

# Make: Mini Mangonel

## Materials

Cut two pieces of cardboard, one 6cm x 6cm, the other 6cm x 3cm. You don't need to be very accurate.

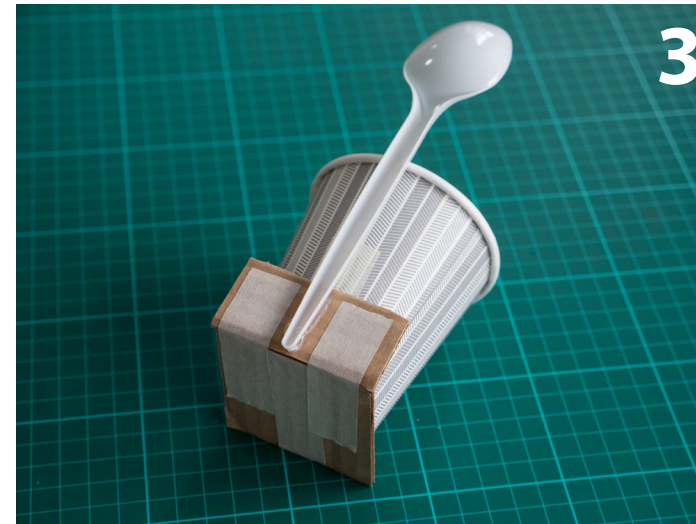
Gather the other bits and pieces shown here. You may need to share masking tape!

## Preparation

Tape the square of cardboard to the bottom of the cup.

Use the cool melt glue gun to stick the spoon to the smaller piece of cardboard. Make sure it's the same way round as in the picture.

If you've not used a glue gun before or would like some help, just ask!



## 3 Hinge

This is the fiddly part.

Cut two lengths of masking tape (about 6cm), then lay your cup on its side. Set the spoon in place as shown, then tape the two pieces of cardboard together to make a hinge.

There are several other ways you could do this – see if you can work out why we've picked this one.

## 4 Elastic Power!

Stand the cup up, and slip the rubber band over the top.

Your mini mangonel is complete – now take it to the firing range and see how well it works.

## Mangowhat?

This sort of catapult was first built by the Romans more than 2,000 years ago, though they'd have used wooden frames rather than plastic spoons and paper cups. They'd also have used twisted rope to power the spring, rather than an elastic band.

Mangonels weren't very accurate, but for flinging rocks at castle walls they were good enough. They were also relatively simple and easy to make, and light enough to transport from one siege to the next.

