

Your Name:

Your Age:



This month's challenge:

Classroom Inventions

Inventions to liven up the classroom
and to make lessons a bit more crazy!



Interesting Fact:

Some schools around the
World have started using
pedalling desks that let you
exercise while you learn!



Tell us about your idea:

IET The Institution of
Engineering and Technology

**Institution of
MECHANICAL
ENGINEERS**

Don't forget to give
your invention a
name!

**Draw your
invention idea:**

Upload your drawing to
www.kidsinventstuff.com



You can send us a
video explaining
your idea too!

Invent at Home

Raise your hand!



Here's how to create your own hand raising machine. It's an invention you can use to change the way you get the teacher's attention.

Think about the muscles and joints you use to raise your own hand. With these instructions, you can build similar mechanisms to make your own hand raising machine!

This is your project, so try making adjustments and experimenting with new ways of putting it together– because there are many ways to make this project work.



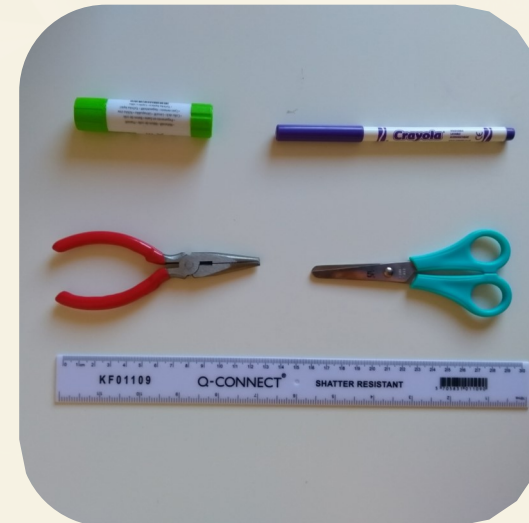
Materials:

- Tape
- Paperclips
- String
- Drinking Straw
- Cardboard
- Rubber band (optional)
- Lolly Sticks (optional)

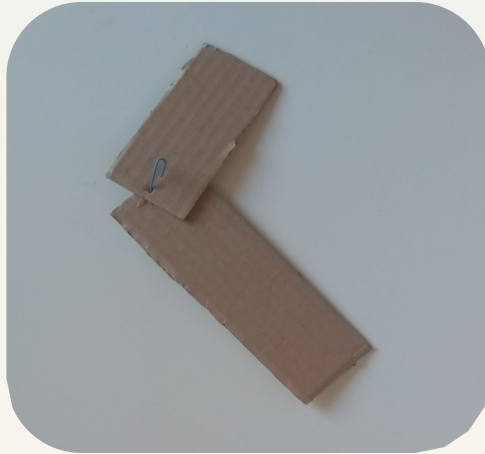


Tools:

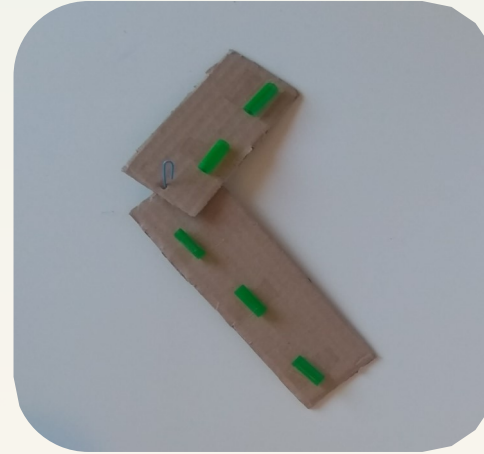
- Ruler
- Scissors
- Needle nose Pliers (optional)
- Marker
- Glue



1.



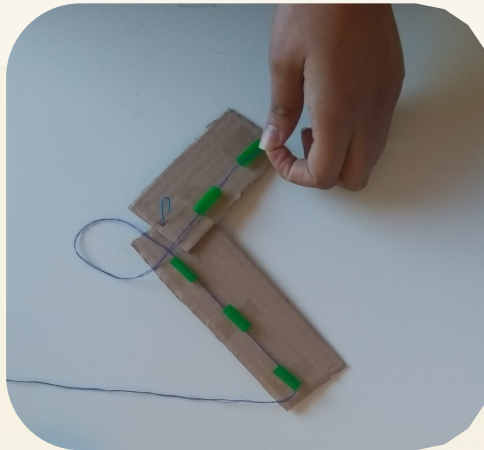
2.



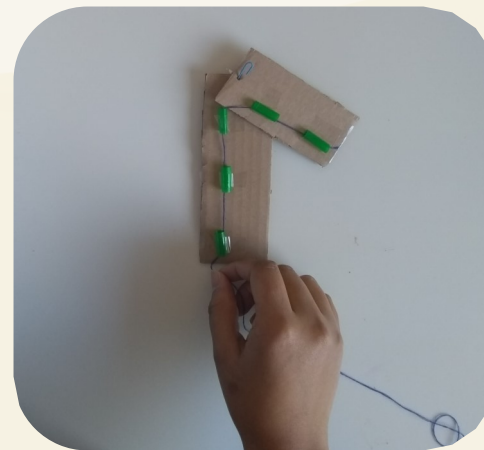
Design and build a two section arm using the scissors and cardboard. Use the paperclip as an elbow joint.

Plan and attach the straw guides using scissors and tape.

3.



4.



Thread the string through the straw guides and secure one end of the straw to the 'hand' using tape.

Test your raising arm and adjust.

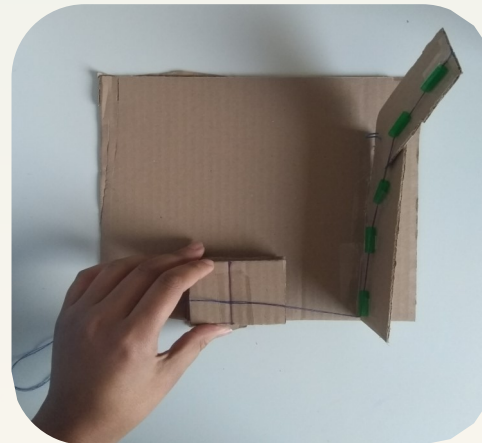
Top Tip:
You can bend the paperclip using needle nose pliers.

5.



Make a sliding button by stacking rectangles of cardboard using scissors and glue.

6.



Attach the arm to the base with tape. Tape the string to the sliding button.



7.



Create and attach a case to guide your sliding button using cardboard, scissors and glue.

8.



Decorate and play!

Brain stretcher:

Can you automatically lower the arm using lolly sticks and a rubber band?