## <u>Shaduf</u>





## Shaduf prototypes!

With the help of an adult, get creative with making a model Shaduf with what you have around the house. If we were in school, we would use sticks from outside or dowling for the rods, modelling clay for the base, string to secure it and a pipe cleaner with yoghurt pot for the bucket. Take a look at these pictures and use your imagination to search for materials and make your own Shaduf prototype. Even Lego would work!

To test it works, push or pull the counterweight (the ball at the end) and see if it will lift your water.



Tips:

- Your Shaduf will need to be on a raised surface to be able to have the water bucket fall forwards and 'pick up' water.
- Your three sticks (or whatever you are using as an alternative) should be the same length (measure them with a ruler) they should join at the top and be separate at the bottom, like a tripod. The top ends should still be sticking out.
- Then, a fourth, longer piece of stick should be placed on the top, between the three sticking out dowels so that they can support it.
- You can then put a hole in whatever you are using for a bucket and attach it to the top stick with string.
- Add a counterweight (modelling clay, blue tack, anything heavier than the pot) on the other side make sure it is secure.