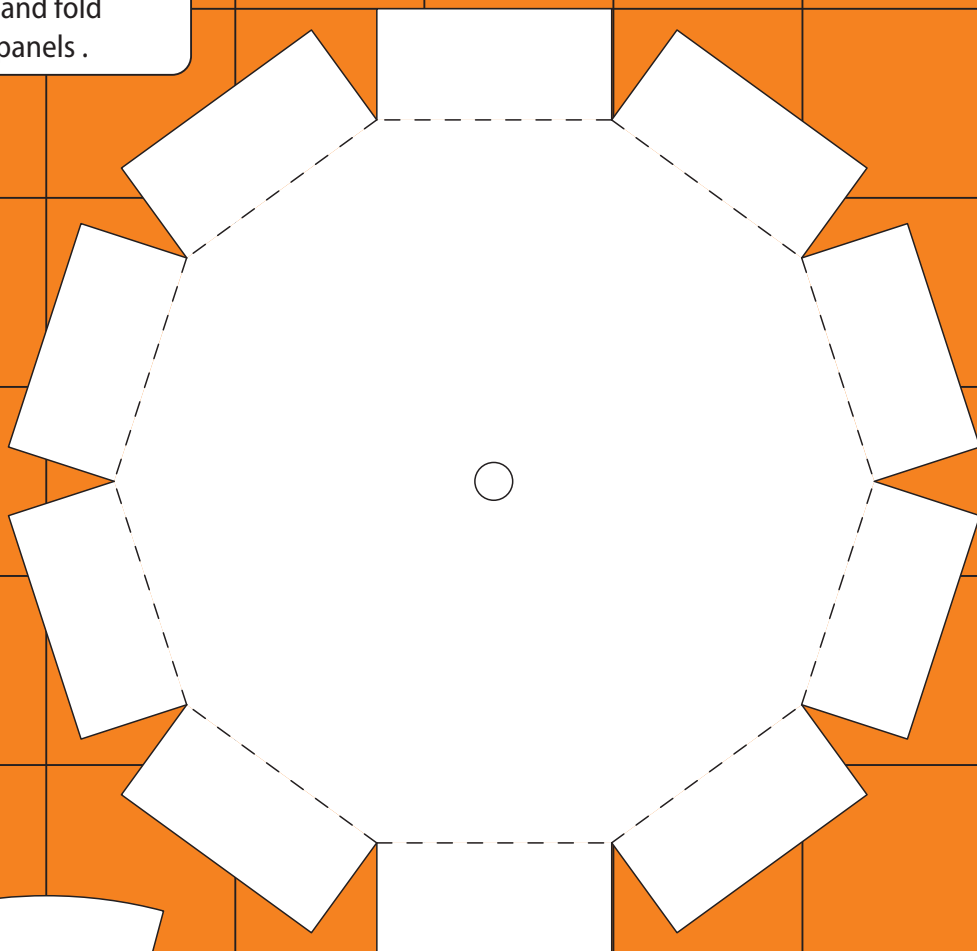
Fold, glue and fit the card panels.

8 Operate your Merry-Go-Round!

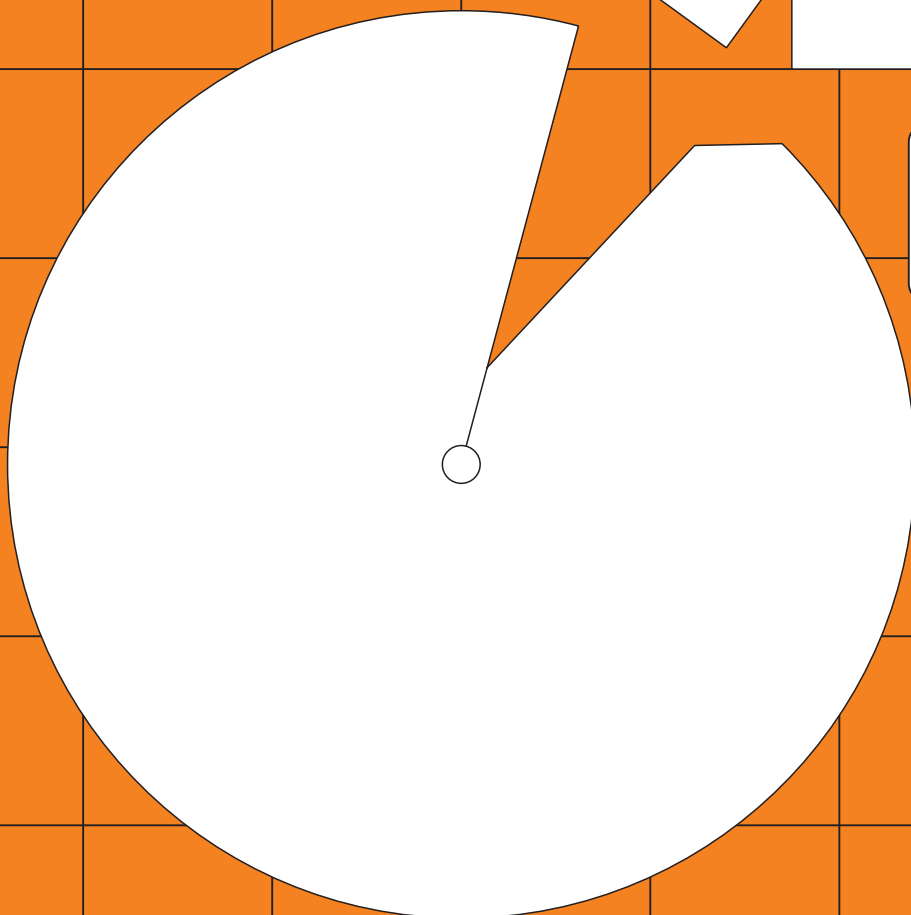
When you turn the first axle the rotating force is transferred to the vertical axle by the two wheels. The force of friction between the wheels causes the first wheel to turn the second wheel. The wheels act just like gears but gears have teeth so they can't slip.

Card Panels

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



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



25mm
25mm