

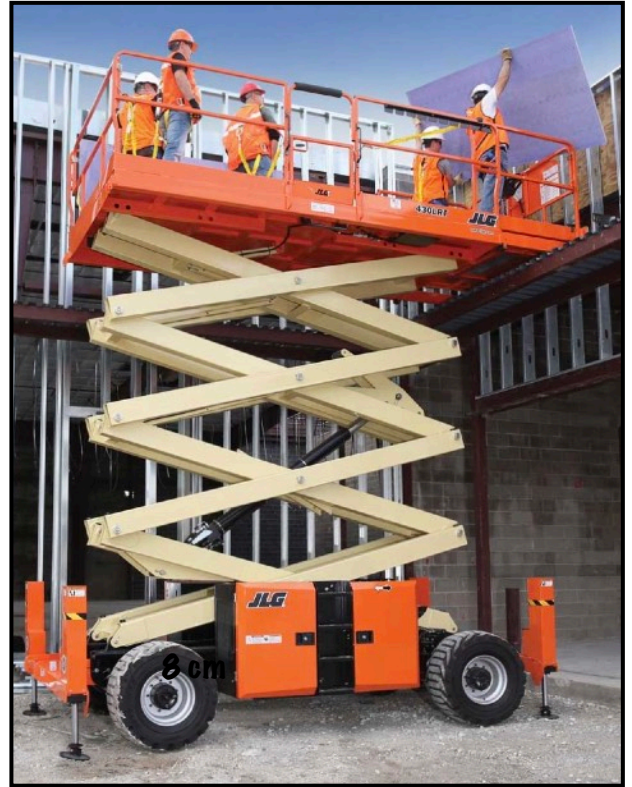
Scissor lifts are awesome machines that lift people and things up on a platform. They take many shapes, and are used in a wide range of places, but the typical feature is how stable they are.



This is an old-school scissor lift that uses a worm gear to make the lift work.



The bed at a doctor's office uses a hydraulic scissor lift!

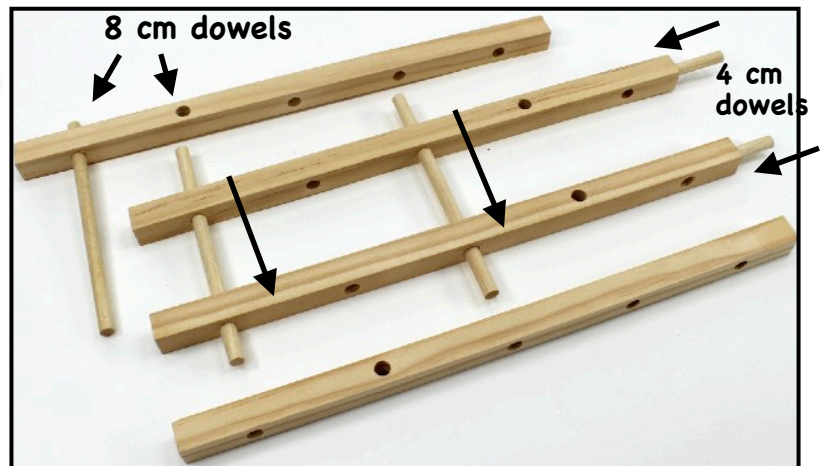


This one is pretty big - can move around, and uses hydraulic stands, to stabilize it once in place.

This is what it will eventually look like, get your own riders!



Start with 4 long beams and 3 - 8 cm and 2 - 4 cm dowels. Line them up as shown.



You will need some cardboard (30 x 10 cm) and two piston sets - and about 15 cm of pipe cleaner - to hold the piston to the platform.

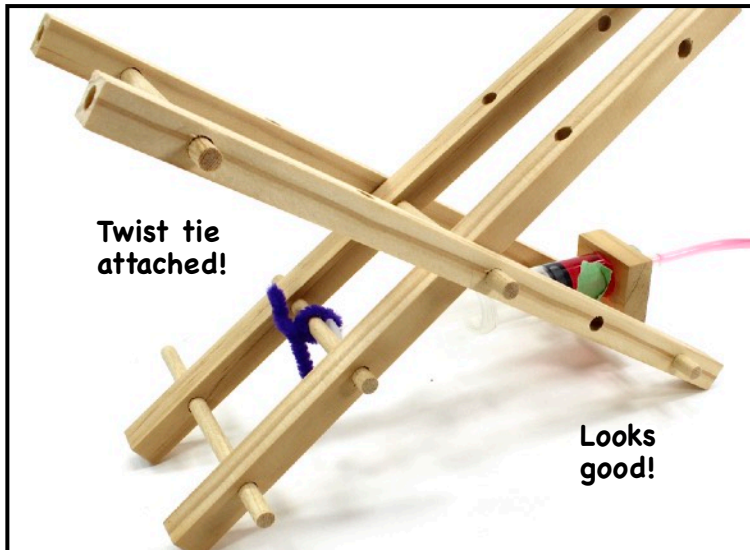
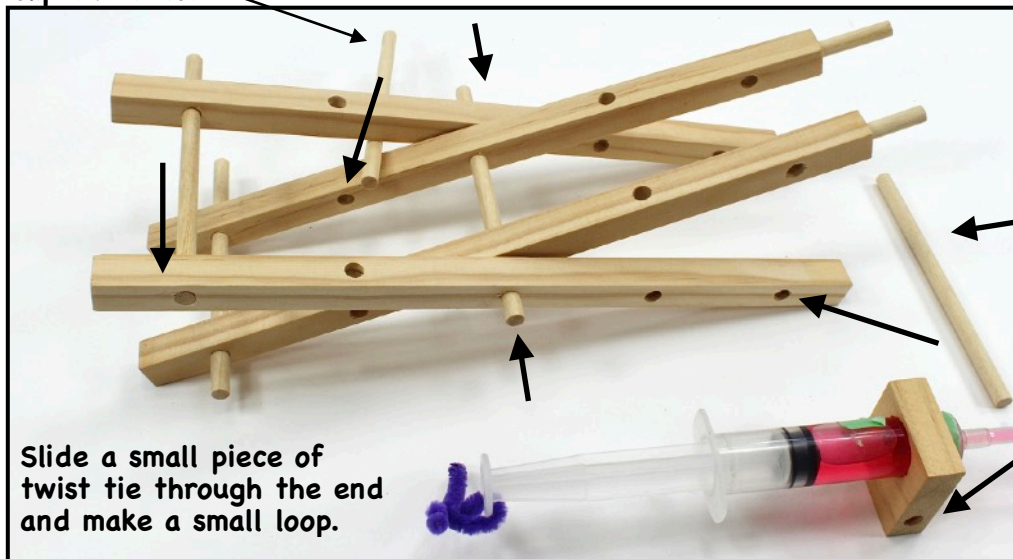
SCISSOR LIFT

This dowel slides through these holes - slip the twist tie through!

Slide the outside beams over the center dowel and add an 8 cm dowel to the bottom.

Slide a small piece of twist tie through the end and make a small loop.

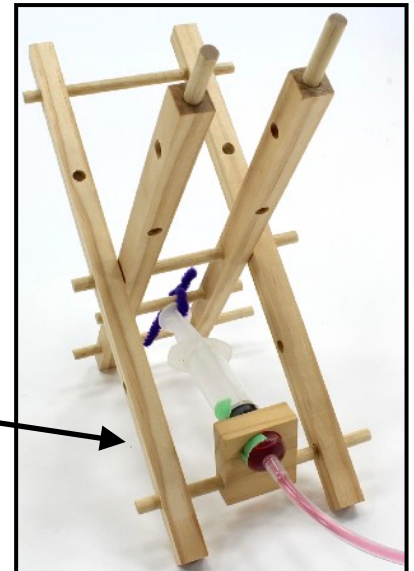
This 8 cm dowel will hold the piston to the bottom beam.



Same thing, different angle.



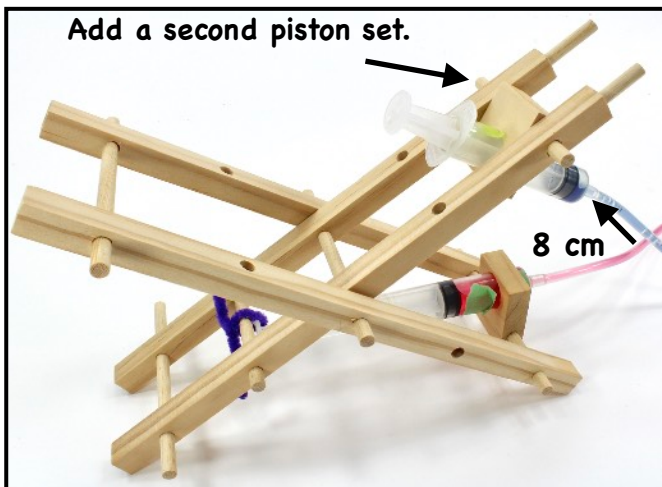
Move the piston up a bit - use tape to hold in place.



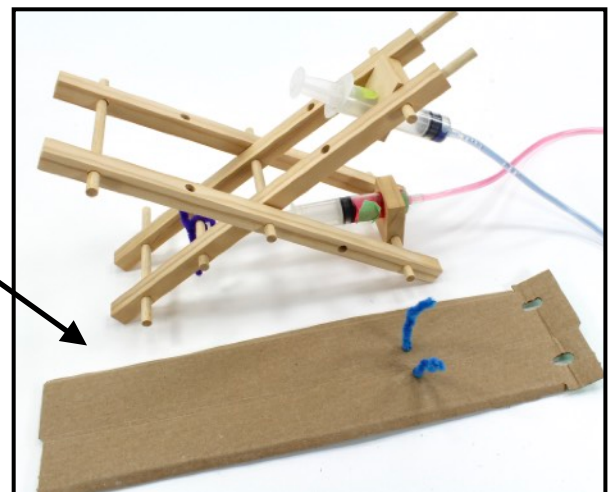
Test it out to see the range of movement!

You can just add the cardboard platform to the top and you are done! BUT - we want to make it interesting, so let's add a piston to the top, this way we can make our platform tilt!

Add a second piston set.



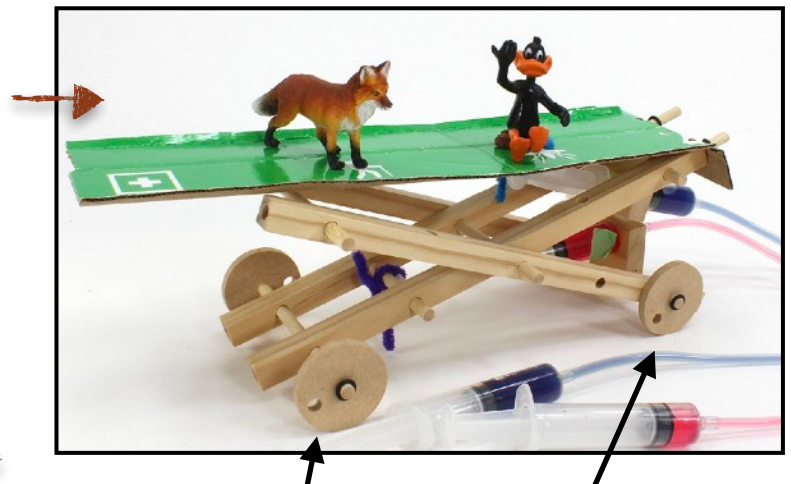
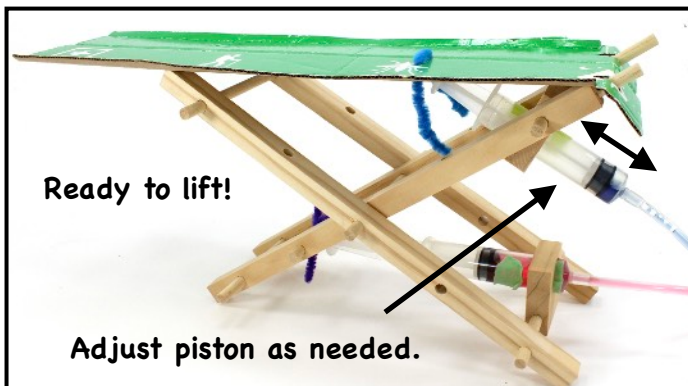
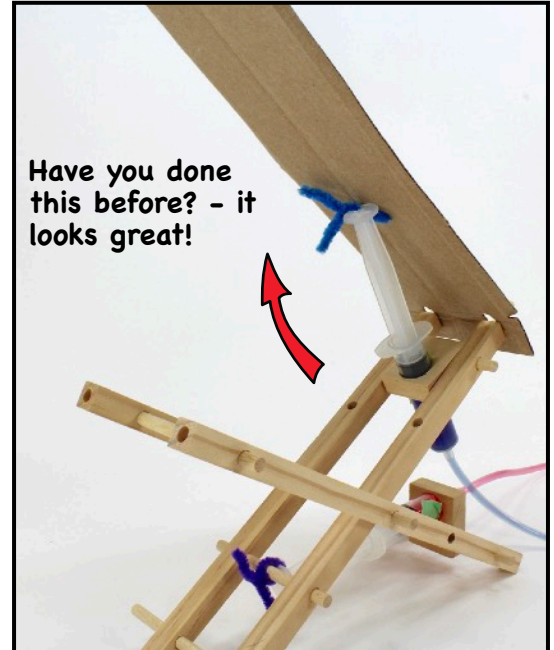
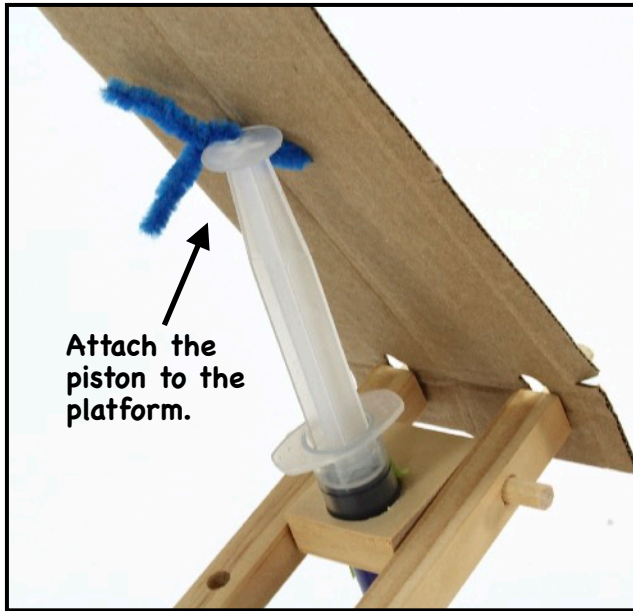
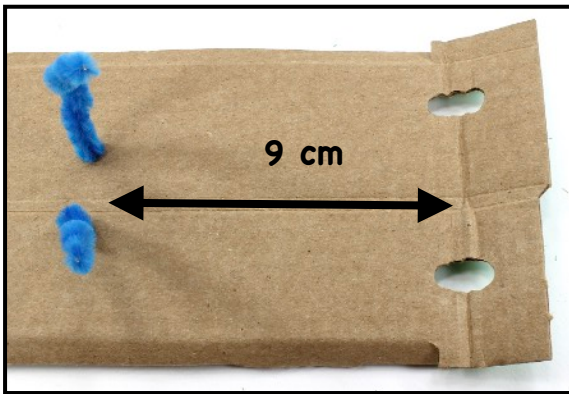
Cardboard 30 cm long and 10 cm wide.



SCISSOR LIFT

The end of the cardboard is bent a bit, and the holes are a bit long and wider than the dowel so it moves easily.

9 cm from hole to twist tie.



Done - but now, lets add some wheels!



Good trick! Just when they were having some fun - off they go!

Most Scissor lifts don't tip riders off - so this is actually a bit of a dump truck style scissor lift.

Scissor lifts are used with trucks to remove and add food to planes when they land.



EXTEND YOUR DESIGNS!

Once you have made this one - try some other designs!



Add more scissors!

Yep - that is Picard, Troi and Data. Old school Star Trek!



This one uses a shoebox lid and the base.



Not sure what this is, but those are scissors. A scissor cherry picker? - why not?



A double Scissor lift!