

STEAM ON!

MAKE A CABLE CAR!

Cable cars are a unique form of transport. A number of cars (or gondolas) travel through the air on a moving cable.



Cable cars are especially good for traveling over water or valleys. They can be used instead of bridges.

The Emirates Airline in London is a cable car. It crosses the River Thames.

For this project you'll need:

- 3x Paper cups
- Some cardboard tubes
- String or wool
- Rubber bands
- Decorations



First, cut the bottom part off one of the cups. Leave about 2cm.

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Cut a cardboard tube into four roughly equal sections. Use a pencil and sticky tack to make holes at the places where you want to start cutting.



Now place your trimmed down cup on top of the third cup. Don't stick this down as it needs to be able to turn.



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Now decide how far you want your cable car to travel. Place your cups at whatever distance you like and stick one of them down. 30cm is quite a good distance.



Tie your string into a loop, pop it around your two cardboard tubes and gently push your not-stuck-down cup outwards until the string is straight and not drooping down anywhere. Then stick down your second cup.

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Now stretch the rubber bands over the tube on your trimmed down cup. These don't need to be very tight, so long as they can't fall off.



Cut a piece of string to run around your two cardboard tubes. Make sure you also leave enough to tie a knot.



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When you've finished decorating, cut some shorter pieces of string. Run the string through one of your cars, and around the long string, then tie a knot.



Then you're done! Time to test out your cable car!

Slowly twist your trimmed down cup. The rubber bands should grip the string and your cars should start to move.

The rotary motion of the cup converts into linear motion as the cars move along.

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Decorated your remaining tubes however you like. I'm using foil and silver pipe cleaners. These tubes are going to be your cars.



Do this with each of your cars. Make sure the loops you make are short enough to keep your cars from touching the ground!

