How to make a simple cam mechanism

You will need

A piece of card





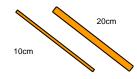
scissors

2 pieces of dowel

wheel



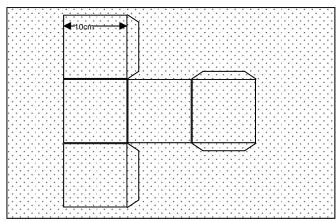




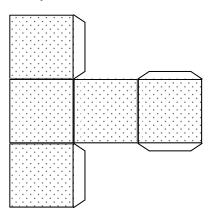


Instructions

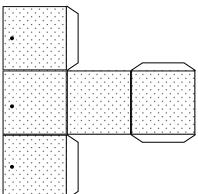
Draw out a net for an open cube on the piece of card.



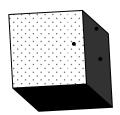
Carefully cut it out and score the folds.



Measure and mark 5cm along 3 sides as in the diagram below. Hole punch the card at these points

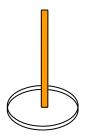


Make up the cube, sticking the tabs with pva glue and holding them in place with paperclips if necessary.



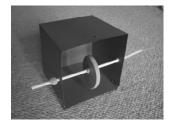
This is the frame

Stick the wheel onto the bottom of the thin piece of dowel.

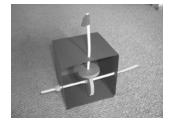


This is the follower

Thread a cam onto the thicker dowel and thread this through the holes in the frame, securing it in place with blu-tak so that the cam turns with the axle, not by itself.



Finally, thread the follower through the hole in the top of the frame so that the wheel is resting on the cam.



Your mechanism is now ready to test.

The blu-tak will enable you to change the cam and investigate how different shapes affect the movement.

Turn the a crank handle and watch the flag.

How does it move? Don't forget to record your results.